Center for American Progress

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The $78 Billion Community College Funding Shortfall

By Victoria Yuen October 2020

Contents

Introduction and summary

Community colleges play a crucial role in American higher education. As affordable alternatives to four-year universities, they offer a vital pathway to a four-year degree, as well as career and vocational training. Because these colleges also disproportionately serve low-income students and students of color, they are engines of opportunity supporting social mobility and the health of the U.S. economy.

Despite their vital role, community colleges receive $8,800 less in education revenue per student enrolled than four-year institutions, according to a new analysis from the Center for American Progress. That translates into a total gap of $78 billion between the two sectors. To put it another way, the per-student revenue gap between community colleges and four-year institutions is roughly the same size as the typical annual revenue taken in by a community college—about $8,800.

This revenue gap is largely driven by two factors: Four-year institutions bring in much more money through higher tuition and fees, and they tend to receive larger amounts of state appropriations. On the other side of the ledger, local appropriations to community colleges help narrow the gap by about 15 percent nationally, while grants and scholarships provide necessary additional revenue to community colleges.

Because states have dramatically different funding levels for four- and two-year colleges and have varying approaches to parceling out those dollars, and since there are significant differences in tuition and fee revenue, the per-student revenue gaps at four- and two-year institutions also vary significantly from state to state. For example, in New Jersey, the average four-year institution receives $14,000 more per student than the average two-year institution, while Wisconsin is the only state with a negative revenue gap. The average community college in Wisconsin receives $3,000 more in revenue per student than the average four-year university, though four-year colleges still receive more total revenue due to their larger numbers of students. That said, a low or negative revenue gap is not inherently good. Some of the smallest gaps exist in states with low levels of state funding for both sectors.

Lower revenue, of course, means community colleges have much less to spend on students. Research shows that spending is intimately tied to students' ability to persist through college and graduate.[1] It takes money to provide excellent classes, advising and counseling services, emergency aid, and many other ingredients of a good college education. And when community colleges have so much less revenue to spend, the result is substantial inequity.

In the popular imagination, four-year flagship universities may appear deserving of more revenue than community colleges because they do more academic research, need more library resources, and are more likely to run dorms and dining halls. But that should not explain a gap that is $26 billion larger than the total $52 billion in revenue the entire community college sector receives each year.

This figure also understates the true gap in several ways. First, it excludes federal research funding, as well as auxiliary services such as dorms and dining halls that are generally expected to make money for colleges. Second, it looks at results in a way that treats part-time students as equal to a fraction of a full-time student, even though someone who attends part time may not necessarily use fewer resources than a student with a full course load. All of the per-student figures used in this report look at a measure known as full-time equivalent enrollment (FTE). This approach treats one part-time student as equivalent to only a fraction of a full-time student. This substantially shrinks the enrollment at community colleges due to their high numbers of part-time students. While FTE is the traditional measurement used for funding comparisons, many costs may not scale cleanly based on a student's attendance intensity. For example, a part-time student may easily use the same amount of student support services as a full-time student, even if they are in class with an instructor for fewer hours.

This report lays out the revenue gaps between public four- and two-year institutions on a national and state-by-state level, along with how these differences in revenue vary on a per-student basis. For simplicity, this report defines community colleges as public two-year, degree-granting institutions, even though some of these are officially designated as technical colleges. The revenue gaps focus on items directly related to education: tuition revenue, grants and scholarships from all noninstitutional sources, state appropriations, and local appropriations. This is, in effect, a conservative estimate that does not account for significant revenue streams for some institutions. Four-year institutions may need bigger

libraries than community colleges, but community colleges, if anything, have more students with disproportionate needs who benefit more from costly services such as robust academic advising, child care, and help with basic needs including food and housing. That is because community colleges enroll more of today's students—parents, part-time students, and adult learners—and fewer recent high school graduates who can attend full time without outside distractions.[2]

Tackling these gaps and properly supporting community colleges will require action at both the state and federal levels, focused on one overall goal: achieving resource equity between public four- and two-year institutions. This means community colleges should receive substantially more in per-student revenues than what they currently receive. Policymakers need to be intentional about considering ways funding can be better targeted by making larger investments in colleges with fewer resources to increase access, attainment, and equity. State- and federal-level policy changes to close the revenue gap should include:

- Ensuring that any debt-free college plans include provisions to address resource equity gaps, not just replace tuition revenue
- Providing federal grants to bolster institutional operating support based on student need
- Reforming state appropriations to eliminate gaps in funding
- Allocating more local funding for community colleges, especially in states that do not currently provide any local dollars to these institutions

Sadly, the effects of the coronavirus pandemic will likely only exacerbate these gaps over the coming months and years. Colleges and universities will likely face revenue shortfalls for the 2020-21 academic year as a result of diminished state coffers and declining student enrollment. Public higher education often faces disproportionately large cuts during economic downturns, even as college enrollment typically swells, as newly unemployed workers commonly seek degrees.[3] Research shows that state disinvestment leads to an increase in tuition and fees, which poses great risk to students.[4] The risks are greater for community colleges in a system where resources are already highly inequitable. It is imperative that policymakers at the state and federal levels ensure equity when making future cuts.

Revenue sources examined

This report includes the four sources of revenue that are most likely to go toward educational purposes: tuition and fees, noninstitutional grants and scholarships such as the Pell Grant or state and local scholarships, state appropriations, and local appropriations. Due to data limitations, this report's analysis of student grants, scholarships, and fellowship monies may include dollars that go toward living expenses rather than tuition. It does not include revenue sources that are not primarily going toward educational purposes, such as auxiliary revenue for dorms or student centers; federal, state, and local operating grants; capital grants and gifts; and investment revenue. Not including these sources is a way to account for the fact that some spending at four-year colleges goes to their research mission or other functions that community colleges do not provide. This choice also presents a more conservative way of considering the gap, since these other funds disproportionately flow to four-year colleges.

The findings

4-year colleges take in $78 billion more in revenue compared with community colleges

Compared with two-year community colleges, four-year public colleges bring in significantly more revenue annually. Due to graduate student enrollment, four-year institutions have an additional 1.4 million FTEs than community colleges, but this inclusion does not explain the revenue disparities between the sectors since there is also a gap on a per-student basis.

