TICAS

Dire Disparities

Patterns of Racially Inequitable Funding and Student Success in Public Postsecondary Education

August 2019

Acknowledgements

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This report was written by Lindsay Ahlman, with key project support from Debbie Cochrane and Veronica Gonzalez.

We are grateful to our foundation partners and individual donors whose support makes TICAS' work possible. The Joyce Foundation and Lumina Foundation provided support for this project. The views expressed in this paper are solely those of TICAS and do not necessarily reflect the views of our funders.

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Introduction

College plays a critical role in providing opportunities for economic mobility, yet degree attainment by race is inequitable. Currently, more than half of young white adults hold at least a two-year college degree, compared to 37 percent of Black young adults. Less than a third of Hispanic, American Indian, and Hawaiian or Pacific Islander young adults have at least a two-year college degree.[1]

Underrepresented students of color disproportionately attend public colleges and universities that have less money to spend supporting them, and where success rates are low. Community colleges serve the highest shares of underrepresented students of color and have just a fraction of the state support and tuition revenue available to other colleges.[2]

This report examines how changes in core education revenue (state and local appropriations, and tuition) between 2006 and 2016 — the years during and following the Great Recession — impact disparities in resources across public colleges and universities and the underrepresented students of color who enroll in them. We find that:

- Underrepresented students of color make up an increasing share of enrollment at all types of public colleges and universities, and most underrepresented students of color (54%) attending public colleges and universities go to a community college. At the same time, prior research has found that enrollment of underrepresented students of color at flagship and selective universities does not equitably reflect demographic trends.

- State disinvestment following the Great Recession shifted more of the burden of college costs from state and local governments onto students and families in the form of increased tuition.[3] Between 2006 and 2016, tuition revenue increased by $850 per student at community colleges and $5,000 per student at doctoral universities. Tuition now makes up a higher share of total revenue than before the recession, for all public schools.

- Over the course of the decade, state funding per student increased modestly at community colleges while remaining stable or declining at other types of public colleges and universities. Community colleges still receive nearly $2,900 less per student from states than doctoral universities, despite serving the highest shares of underrepresented students of color. Considering both tuition and appropriations, these increases have not moved the needle on persistent disparities in total per-student revenue across different types of public colleges.

- We also examined patterns of resource disparities in California, Illinois, New York, North Carolina, and Texas — five states that together enroll over a third of all public college students. In all five states, community colleges receive no more than half — and as little as 22 percent — of the per-student revenue received by doctoral universities.

- Nationally and in all five states examined, schools receiving the least funding and serving the bulk of underrepresented students of color have the lowest rates of success.

Public colleges and universities serve a variety of important goals, and these goals drive some legitimate differences in levels of resources across college types. At the same time, states are rightly focused on the need for a more educated workforce and the importance of closing college attainment gaps. Achieving these goals requires states to address head on the funding patterns that perpetuate disparities, including the inadequacy of current funding levels for the community colleges that disproportionately serve disadvantaged students.

National Trends at Public Colleges and Universities

Underrepresented students of color make up an increasing share of total enrollment at public institutions, and they disproportionately attend community colleges.

Three-quarters (74%) of underrepresented students of color (who, for the purposes of this report, include Black, Latino, American Indian/Alaskan Native, Native Hawaiian and other Pacific Island students) enroll in public colleges, and of these students a majority (54%) enroll in associate's colleges (community colleges).[4] Underrepresented students of color are an increasing share of enrollment across all institution types nationwide. Less selective and non-research intensive public four-year colleges serve higher shares of these students compared to doctoral universities like the University of Michigan and the University of Virginia. However, community colleges enroll the highest share of underrepresented students of color, growing from 29 percent in 2006 to 38 percent of enrollment in 2016.

By comparison, fewer than a quarter (23%) of students enrolled in doctoral universities (such as the University of Michigan and the University of Virginia) were underrepresented students in 2016, up from 17 percent in 2006.[5] Despite this growth, Black and Latino students continue to be underrepresented in public selective and flagship universities.[6]

In the wake of the Great Recession, state and local funding support declined for all public colleges and inequitable funding patterns persisted.

When the Great Recession began in December 2007, state support for public higher education had already declined from its high in 2001 and total enrollment was continuing to climb.[7] A pattern of inequitable funding, that especially disadvantaged community colleges, was also already in place. During the 2006-07 academic year, community colleges received the same level of per-student state and local appropriations support as baccalaureate colleges (such as Virginia Military Institute and St. Mary's College of Maryland), but only half (49%) the funding directed at doctoral universities and 78 percent of that directed at master's colleges and universities (such as many California State University and State University of New York campuses).

The Great Recession ended in June 2009, and state fiscal year 2012 saw both an historic low level of total per-student state support for higher education and an historic high in total enrollment.[8] By the 2011-12 academic year, state and local support (as measured by appropriations per full time equivalent (FTE)) had declined from 2006 levels across the board. Appropriations revenue at community colleges declined by 18 percent, at baccalaureate colleges by 12 percent, at master's universities by 21 percent, and at doctoral universities by 25 percent.[9]

State funding disparities that predated the recession declined very slightly, after master's colleges and universities and doctoral universities saw somewhat larger cuts to per-student appropriations in the years immediately following the recession. By 2011, community colleges received 54 percent of the appropriations support of doctoral universities, and 82 percent of that of master's colleges and universities. See Table 1 on the right for complete data on changes in revenue over time by Carnegie Classification.

After 2012, reinvestments of state and local funding have narrowed but not closed gaps in appropriations revenue.

As state revenues began to recover from the Great Recession between 2011 and 2016, per-student state and local appropriations for community colleges grew by 31 percent. Investment in other types of public colleges also increased, but to a smaller degree (14% at baccalaureate colleges and by 9% at both master's colleges and universities and doctoral universities). In fact, community colleges are the only public school type to have seen a net increase in per-student state and local appropriations revenue (+7%) from 2006 to 2016.

This relatively higher reinvestment in community colleges helped reduce — but not eliminate — existing gaps in local and state appropriations across types of public colleges. By 2016, community colleges received 65 percent of doctoral universities' per-student appropriations revenue (nearly $2,900 less per student) and nearly the same per-student support as master's colleges and universities.

Per-student tuition revenue has increased across all public college types, compensating for state cuts over the past decade.

Colleges responded to declines in state and local funding for public higher education during 2006 to 2011 by increasing tuition. Doctoral universities maintained their total revenue by offsetting losses in appropriations with an equivalent increase in tuition, as did master's colleges and universities. Total per-student revenue at baccalaureate colleges actually increased 19 percent, as per-student tuition charges more than made up for appropriations cuts.

In contrast, community colleges experienced a 5 percent decline in total revenue as a result of their limited ability to increase tuition to fully offset reductions in state and local support. Community colleges — like many less selective, non-research-intensive public four-year colleges — also generally don't have sources of revenue beyond appropria-

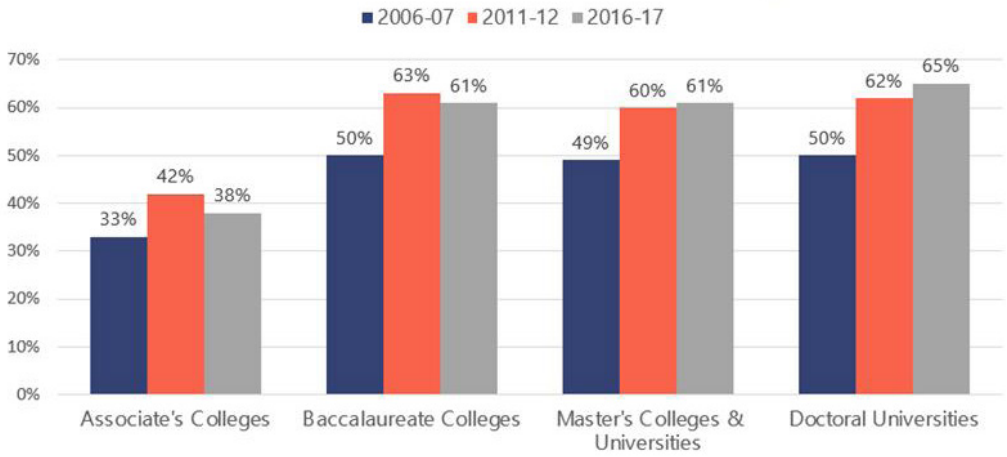
tions and tuition (such as endowments, research, and affiliated medical facilities) available to some research-intensive public universities.[10]

TABLE 1: Change in Revenue per FTE by Carnegie Classification

		APPROPRIATIONS	TUITION	TOTAL REVENUE
2006-07 to 2011-12 (five years)	Associate's Colleges	-18%	21%	-5%
	Baccalaureate Colleges	-12%	49%	19%
	Master's Colleges and Universities	-21%	25%	1%
	Doctoral Universities	-25%	25%	0%
2011-12 to 2016-17 (five years)	Associate's Colleges	31%	12%	23%
	Baccalaureate Colleges	14%	6%	9%
	Master's Colleges and Universities	9%	13%	11%
	Doctoral Universities	9%	20%	16%
2006-07-to 2016-17 (ten years)	Associate's Colleges	7%	35%	16%
	Baccalaureate Colleges	0%	59%	29%
	Master's Colleges and Universities	-14%	42%	13%
	Doctoral Universities	-19%	50%	16%

Across the board, tuition comprised a larger portion of total revenue in 2016 than before the recession, a sign of the shifting burden of college costs from states to students at all types of public institutions. Between 2006 and 2016, tuition revenue increased by $850 per student at community colleges and $5,000 per student at doctoral universities. The extent to which colleges rely upon tuition revenue varies substantially, with the range across institution types having widened in recent years. Community colleges' reliance on tuition revenue has been and continues to be less than that of other institution types — by design. Tuition as a share of total per-student revenue even *declined* between 2011 and 2016 when these schools received increased state and local support.