Two-year institutions receive roughly two-fifths of the revenue that four-year institutions receive—$52 billion compared with $130 billion. This amounts to an overall annual revenue difference of $78 billion when accounting for tuition, grants and scholarships, state appropriations, and local funding. (see Table 1)

TABLE 1

Community colleges receive two-fifths of the revenue that four-year institutions receive, despite serving only 1 million fewer students

Total revenue dollars and the number of full-time enrolled students (FTE) at two-year institutions and four-year institutions, academic year 2016-17

Sector	Total revenue dollars	Revenue per FTE	Total FTE
Public four-year institutions	$130 B	$17,540	7,422,237
Public two-year institutions	$52 B	$8,695	6,012,175

Source: Author's calculations based on data from the National Center for Education Statistics, "Integrated Education Postsecondary Data System Survey Components: Finance," available at https://nces.ed.gov/ipeds/use-the-data (last accessed September 2020).

On a per-student basis, differences in revenue translate into significantly fewer resources for students. Four-year institutions receive about $17,500 in revenue per FTE, while two-year colleges receive only about $8,700 per FTE. This funding difference amounts to about $8,800 more per student between two- and four-year colleges.

The smaller revenues at two-year colleges affect what they can spend on students as well as their staffing and amenities. Community colleges operate with a bare-bones infrastructure; for example, their teaching staffs are comprised of more adjunct faculty than at four-year institutions, and important campus services such as on-site child care and mental health centers are less prevalent.[5]

This all adds up to significant gaps in outcomes across college types. The most recent data from the U.S. Department of Education show that students attending community colleges graduate at almost half the rate of students enrolling in four-year institutions, even when adjusted for the different amount of time it takes to complete degrees at each type of institution.[6] Research on funding differences has found a positive correlation between increases in spending and degree completion at all institution and degree types.[7]

Compounding the problem of inequitable resources, community colleges more often serve students with lower-income backgrounds, students who are the first in their families to attend college, or students who work while attending—factors which often lead to the need for greater academic and educational support services while enrolled. Nearly 40 percent of students attending community colleges are from families making less than $50,000 per year. By contrast, 42 percent of students from families making more than $100,000 attend a public four-year institution, while only 22 percent of students from these families chose a community college.[8] Students of color are also significantly more likely to enroll in public two-year community colleges, and they are vastly underrepresented at public four-year institutions. In fall 2015, more than 55 percent of Latino students and 48 percent of Black students were enrolled in a public two-year college, compared with 39 percent of white students.[9] This means that the students who enroll in community colleges have less access to vital resources that have a long-term influence on their success in college. Eliminating gaps in revenue carries significant implications for equity in access and opportunity in higher education.

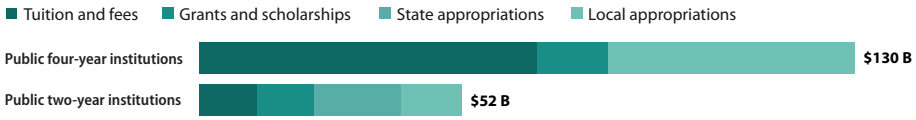
The national revenue gap

Gaps in tuition and fees, grants and scholarships, state appropriations, and local appropriations collectively make up the $78 billion revenue difference between public four- and two-year institutions. While community colleges receive more in local funding, that revenue stream is small compared with the additional revenue that public four-year institutions receive in tuition and state appropriations. (see Figures 1 and 2)

FIGURE 1

The total revenue gap between four-year institutions and two-year institutions is $78 billion

Revenue gap between four-year institutions and two-year institutions, by revenue source

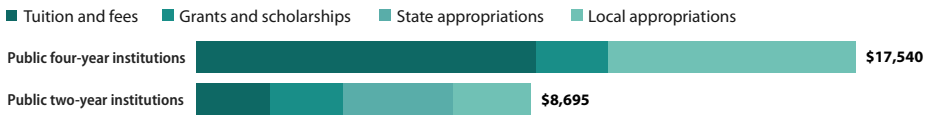


Source: Author's calculations based on data from the National Center for Education Statistics, "Integrated Education Postsecondary Data System Survey Components: Finance," available at https://nces.ed.gov/ipeds/use-the-data (last accessed September 2020).

FIGURE 2

Community colleges receive about $8,800 less in revenue per full-time enrolled student (FTE) than public four-year institutions

Revenue gap per FTE between two-year institutions and four-year institutions, by revenue source



Source: Author's calculations based on data from the National Center for Education Statistics, "Integrated Education Postsecondary Data System Survey Components: Finance," available at https://nces.ed.gov/ipeds/use-the-data (last accessed September 2020).

Gaps in tuition revenue account for $55.5 billion of the $78 billion revenue gap between public four- and two-year institutions. On a per-student basis, four-year institutions receive $7,100 more per FTE in tuition revenue than community colleges. Because one of the main tenets of a community college education is to keep the cost of attendance low for students, community colleges cannot turn to tuition revenue to balance their budgets and may have to cut educational services if they do not receive sufficient funding.

Grants and scholarships make up only $2.9 billion of the revenue gap; on a per-student level, they contribute $1,900 in revenue per-FTE at both four-year institutions and community colleges. But multiple ways of looking at these funds show they are of greater relative importance to community colleges. For one, community colleges receive nearly the same amount in grants and scholarships as they do tuition—around $11 billion—while the grants and scholarships revenue at four-year institutions is only one-fifth of tuition revenue. Without government aid, particularly from Pell Grants, community colleges would be operating with even fewer dollars.

Later sections of this analysis treat grants and scholarships as part of the overall dollar amount going to tuition, since they are used to pay direct academic expenses and they follow the student. When combined with tuition dollars, $58.5 billion of the total revenue gap comes from these monies, including a per-student difference of $7,200.

State appropriations account for $31.3 billion of the overall gap, and on a per-student level, this equates to community colleges receiving $3,700 less per FTE. All states except for Colorado, Delaware, New Hampshire, and Wisconsin appropriate more per student at four-year institutions than two-year institutions. While these four states dole out more in state appropriations per FTE to their community colleges, three out of these four states are also among the lowest funders of four-year institutions.

Local revenue is the only revenue source in which community colleges receive more funding—about $11.9 billion more—than public four-year institutions. Community colleges take in $2,016 per FTE in local revenue, while public four-year institutions take in $39 per FTE. Two-year institutions rely on local appropriations much more than four-year institutions and, without them, the national revenue gap would balloon to $89.8 billion. That said, these funding levels are not uniform nationwide: There are 13 states that provide no local funding to either their community colleges or their four-year institutions.