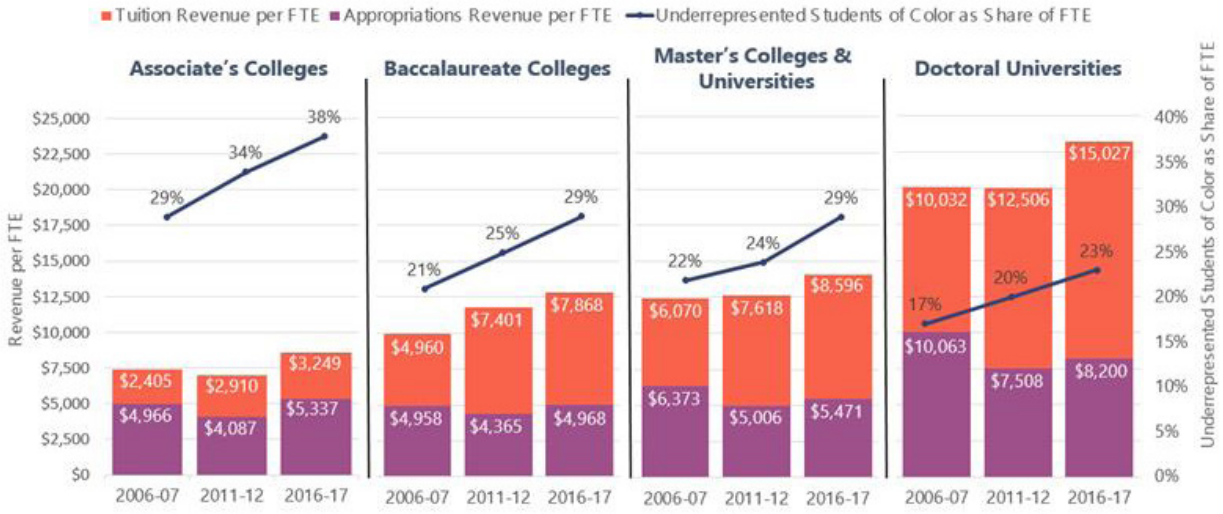
Tuition as a Share of Total Revenue per FTE



Disparities in total revenue persist, with colleges enrolling the largest shares of underrepresented students of color having fewer per-student resources to spend.

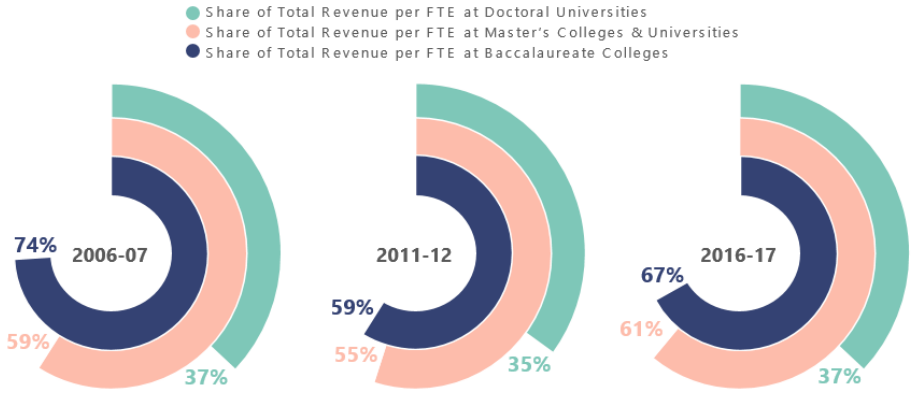
Community colleges were the only type of public college to see decline in *total* per-student revenue between 2006 to 2011 (see Table 1 on page 7). And while community colleges also saw relatively bigger increases in state and local funding support over the next five years, stark disparities in total revenue across school types persisted into 2016.

Per-Student Revenue and Enrollment of Underrepresented Students of Color at Public Colleges, by Carnegie Classification



Despite increased state investment in community colleges, they still have just a fraction of the resources available to spend on students as other types of schools serving lower shares of underrepresented students of color. Community colleges and doctoral universities each saw equivalent increases in total revenue from 2006 to 2016 in percentage terms (+16%), but community colleges' total per-student revenue remains just 37 percent of revenue at doctoral universities.

Associate's Colleges' Total Revenue Relative to Other Public School Types

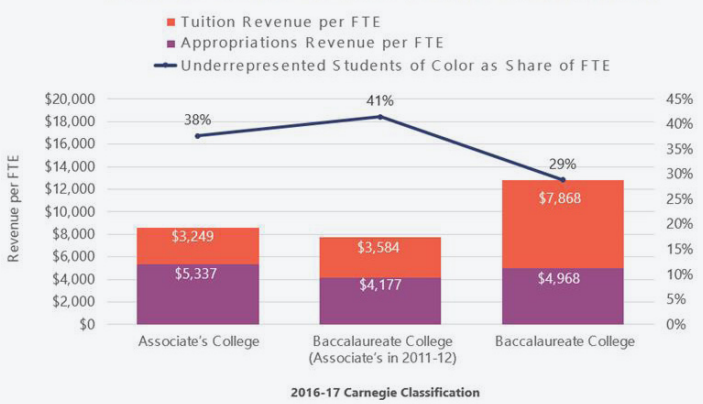


Schools that Changed Carnegie Classifications

This analysis uses Carnegie Classifications to group institutions into categories that can be compared across a set of years. However, while changes to colleges' Carnegie Classifications are uncommon, they do occur, and complicate analyses of differences across types of institutions over time.

During the ten-year period reflected in this analysis, many community colleges across several states began offering a limited number of bachelor's degree programs designed to meet community needs. These four-year programs changed the schools' Carnegie Classification, even though these colleges remain thought of — and funded as — community colleges.

Newly Classified Baccalaureate Colleges Have Funding Patterns Similar to Their Former Classification



A total of 74 schools classified as community colleges in 2011 were subsequently classified as baccalaureate or baccalaureate-associate's hybrids in 2016. Examining these schools shows that while their classification changed, their funding pattern and student make-up is much closer to their prior classification than their new one.

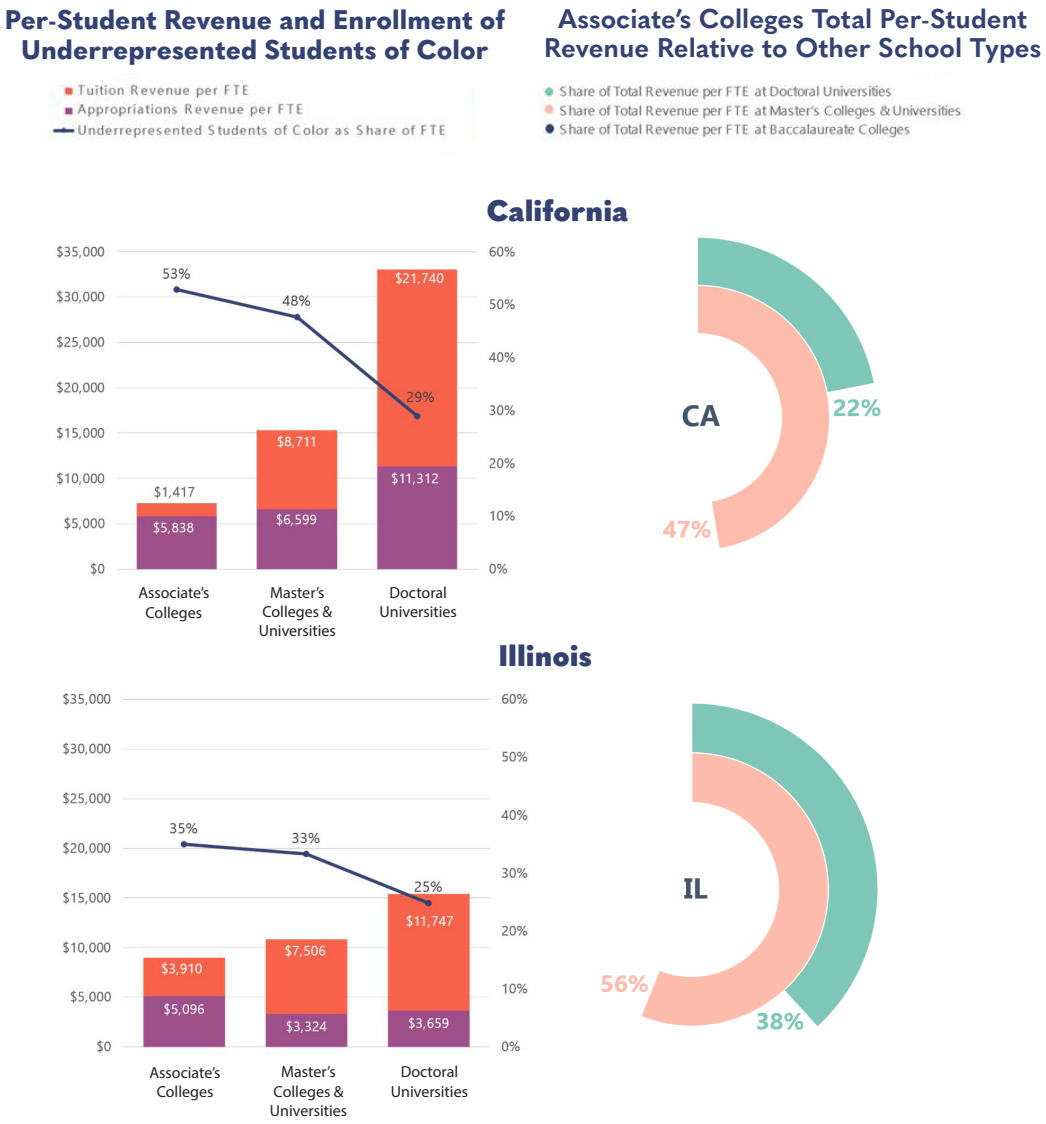
In recognition that Carnegie Classifications do not reflect this evolution within the universe of community colleges, and to facilitate fair comparisons across the three years of data we examine, the analyses discussed throughout this report include only colleges for which Carnegie Classification was consistent across 2006, 2011, and 2016.