Revenue gaps vary widely by state

While states consistently fund their public four-year institutions at higher levels than their two-year institutions, the revenue gap varies considerably by state. Wisconsin is the only state in which the average community college receives $3,000 per FTE more in revenue than the average four-year university. Importantly, four-year colleges in Wisconsin still get more total revenue because they have more students than two-year institutions. On the opposite end of the spectrum, New Jersey has a $14,094 per-FTE revenue gap. (see Figure 3)

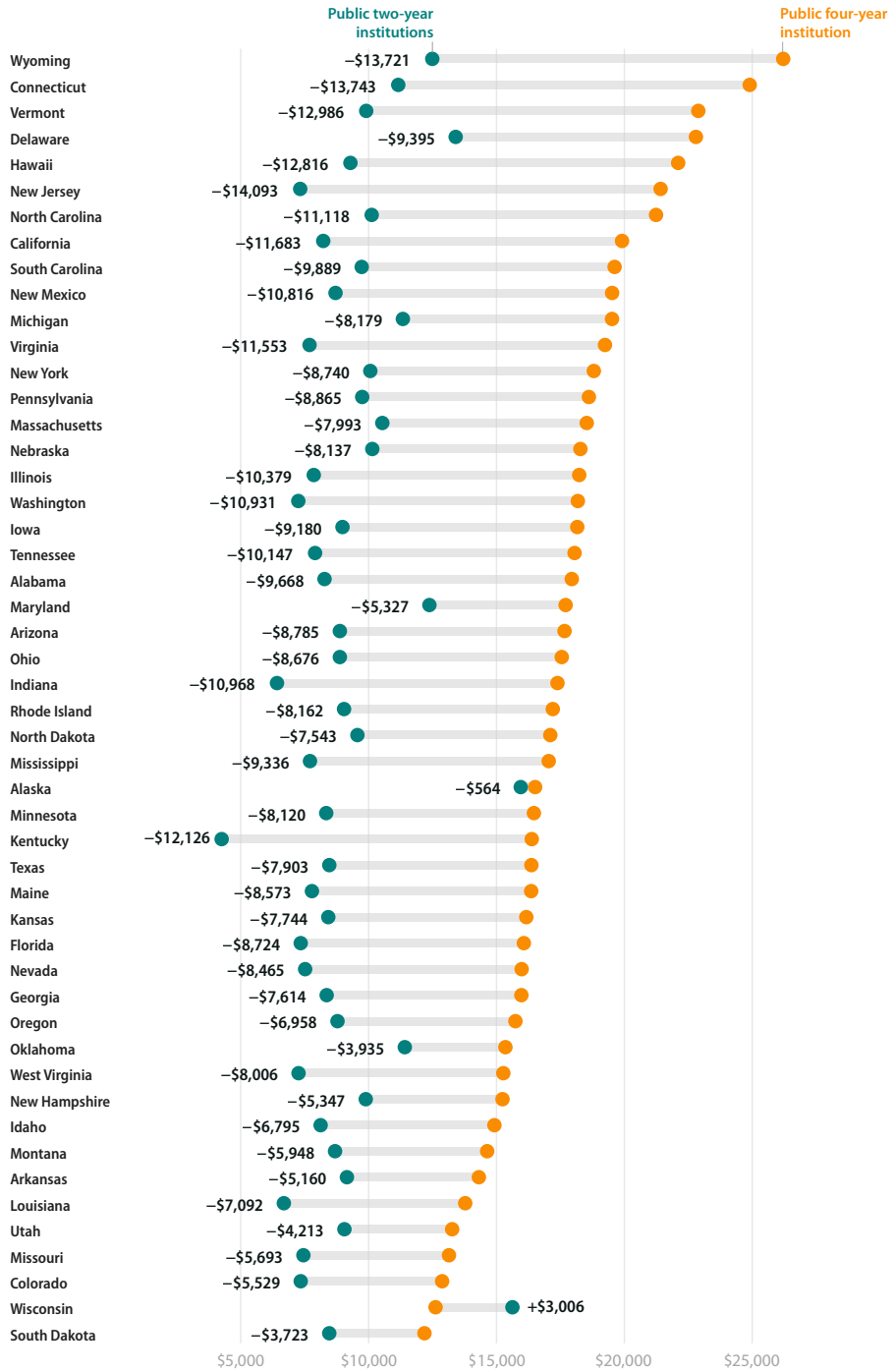
Connecticut has the second-largest revenue gap, and it is a good example of the fact that the overall levels of revenue also matter when looking at these differences. Though it has an unacceptably large difference in revenue, its four-year colleges have the second-highest per-FTE revenue amount and its community colleges have the third-highest. The same problem manifests with states that have lower revenue gaps. South Dakota, for example, has the third-smallest revenue gap, but it is in the bottom 15 in funding for both public four-year colleges and two-year institutions.

The next sections look at how the four main sources of revenue affect revenue gaps in different ways.

FIGURE 3

Revenue gaps vary widely by state

Revenue gap between four-year institutions and two-year institutions per full-time enrolled student, by state



Note: Alaska, Delaware, Rhode Island, Vermont, and Wyoming have few institutions within each sector, so the averages for these states are based off a small sample.
Source: Author's calculations based on data from the National Center for Education Statistics, "Integrated Education Postsecondary Data System Survey Components: Finance," available at https://nces.ed.gov/ipeds/use-the-data (last accessed September 2020).

Tuition is the predominant driver of the revenue gap in more than two-fifths of states

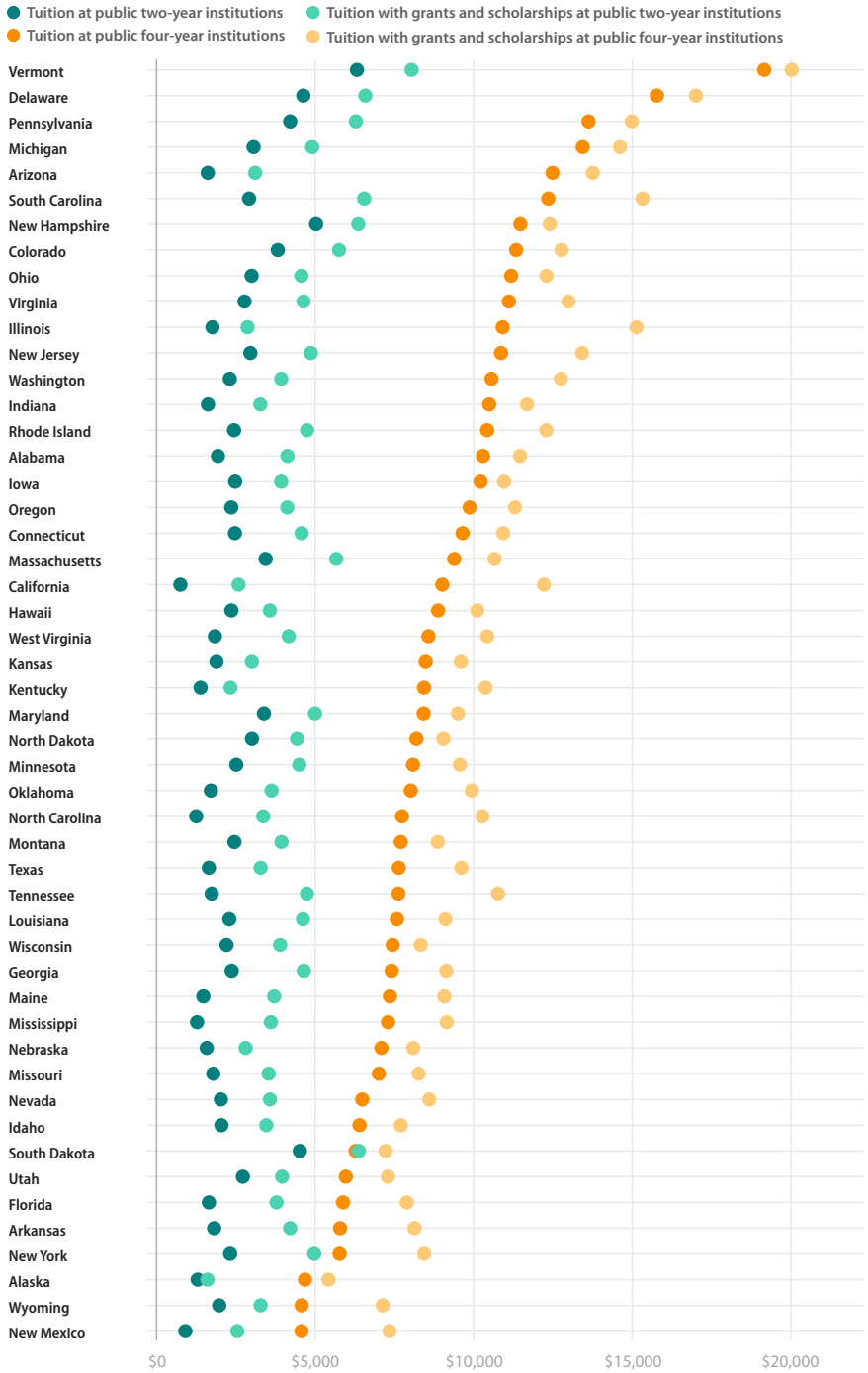
In 22 states, the tuition revenue gap is at least 80 percent of the total revenue gap. This includes some states where the tuition gap is larger than the overall difference because local funding helps shrink the divide. For example, in Oklahoma, the revenue gap in tuition and fees is 160 percent of the total revenue gap, meaning that local appropriations and grants and scholarships help narrow this disparity. In some cases, tuition may make up a large share of the gap because it has displaced state spending over time. For example, Vermont public colleges have the fifth-lowest amount of state revenue per student for their community colleges and the third-lowest for four-year institutions. Tuition makes up 98 percent of Vermont's revenue gap. Fixing that disparity would thus require massive restoration of federal, state, and local funding that may not be feasible in short order.

Grants and scholarships are particularly important for two-year institutions. In 15 states, the grants and scholarships revenue per FTE at two-year colleges exceeds what those institutions receive in tuition, and in 26 states it is at least 75 percent as large as tuition revenue. For example, revenue from grants and scholarships for California community colleges is 2.4 times bigger than the tuition revenue these institutions receive. By contrast, the four-year colleges where grants and scholarships are closest to tuition revenue are located in New Mexico, where they are 60 percent as large. However, despite the importance of grants and scholarships, this additional funding only marginally narrows the tuition revenue gap in 33 states. (see Figure 4)

FIGURE 4

Tuition drives the revenue gap in two-fifths of states

Four-year institution and two-year institution tuition revenue per full-time enrolled student, by state



Note: Alaska, Delaware, Rhode Island, Vermont, and Wyoming have few institutions within each sector, so the averages for these states are based off a small sample.
Source: Author's calculations based on data from the National Center for Education Statistics, "Integrated Education Postsecondary Data System Survey Components: Finance," available at https://nces.ed.gov/ipeds/use-the-data (last accessed September 2020).

State appropriations drive the revenue gap in 16 states

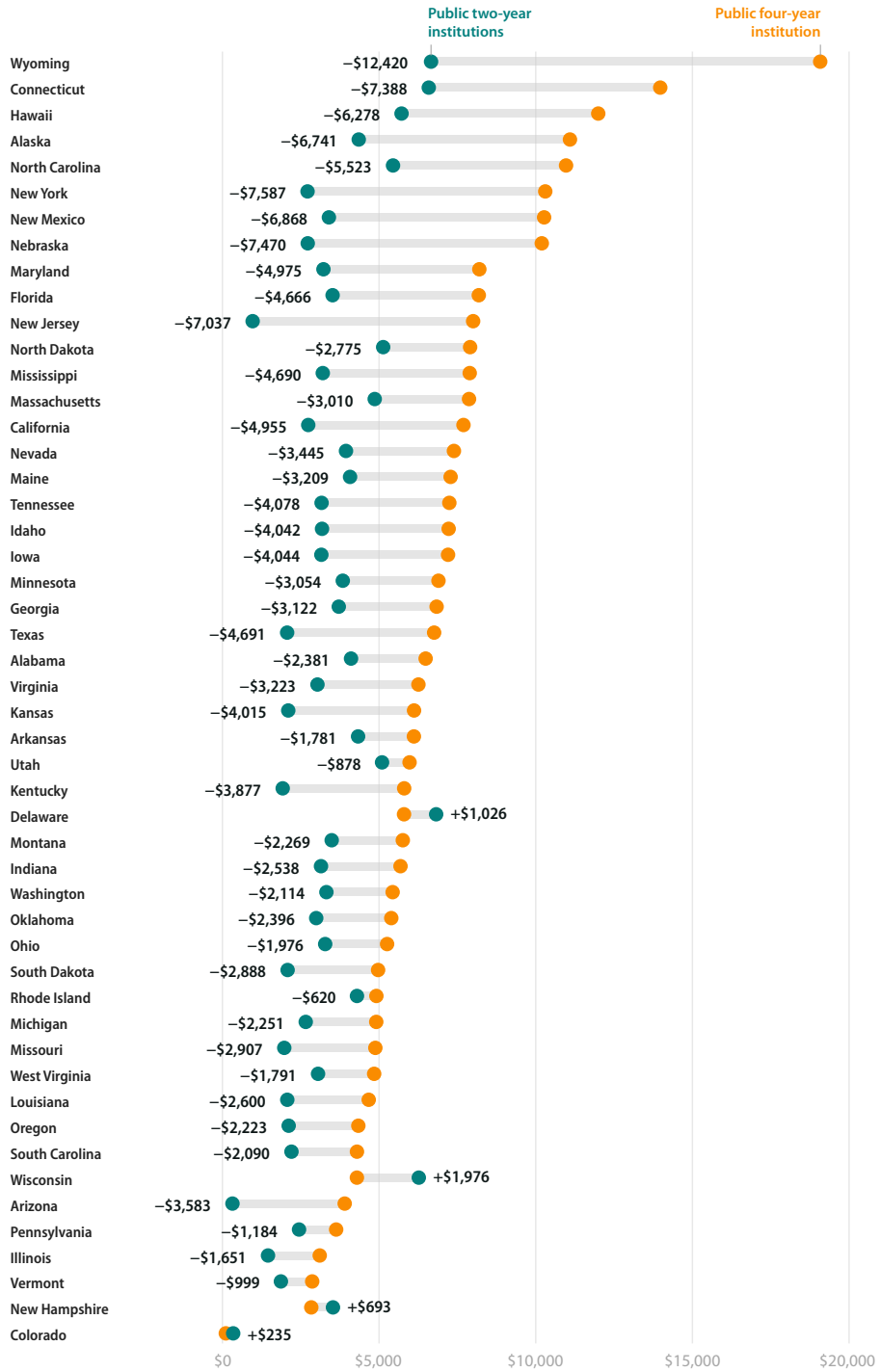
For another 16 states, state appropriations make up at least 50 percent of the revenue gap. States with the highest revenue gaps dole out some of the highest state appropriations, especially for their public four-year colleges. (see Figure 5)