Funding Patterns in Five Large States Mirror National Trends

Across states, the higher education landscape varies considerably. We analyzed data from five states with the highest enrollment in 2016 — California, Illinois, New York, North Carolina, and Texas — to assess whether national patterns in public college funding are mirrored in individual states. (For more on our methodology, see page 15.) These five states together enrolled over a third (36%) of all students enrolled in public institutions and half (51%) of all underrepresented students of color.

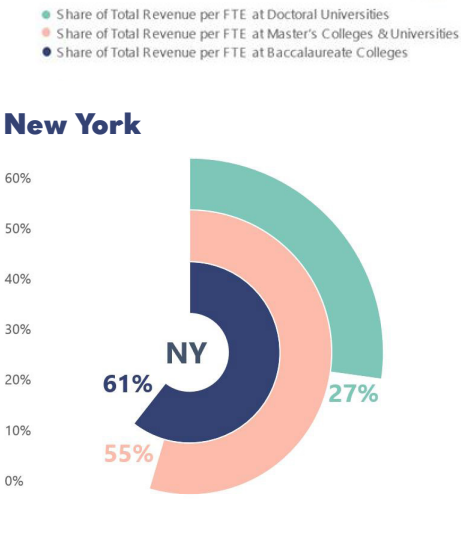
While patterns vary somewhat by state, we see similar trends. Doctoral universities have the highest per-student revenue and serve the lowest share of underrepresented students, and community colleges stand out the most starkly. In all five states, community colleges have just a fraction of the total resources that colleges serving lower shares of underrepresented students have to spend on educating students and helping them succeed. Community colleges' total revenue makes up anywhere from 22 to 49 percent of total revenue at doctoral universities (in California and Texas, respectively), and between 47 and 64 percent of total revenue master's colleges and universities (in California and North Carolina, respectively).

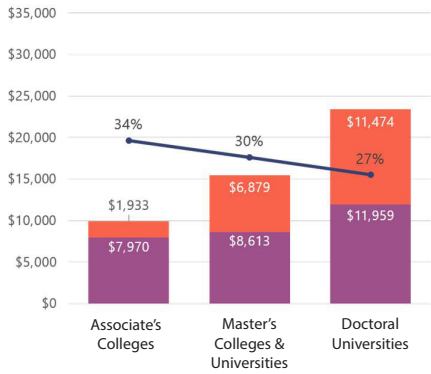
Community colleges in four of the five states (all but New York[11]) rely less heavily on tuition as a source of revenue than other types of colleges. For example, 20 percent of total revenue at community colleges in both California and North Carolina comes from tuition, compared to 66 and 49 percent at doctoral universities in those respective states.

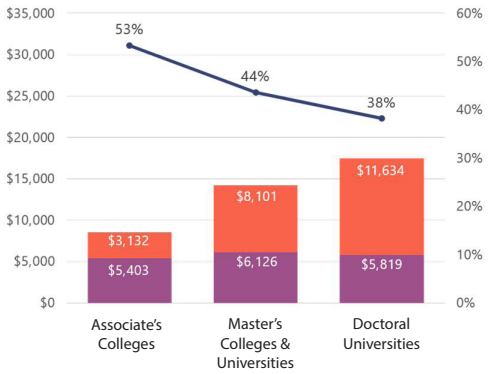


Per-Student Revenue and Enrollment of Underrepresented Students of Color

Associate's Colleges Total Per-Student Revenue Relative to Other School Types







Funding Matters for Student Success

A growing body of evidence points to the critical role institutional resources play in supporting positive student outcomes. Increased spending, wisely invested, increases student success.[12] Not all strategies to increase completion come with a big price tag.[13] However, poorly resourced colleges are unlikely to be able to strengthen the academic and non-academic supports that are key to driving student success.