While large gaps in revenue per student are concerning, small gaps may represent a different issue—insufficient support for all colleges. Out of the 10 states with the lowest overall revenue gaps, seven of them have state appropriations below the per-FTE national median. For example, Colorado has the ninth-lowest per-FTE revenue gap, but it ranks near the bottom in state appropriations per FTE for both four- and two-year institutions—50th and 49th, respectively.

FIGURE 5

State appropriations drive the revenue gap in 16 states

Four-year institution and two-year institution state appropriations revenue per full-time enrolled student, by state



Note: Alaska, Delaware, Rhode Island, Vermont, and Wyoming have few institutions within each sector, so the averages for these states are based off a small sample.

Source: Author's calculations based on data from the National Center for Education Statistics, "Integrated Education Postsecondary Data System Survey Components: Finance," available at https://nces.ed.gov/ipeds/use-the-data (last accessed September 2020).

Local appropriations narrow—but do not close—revenue gaps

Local appropriations are an important source of support for community colleges. Out of the 37 states that have some form of local funding for colleges, 33 of them provide more in funding per FTE to community colleges than public four-year institutions. That includes 24 states that only provide local funds to community colleges. However, these local funding amounts are not enough to close overall revenue gaps. Nationally, local appropriations only add about $2,000 per FTE at community colleges. Excluding the states that do not offer any local funding only raises the average amount to $2,224 per FTE. (see Figure 6)

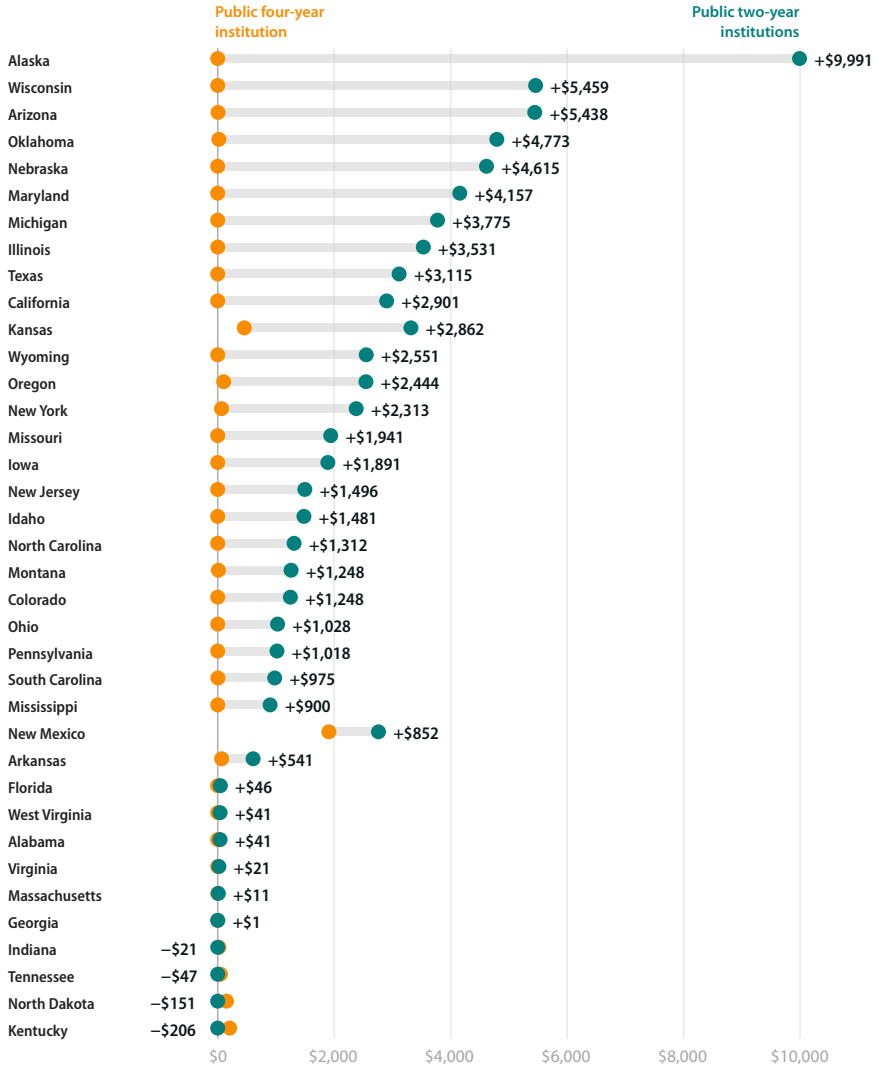
Arizona has the second-highest level of local funding per FTE. However, it is an example of how local appropriations can help close revenue gaps while falling far short of eliminating them. It has some of the lowest per-FTE state appropriations—45th and 50th in state appropriations for four-year and two-year public institutions, respectively. This is at least partly due to significant state cuts during and after the Great Recession; from 2008 to 2018, Arizona saw a nearly 54 percent decrease in state appropriations per student.[10] In response to state disinvestment, localities started taking up the role of the state in funding their community colleges.[11] Today, community colleges in Arizona are primarily funded by local appropriations: 61 percent of total revenue per FTE comes from local appropriations. Meanwhile, 17 percent of revenue comes from tuition, 16 percent comes from grants and scholarships, and 4 percent comes from state appropriations.[12]

The increasing reliance on local appropriations also leads to questions about what it would take to increase this source. While most of colleges' populations may come from their communities and surrounding areas, local appropriations largely stem from property taxes, which may be difficult to raise—especially if states do not currently provide any local revenue to colleges.

FIGURE 6

Local funding helps close the revenue gap, but community colleges receive more local funding per full-time enrolled student (FTE) in only 33 states

Four-year institution and two-year institution local appropriations revenue per FTE, by state



Note: Alaska, Delaware, Rhode Island, Vermont, and Wyoming have few institutions within each sector, so the averages for these states are based off a small sample. The following states were excluded because they have no local funding: Connecticut, Delaware, Hawaii, Louisiana, Maine, Minnesota, New Hampshire, Nevada, Rhode Island, South Dakota, Utah, Vermont, and Washington.
Source: Author's calculations based on data from the National Center for Education Statistics, "Integrated Education Postsecondary Data System Survey Components: Finance," available at https://nces.ed.gov/ipeds/use-the-data (last accessed September 2020).

Recommendations

Addressing the revenue gap to achieve resource equity between public two-year and four-year institutions will require action at both the state and federal levels. Policymakers need to be intentional about considering ways funding should be better targeted by making larger investments in colleges with fewer resources to increase access, attainment, and equity. At the federal level, this means ensuring issues of resource equity do not get lost within solutions to address affordability through a free or debt-free college plan. At the state level, it means reexamining funding allocation policies during better economic times and doing more to protect underresourced colleges during downturns.

Address resource equity within college affordability plans

Policymakers and think tanks have introduced several aspirational college affordability plans over the past few years to deliver some form of free or debt-free college to students. The details of these plans vary, but they all rest on the idea of a federal-state partnership in which the federal government provides large amounts of additional funding to states and, in exchange, states agree to maintain or, ideally, increase their funding. This additional funding plus institutional collaboration then delivers a free or debt-free college education to students. This is the premise behind all of the major college affordability proposals, including the College for All Act from Sen. Bernie Sanders (I-VT);[13] the Debt-Free College Act from Sen. Brian Schatz (D-HI);[14] and the Center for American Progress' Beyond Tuition, a plan for debt-free college.[15]

It is crucial that these college affordability plans do not solely replace tuition revenue with federal and state funding. While doing so would deliver a substantially more affordable postsecondary experience for students, it would leave in place worrisome differences in resources that could impede the ability of colleges that charge lower prices to provide the necessary services and supports to improve outcomes.

What that means in practice is designing a federal-state partnership program not just around providing enough resources to deliver a free or debt-free education but also around increasing the allocations for places that currently receive lower levels of support. For example, such a plan could set a minimum per-student revenue goal for every public college based on either a national or regionally adjusted benchmark. It could also provide additional funding to states that spend more on closing resource gaps. A state could receive $1.50 for every $1 spent on an existing lower-resourced state institution, rather than receiving $0.25 for every $1 in additional funding to a well-resourced institution. While this may not fully close all gaps, it would ensure that gaps do not result from some colleges' insufficient resources.

Factoring resource equity into a federal-state partnership is even more important during recessions that may lead to massive state cuts, such as the economic downturn resulting from the coronavirus pandemic. A federal-state partnership should include a maintenance-of-effort provision that ensures state funding levels will not dip below specified levels, while federal investments should automatically increase based on economic triggers, such as jumps in the unemployment rate. These automatic funding increases could also be explicitly targeted at lower-resourced colleges. The net result would recognize the important countercyclical role of the federal government.

Additional federal grants for institutional operating support

Beyond a federal-state partnership, the federal government could also encourage equitable funding between two- and four-year colleges through additional federal grants for institutional operating support. This is similar to the rationale behind Title I spending on K-12 schools: Serving students with greater need requires not just equal investment but also additional support.[16]

There are several ways to structure these operating support grants. One approach would be to provide public institutions that have below-average revenue per student with a set amount of operating support for each Pell Grant recipient they enroll.[17] These amounts could also be adjusted with more funding for a maximum Pell recipient or a person who has dependents. As two-year institutions are more likely to enroll low-income students,[18] additional grants could boost the total funding that community colleges receive and narrow revenue gaps between these institutions and their four-year counterparts. Importantly, these funds should be limited to public colleges. They should also come with a personalized performance

agreement that sets concrete goals for improving retention and completion for each institution. This provides a way to ensure that the additional funding is also trying to achieve better results.

Reforming state appropriations

In the K-12 education sector, two-thirds of state funding formulas recognize that students with greater needs deserve greater resources.[19] In higher education, the approach is the opposite, with four-year institutions and public research colleges receiving greater investment at both the state and federal levels. States should work to reverse this and provide equitable resources by increasing state funding for two-year institutions.

If state appropriations prioritize their four-year research institutions over the community college system and Black and Latinx students are more likely to attend community colleges, then state funding fails to adequately serve students of color. For example, previous CAP research has shown that public institutions spend $5 billion less on Black and Latinx students nationwide, which translates to these students receiving $1,000 less per year in educational resources.[20] This figure is lower than the overall gap in this report because there are still large numbers of white students in community colleges as well. States should adopt an equity analysis to ensure that their funding models do not disproportionately affect institutions with large populations of students that need more assistance. This equity analysis should consider all metrics of identity, such as gender, race, class, and more.

Addressing state appropriations will look different throughout the nation, as no two state funding formulas are the same. Additionally, given the current economic challenges caused by the coronavirus pandemic, states will face difficulties in closing the revenue gap within a narrow time frame. In the meantime, states can set interim goals to begin to address resource equity. Some potential targets could include halving the revenue gap within a set number of years, raising community college appropriations per FTE to match regional four-year institutions, and incorporating enrollment metrics such as the number of Pell recipients or students of color into state funding formulas. Similarly, states should consider these demographic questions when deciding the size and scope of any cuts enacted during the response to the coronavirus.