Nationally and in all five states examined, schools receiving the least funding and serving the bulk of underrepresented students of color have the lowest rates of success. For example, three-quarters of underrepresented students of color at public colleges in California attend community colleges, where the graduation rate is 30 percent. Just 8 percent of underrepresented students of color in the state attend doctoral universities, where the graduation rate is 83 percent.

Table 2: Public College Graduation Rates and Student Enrollment, by Carnegie Classification[14]

	Associate's Colleges	Baccalaureate Colleges	Masters Colleges and Universities	Doctoral Universities
NATIONAL				
150% Graduation Rate (first-time full-time undergraduates (FTFT UG))	25%	36%	51%	67%
Share of Underrepresented Students of Color (undergraduate full-time equivalent (UG FTE))	58%	2%	16%	23%
Share of Other Students (undergraduate full-time equivalent (UG FTE))	44%	3%	18%	34%
CA				
150% Graduation Rate (FTFT UG)	30%	-	58%	83%
Share of Underrepresented Students of Color (UG FTE)	75%	-	16%	8%
Share of Other Students (UG FTE)	65%	-	17%	18%
IL				
150% Graduation Rate (FTFT UG)	28%	-	45%	66%
Share of Underrepresented Students of Color (UG FTE)	74%	-	10%	16%
Share of Other Students (UG FTE)	68%	-	9%	23%
NC				
150% Graduation Rate (FTFT UG)	22%	-	61%	68%
Share of Underrepresented Students of Color (UG FTE)	55%	-	16%	29%
Share of Other Students (UG FTE)	49%	-	16%	33%
NY				
150% Graduation Rate (FTFT UG)	25%	34%	56%	74%
Share of Underrepresented Students of Color (UG FTE)	50%	12%	31%	6%
Share of Other Students (UG FTE)	48%	7%	31%	14%
TX				
150% Graduation Rate (FTFT UG)	19%	-	41%	65%
Share of Underrepresented Students of Color (UG FTE)	66%	-	7%	24%
Share of Other Students (UG FTE)	55%	-	9%	35%

Policy Recommendations

Use Data to Support Tracking, Assessment, and Strategy

Meeting state educational and workforce attainment goals requires a commitment to funding equity to ensure schools serving the bulk of underrepresented students of color have adequate resources to support success. Strategies for increasing access and completion should be guided by deep assessments of funding gaps and their impact on underrepresented students of color and other vulnerable students, including a closer look at individual racial groups of students who face unique barriers. As part of this work, states should prioritize improving their own data systems to ensure they can accurately track the enrollment, completion, and employment outcome data needed to identify areas for improvement and track progress in closing gaps — including at key racial and socioeconomic disaggregates. The federal government can support state focus on closing equity gaps by requiring states to engage in annual funding equity assessments leveraging consistent and comparable data collected by the federal government. States should be required to develop and implement plans to address inequities identified by the best available data, with approval and monitoring from the Secretary of Education.

Use New Federal Investments in Public Higher Education to Supplement State Investment Focused on Equitable Institutional Supports

A new partnership between the federal government and states should deliver new federal investments contingent on a maintenance or increase in state support for public higher education. By increasing resources available to schools where most underrepresented students of color attend and where completion rates are low, a well-designed federal-state partnership offers a workable path forward to reducing racial inequities in college access and success. New federal resources aimed at maintaining or lowering the net price of public college for low- and moderate-income students and keeping states invested in colleges would set a new foundation for affordability, similar to what is set forth in recent proposals to make college debt-free.[15] States receiving these funds would be required to assess and develop remedies for funding inequities across schools serving different student populations. A federal-state partnership would also establish a foundation to support states through economic downturns in order to avoid recreating the steep cuts following the Great Recession that disproportionately impacted underrepresented students of color.

Conclusion

Over half of all underrepresented students of color are enrolled at community colleges, yet persistent patterns of inequitable funding leave these schools with inadequate resources to support student success. While there are encouraging signs of an increasing focus of state and local support on community colleges, the investments have been insufficient to make progress in closing disparities across different types of institutions. A closer look at five states educating half of all underrepresented students of color enrolled in public institutions reveals a similar pattern. As such, there remains great cause for concern.

The status quo is not a workable path to closing racial equity gaps in degree attainment. Spending is directly connected to student success, and schools cannot spend money they do not have. The result: schools serving higher shares of underrepresented students of color also have the lowest success rates.

In order to make progress on closing persistent gaps in college attainment by race, states and the federal government must increase their commitment and work together to ensure public college funding is both adequate and equitable.