Explore ways to increase local funding

Local funding is a crucial but often unexplored component of community college support. Though it cannot on its own close revenue gaps, states should explore ways to raise some additional funding for community colleges from local sources, particularly those that do not currently provide any local support for these institutions. States could do this through multiple avenues, including property tax levies, local corporate taxes, or local income taxes.

Attempts to increase local funding will also have to contend with potential equity implications in which wealthier areas raise more funds than lower-income localities. This will likely be less of an issue in postsecondary education than in K-12 education because community colleges are generally still more likely to enroll low-income students.[21] Wealthier areas cannot solely provide local appropriations to students from high-income families, as these students often go to four-year institutions located in other parts of the state or nation, so the unequal funding-to-outcome disparity in K-12 is less apparent here. That said, states should still consider policies that allow for more equitable statewide local funding distributions in order to prevent differences in educational quality.

Conclusion

"You get what you pay for" is a common adage about consumer purchases. And while issues of college quality are more complex than simply their cost, it is true that the amount of money an institution takes in to educate its students affects the extent of services and supports it can provide. This especially matters for institutions that are serving a lot of today's learners, especially individuals who are low-income, Black, or Latinx.

The United States currently underinvests in community colleges by $78 billion compared with public four-year institutions. Although it has potentially negative effects on their students, four-year colleges can take in more money from tuition, giving them a potential outlet for making up lost state revenue. States often spend more on four-year public colleges than their two-year counterparts, and local funding is not enough to fully close these gaps. The result is that four-year colleges have a revenue base nearly three times larger than that of community colleges.

Policy solutions must do a better job recognizing these resource imbalances going forward. In particular, the effort to deliver free or debt-free college must acknowledge the potentially inequitable effects of simply replacing tuition revenue. While doing so will help students, it will also perpetuate massive revenue gaps and inequality. Similarly, states must think more about how they appropriate dollars to create more parity between types of public colleges.

The stakes here are high. Until the current funding structure prioritizes high-need, low-resourced institutions, higher education will continue to benefit a select few and reinforce a system of inequality—the opposite of what a college degree is meant to achieve.

About the author

Victoria Yuen is a policy analyst for the Postsecondary Education team at the Center for American Progress. Her work focuses on institutional finances, student outcomes, and college affordability for students and their families.

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Methodology

The data used in this analysis come from the U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS) and are taken from the 2016-17 school year.[22] The author downloaded four sets of variables: institutional characteristics such as sector and state; fall enrollment, which includes part-time and full-time counts; 12-month enrollment; and revenue by source (tuition, appropriations, and noninstitutional grants and scholarships) to calculate institutional revenue per FTE—the amount of revenue received for every full-time enrolled student. This analysis only applies to public institutions within the 50 U.S. states and considers both undergraduate and graduate students in the full-time student analysis.

Data cleaning

The author took several steps to account for variations in institutional accounting and data reporting. Institutions report revenue in two different accounting methods: Governmental Accounting Standards Board (GASB), the method that most nonprofit colleges use, and Financial Accounting Standards Board (FASB), primarily for private colleges but also for a few public institutions. The author created new revenue variables that include both public GASB and FASB accounting methods in order to allow for comparison between the reporting methods of institutions. For example, the tuition and fees revenue source has both a GASB variable and an FASB variable, so the author created a new variable to merge the previously separate GASB and FASB tuition and fees variables under one variable.

Next, the author addressed the data reporting inconsistencies between various state university systems. State universities are often a part of a university system, meaning they have a main campus and several branch campuses. An example of this would be the University of Texas at Austin, which is the flagship/main campus

for the University of Texas system. The system's other branch campuses include UT San Antonio, UT El Paso, and UT Arlington, just to name a few examples. For some university systems, the revenues are aggregated up and reported only at the main campus, which inflates the revenue at the flagship campus and underreports the amounts at branch campuses. In these instances, the author used the IPEDS parent/child allocation factor—the variables within IPEDS that identify main and branch campuses and the percentage of revenues that is associated with each institution—to accurately determine the revenue of the main campus and its relevant branch campuses.

Finally, the author accounted for differences in the way institutions report Pell Grant revenue in order to get a measure of revenue that excludes Pell. If the institution reported under FASB, the author subtracted Pell revenue from net tuition and fees if the institution classified itself as a pass-through entity.[23]

Variables

As community colleges enroll a greater share of part-time students to full-time students and 12-month enrollment excludes part-time students, the author used fall and 12-month enrollment to calculate the number of full-time 12-month enrollees at each institution. The author took the proportion of fall part-time undergraduate students and fall full-time undergraduate students and applied it to the 12-month unduplicated count. This process was repeated with graduate students. These 12-month part-time undergraduate and graduate figures were then converted to a full-time count using the National Center for Education Statistics conversion factor for public undergraduate and graduate part-time students. The author added the newly converted 12-month part-time to full-time figures to the 12-month full-time number—both at the graduate level and the undergraduate level—to get an updated 12-month FTE count that includes part-time students. Finally, the author added up the undergraduate and graduate 12-month FTE count to get a full FTE count at each institution.

Institutions receive revenue from a variety of sources, but not all of these go directly to educational purposes. Moreover, some of them represent functions that two-year institutions do not carry out, such as revenue from hospitals and

auxiliary enterprises. Therefore, the author chose to remove these revenue sources from the dataset and focus more on items that relate directly to education. The final revenue counts included in the dataset and measures of revenue per state include the following variables:

- **Net tuition and fees.** Tuition net of discounts and allowances, including Pell Grants if the institution identified as a pass-through entity and excluding federal loans

- **Grants and scholarships.** Noninstitutional-based money given to the student as a grant, scholarship, or fellowship

- **State appropriations.** Money appropriated by the state legislature

- **Local appropriations.** Money appropriated below the state level or revenue raised through local taxes, such as property taxes, income taxes, or corporate taxes

The author created a grants and scholarships variable that is the combination of Pell Grants, grants and scholarships from state governments, and grants and scholarships from local governments. Data limitations prevented the author from assessing how much in grants and scholarships were refunded back to students, and the author acknowledges that this variable may be overestimated.

Finally, the author fixed the sector variable to accurately report which institutions are considered public four-year institutions versus public two-year institutions. For example, the sector variable in IPEDS classifies Miami Dade College as a public four-year institution, but because it gives out more associate-level degrees, it functions as it a public two-year institution. To correct this issue, the author combined the control and institutional category variables to create a more accurate sector variable. Institutions that primarily dole out baccalaureate degrees are classified as public four-year institutions, while institutions that give out degrees below the baccalaureate level or are nondegree-granting institutions are considered public two-year institutions or community colleges.