Methodology

This report uses data from the Integrated Postsecondary Education Data System (IPEDS) 2006-07, 2011-12, and 2016-17 years, including the Finance, 12-month Enrollment, and Fall Enrollment Surveys. Our data analysis was modeled on Stata code written by the Center for American Progress for an analysis on gaps in college spending for students of color.[16] Revenue figures include average tuition revenue and appropriations per full-time equivalent (FTE) graduate and undergraduate student enrollment for public two-year and four-year institutions (excluding Special Focus and Tribal schools) in the 50 states (not DC). Revenue is inclusive of both tuition revenue and state and local appropriations revenue at Governmental Accounting Standards Board (GASB) and Financial Accounting Standards Board (FASB) schools, using the Delta Cost Project methodology for use of FASB and GASB accounting methods.[17] All revenue figures are in 2016 dollars. Share of enrollment figures include both undergraduate and graduate student full-time equivalent (FTE) enrollment, using a conversion factor for part-time students.

Carnegie Classification groupings are based on the Basic Classification by the Carnegie Foundation for the Advancement of Teaching.[18] Baccalaureate colleges includes institutions where baccalaureate or higher degrees represent at least 50 percent of all degrees but where fewer than 50 master's degrees or 20 doctoral degrees were awarded during the update year, as well as baccalaureate/associate's colleges, which include four-year colleges (by virtue of having at least one baccalaureate degree program) that conferred more than 50 percent of degrees at the associate's level.

Colleges can and do change Carnegie Classifications over time, and only colleges for whom Carnegie Classifications was consistent across the years in which they appeared are included in the analysis. A total of 57 schools changed classifications from 2006-07 to 2011-12, and 122 schools changed classifications between 2011-12 and 2016-17. The 74 schools classified as associate's colleges in 2011-12 and baccalaureate or baccalaureate-associate's colleges in 2016-17 represent the largest single group of the 162 schools whose classification changed at least once over the ten-year period.

Because figures in this report exclude institutions whose classification changed from prior years, 2016-17 figures in this report may not align with those reported in our prior brief, which assessed funding patterns in only 2016-17.[19]

Institution Counts for Each Year by Carnegie Classification (National)

	2006-07	2011-12	2016-17
Associate's Colleges	870	879	874
Baccalaureate Colleges	86	88	90
Master's Colleges and Universities	226	226	234
Doctoral Universities	164	164	167
Total	**1,346**	**1,357**	**1,365**

To minimize the influence of potential errors in data reporting and avoid overstating trends based on a very small number of colleges, the analysis of each state includes only classifications for which at least three schools appear. As a result, one baccalaureate college in both California and North Carolina were excluded; Illinois and Texas did not have any institutions classified as baccalaureate colleges in 2016-17.

Institution Counts for 2016-17 by Carnegie Classification for Selected States

State	Associate's Colleges	Baccalaureate Colleges	Masters Colleges and Universities	Doctoral Universities	Total
California	113		16	9	138
Illinois	48		7	5	60
North Carolina	58		6	6	70
New York	35	8	20	6	69
Texas	58		14	11	83
Total	**312**	**8**	**63**	**37**	**420**

Endnotes

[1] TICAS calculations on Current Population Survey data. Sarah Flood, Miriam King, Renae Rodgers, Steven Ruggles, and J. Robert Warren. Integrated Public Use Microdata Series, Current Population Survey: Version 6.0 Annual Social and Economic Supplement. Minneapolis, MN: IPUMS, 2018. http://bit.ly/2WJdPFa.

[2] For the purposes of this report, underrepresented students of color include Black, Hispanic, Native Hawaiian or Pacific Islander, and American Indian and Alaskan Native students. A community college refers to the Carnegie Classification of "associate's college," defined as an institution at which the highest degree awarded is an associate's degree. For more on community college definitions and how it is evolving, see the box on page 5 and the methodology section.

[3] See also Michael Mitchell. August, 2017. "A Lost Decade in Higher Education Funding." Center on Budget and Policy Priorities. http://bit.ly/30o1Wa0; and State Higher Education Executive Officers Association. 2019. *State Higher Education Finance: FY 2018*. http://bit.ly/2JHTTyX.

[4] Calculations by TICAS on data from the U.S. Department of Education, IPEDS 12-month enrollment for all students enrolled in 2016-17 in schools in the 50 states and the District of Columbia. Figures include both two-year and four-year public institutions, and both undergraduate and graduate students.

[5] Unless otherwise noted, enrollment figures throughout this report refer to full-time equivalent enrollment of both undergraduate and graduate students and are derived from the 12-month Enrollment and Fall Enrollment Surveys of the Integrated Postsecondary Education Data System (IPEDS).

[6] Peters, Eleanor Eckerson and Mamie Voight. 2018. *Inequities Persist: Access and Completion Gaps at Public Flagships in The Great Lakes*. Institute for Higher Education Policy. http://bit.ly/2L2uEXb; Anthony P. Carnevale, Martin Van Der Werf, Michael C. Quinn, Jeff Strohl, and Dmitri Repnikov. 2018. *Our Separate & Unequal Public Colleges: How Public Colleges Reinforce White Racial Privilege and Marginalize Black and Latino Students*. Georgetown University Center for Education and the Workforce. http://bit.ly/2W3uRkb.

[7] From 1980 to 2018, the highest per FTE state support was $9,145 in 2001, when total FTE enrollment was 8,645,524. By 2006, per FTE state support was $8,167 and FTE enrollment was 9,813,978. Figures are CPI adjusted. State Higher Education Executive Officers Association (SHEEO) State Higher Education Finance dashboards https://public.tableau.com/profile/sheeo#!/vizhome/SHEF_FY18_Interactive_Data/About. For more information on timing of the Great Recession, see Center of Budget and Policy Priorities. June 2019. Chart Book: The Legacy of the Great Recession. https://www.cbpp.org/research/economy/chart-book-the-legacy-of-the-great-recession.

[8] Total per FTE state support was $6,470 in 2012, and total FTE enrollment was 11,525,017. Figures are CPI adjusted. State Higher Education Executive Officers Association (SHEEO) State Higher Education Finance dashboards https://public.tableau.com/profile/sheeo#!/vizhome/SHEF_FY18_Interactive_Data/About.

[9] This analysis uses the Basic Carnegie Classification framework. 'Community college' reflects schools classified as associate's colleges. Baccalaureate colleges include both baccalaureate and baccalaureate-associate's colleges. Special Focus Institutions and Tribal Colleges were excluded. For definitions of each classification, see: http://carnegieclassifications.iu.edu/classification_descriptions/basic.php.

[10] Kahlenberg, Richard D. 2015. *How Higher Education Funding Shortchanges Community Colleges*. The Century Foundation. http://bit.ly/2KV54V5.

[11] New York is the only state with sufficient numbers of baccalaureate colleges to include in a comparison (see Methodology, page 15). Across all institution types, the eight baccalaureate colleges in New York enroll the highest share of underrepresented students of color (52%). While these colleges receive less than half the total per-student revenue at doctoral universities enrolling the lowest share of these students (23%), they receive 90% of master's colleges and universities' per-student total revenue, and 1.6 times more than community colleges, which each enroll similar shares of underrepresented students of color (39% and 40% respectively).

[12] David Deming and Christopher Walters. February 2018. *The Impact of State Budget Cuts on U.S. Postsecondary Attainment*. Harvard Web Publishing. http://bit.ly/2Q50Taa; David J. Deming and Christopher R. Walters. August, 2017. *The Impact of Price Caps and Spending Cuts on U.S. Postsecondary Attainment*. National Bureau of Economic Research, Working Paper 23736. http://bit.ly/2YwFQQY; Michael Mitchell. August, 2017. *A Lost Decade in Higher Education Funding*. Center on Budget and Policy Priorities. http://bit.ly/30o1Wa0. See also: William N. Evans, et al. December 2017. *Increasing community college completion rates among low-income students: Evidence from a randomized controlled trial evaluation of a case management intervention* (Working Paper No. 24150). National Bureau of Economic Research. https://doi.org/10.3386/w24150; Lindsay C. Page, et al. October, 2016. *More than*

dollars for scholars: The impact of the Dell Scholars Program on college access, persistence and degree attainment (SSRN Scholarly Paper No. ID 2726320). Rochester, NY: Social Science Research Network. https://papers.ssrn.com/abstract=2726320.

[13] Kirp, David. July 26, 2019. "The College Dropout Scandal." The Chronicle of Higher Education. https://www.chronicle.com/interactives/20190726-dropout-scandal; TICAS. 2019. *Don't Stop Improving: Supporting Data-Driven Continuous Improvement in College Student Outcomes.* https://ticas.org/sites/default/files/pub_files/dont_stop_improving_0.pdf.

[14] Calculations by TICAS using data from the Integrated Postsecondary Education Data System (IPEDS). Graduation rates include first-time, full-time degree/certificate seeking students who complete their program within 150% of normal time. Underrepresented students of color includes full-time equivalent Black, Hispanic, Native Hawaiian or Pacific Islander, and American Indian or Alaskan Native students, while the share of "other" students includes full-time equivalent White and Asian students. Full-time equivalency is derived using both Fall and 12-month Enrollment figures. Totals across Carnegie categories may not total to 100% due to the inclusion of institutions with no Carnegie classification, which enroll 1% of underrepresented students of color and 1% of white and Asian nationwide.

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[16] See Sara Garcia. April 5, 2018. "Gaps in College Spending Shortchange Students of Color." Center for American Progress. https://ampr.gs/2JkvW1b.

[17] Delta Cost Project Database. http://bit.ly/2YwfqyQ.

[18] The Carnegie Classification of Institutions of Higher Education. Basic Classification Description. http://bit.ly/2Y-B8q3H.

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