Calculations

Institutions receive funding from a variety of sources, and to get the per-student funding for each revenue source, the author took the total amount of revenue and divided it by the updated 12-month FTE count.

The author used a weighted average to calculate the average revenue received per student within each state. This method involved multiplying the proportion of students within that state by the revenue in that institution and then adding up the weighted revenues within each state. Once all the revenue sources were weighted by students within each state, the author summed up all the different revenue sources to get the total revenue received per student for each state.

The author took the difference between the average revenue received per FTE student for four-year and two-year institutions to get the revenue gap per FTE.

To learn more about the data, please contact the author.

Endnotes

1 David J. Deming and Christopher R. Walters, "The Impact of Price Caps and Spending Cuts on U.S. Postsecondary Attainment" (Cambridge, MA: National Bureau of Economic Research, 2017), available at https://scholar.harvard.edu/files/ddeming/files/DW_Aug2017.pdf.

2 Association of American Colleges and Universities, "Misconceptions about Today's College Students," available at https://www.aacu.org/aacu-news/newsletter/2018/november/facts-figures (last accessed September).

3 William R. Doyle, Amberly B. Dziesinski, and Jennifer A. Delaney, "Modeling Volatility in Public Funding for Higher Education" (Nashville, TN: Vanderbilt University and Champaign, IL: University of Illinois at Urbana Champaign, 2018), available at https://aefpweb.org/sites/default/files/webform/doyle_dziesinski_delaney_volatility_2018.pdf.

4 Bo Zhao, "Disinvesting in the Future? A Comprehensive Examination of the Effects of State Appropriations for Public Higher Education" (Boston: Federal Reserve Bank of Boston, 2018), available at https://www.bostonfed.org/publications/research-department-working-paper/2018/a-comprehensive-examination-of-the-effects-of-state-appropriations-for-public-higher-education.aspx.

5 Steven Hurlburt and Michael McGarrah, "Cost Savings or Cost Shifting? The Relationship Between Part-Time Contingent Faculty and Institutional Spending" (Washington: American Institutes for Research, 2016), available at https://deltacostproject.org/sites/default/files/products/Cost-Savings-or-Cost-Shifting-Contingent-Faculty-November-2016_0.pdf; J. Chamberlin, "Mental health services remain scarce at community colleges," *Monitor on Psychology* 43 (4) (2012): 11, available at https://www.apa.org/monitor/2012/04/community-colleges; Eleanor Eckerson and others, "Child Care for Parents in College: A State-by-State Assessment (Washington: Institute for Women's Policy Research, 2020), available at https://www.luminafoundation.org/wp-content/uploads/2017/08/child-care-for-parents-in-college.pdf.

6 National Center for Education Statistics, "Undergraduate Retention and Graduation Rates," available at https://nces.ed.gov/programs/coe/indicator_ctr.asp (last accessed September 2020).

7 Deming and Walters, "The Impact of Price Caps and Spending Cuts on U.S. Postsecondary Attainment."

8 National Center for Education Statistics, "Datalab," National Postsecondary Student Aid Study: 2016 Undergraduates data, Table cghcap58, available at https://nces.ed.gov/datalab/index.aspx?ps_x=cghcap58 (last accessed August 2020).

9 Sara Garcia, "Gaps in College Spending Shortchange Students of Color" (Washington: Center for American Progress, 2018), available at https://www.americanprogress.org/issues/education-postsecondary/reports/2018/04/05/448761/gaps-college-spending-shortchange-students-color/.

10 Michael Mitchell, Michael Leachman, and Kathleen Masterson, "A Lost Decade in Higher Education Funding: State Cuts Have Driven Up Tuition and Reduced Quality" (Washington: Center on Budget and Policy Priorities, 2017), available at https://www.cbpp.org/research/state-budget-and-tax/a-lost-decade-in-higher-education-funding.

11 Ashley A. Smith, "Coping With Zero in Arizona," Inside Higher Ed, January 27, 2017, available at https://www.insidehighered.com/news/2017/01/27/arizona-community-colleges-cope-state-disinvestment-and-declining-enrollments.

12 Author's calculations based on data from the National Center for Education Statistics, "Integrated Education Postsecondary Data System Survey Components: Finance," available at https://nces.ed.gov/ipeds/use-the-data (last accessed August 2019).

13 College for All Act of 2017, S. 806, 115th Cong., 1st sess. (April 23, 2017), available at https://www.congress.gov/bill/115th-congress/senate-bill/806/text.

14 Debt-Free College Act of 2018, S. 2598, 115th Cong., 2nd sess. (March 22, 2018), available at https://www.congress.gov/bill/115th-congress/senate-bill/2598.

15 CAP Postsecondary Education Team, "Beyond Tuition" (Washington: Center for American Progress, 2018), available at https://www.americanprogress.org/issues/education-postsecondary/reports/2018/06/20/451899/beyond-tuition/.

16 Thomas Snyder and others, "Study of the Title I, Part A Grant Program Mathematical Formulas" (Washington: National Center for Education Statistics, May 2018), available at https://nces.ed.gov/pubs2019/2019016.pdf.

17 Tamara Hiler and Wesley Whistle, "Creating a 'Title I' for Higher Ed," Third Way, December 13, 2018, available at https://www.thirdway.org/memo/creating-a-title-i-for-higher-ed.

18 Community College Research Center, "Community College FAQs," available at https://ccrc.tc.columbia.edu/Community-College-FAQs.html (last accessed September 2020).

19 Richard Kahlenberg, "How Higher Education Funding Shortchanges Community Colleges" (Washington: The Century Foundation, 2015), available at https://tcf.org/content/report/how-higher-education-funding-shortchanges-community-colleges/.

20 Garcia, "Gaps in College Spending Shortchange Students of Color."

21 Community College Research Center, "Community College FAQs."

22 National Center for Education Statistics, "Integrated Postsecondary Education Data System," available at https://nces.ed.gov/ipeds/use-the-data (last accessed September 2020).

23 For more on the difference in Pell revenue for GASB/FASB, see Integrated Postsecondary Education Data System, "IPEDS Finance Survey Tips Scholarships, Grants, Discounts, and Allowances," available at https://nces.ed.gov/ipeds/report-your-data/data-tip-sheet-reporting-finance-data (last accessed September 2020).

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