

**UNDERSTANDING COLLEGE AFFORDABILITY**

**Statement of  
Dr. Sandy Baum\*  
Fellow, Urban Institute**

**before the  
Committee on Health, Education, Labor and Pensions  
United States Senate**

**REAUTHORIZING THE HIGHER EDUCATION ACT:  
IMPROVING COLLEGE AFFORDABILITY**

**Tuesday, February 6, 2018**

\*The views expressed are my own and should not be attributed to the Urban Institute, its trustees, or its funders.

I thank Kristin Blagg, Matthew Chingos, Michael McPherson, and Kim Rueben for helpful comments and Fiona Blackshaw and Alex Tilsley for help in preparing this testimony.

## Biography

Sandy Baum is a fellow in the Education Policy Program at the Urban Institute and professor emerita of economics at Skidmore College. An expert on higher education finance, she speaks and writes extensively about college access, college pricing, student aid policy, student debt, and affordability.

Since 2002, Baum has coauthored the College Board's annual publications *Trends in Student Aid* and *Trends in College Pricing*. She is a member of the board of the National Student Clearinghouse and has chaired major study groups through the College Board and the Brookings Institution, developing proposals for reforming federal and state student aid. Baum's articles on higher education finance have been published in professional journals, books, and the trade press. She is the lead researcher on the Urban Institute's college affordability website and is the author of *Student Debt: Rhetoric and Realities of Higher Education Financing* and coauthor of *Making College Work: Pathways to Success for Disadvantaged Students*.

Baum earned her BA in sociology from Bryn Mawr College, where she serves on the board of trustees, and earned her PhD in economics from Columbia University.

## Summary of Testimony

High and rising tuition prices create a real challenge to many students and families attempting to finance a college education. But many other factors also contribute to college affordability. Incomes at the top of the income distribution have grown enough in recent years to keep up with the price of college, but the incomes of lower- and middle-income households have stagnated or declined. Low savings rates mean that few families successfully prepare in advance for college payments.

College affordability depends on more than tuition prices and other expenses students incur and the resources available at the time of enrollment. The *value* of the education helps determine its affordability over the long run. No matter how low the price, a program or an institution that does not support students in completing an education that will serve them well, both in life opportunities and labor market success, will turn out to be unaffordable. An education that provides a significant earnings premium and opens doors to opportunity for students is affordable, even if it requires borrowing and using some of the added earnings to repay student debt.

The federal student aid system plays a critical role in increasing the number of Americans who can enroll and succeed in postsecondary education. Yet too many barriers remain, and Congress has an opportunity to address some of them with the impending reauthorization of the Higher Education Act.

Congress should help make college more affordable for students and families by simplifying the aid application process, making Pell grants more predictable and reliable, eliminating institutions with very poor outcomes from federal aid programs and holding institutions accountable for student success, providing better information and guidance for students, and improving the income-driven system for student loan repayment.

The data required to understand trends in college affordability include information on

1. the net prices students actually pay in addition to published prices,
2. nontuition expenses students must be able to meet in order to succeed in college,
3. institutional grant aid as well as the grants and loans available from the federal government, and
4. student debt.

Basing policies on reliable data and evidence about effectiveness is the best strategy for increasing college access and success.

Chairman Alexander, Ranking Member Murray, and members of the committee:

Thank you for the opportunity to testify today about college affordability. I commend your efforts to strengthen the federal system that supports students striving to invest in themselves and their futures. I am privileged to have the opportunity to share some insights into college affordability emerging from my long career as a higher education economist studying these issues.

I am a fellow at the Urban Institute, where I research student aid, higher education finance, college access and success, and the payoff of higher education for both students and society as a whole. In addition, I have coauthored the College Board's annual reports, *Trends in College Pricing* and *Trends in Student Aid*, every year since 2002. These reports are a trusted source of detailed data on college prices over time and on the history and distribution of student aid. I am also professor emerita of economics at Skidmore College.

The views expressed in this testimony are my own, not those of any organization with which I am affiliated, its trustees, or its funders.

My testimony begins with a discussion of the concept of college affordability, including the resources available to students and families and the economic value of college education. An overview of proposals for Congressional action to ameliorate existing problems follows. I then provide critical data on issues central to college affordability including tuition prices, net prices, student aid, nontuition expenses, and student debt. These data underlie my recommendations and I hope they will help inform the decisions facing Congress.

## **College Affordability: Understanding the Concept**

High tuition and fees and living expenses, along with a shortage of grant aid to help students with limited means cover those expenses, obviously make college less “affordable” than it would be if the prices of all the things students have to pay for were lower. But knowing these prices is not enough to evaluate the financial hurdles students and families face.

As the comprehensive view on the Urban Institute's *Understanding College Affordability* website ([collegeaffordability.urban.org](http://collegeaffordability.urban.org)) suggests, whether college is affordable for college and for society as a whole depends on how much it costs to deliver quality education; on the resources available to institutions, governments, students, and families to pay those costs; and on the value of the education. Making college cheaper won't make it more affordable unless sufficient resources are invested in providing the academic and personal supports students need to succeed and unless the degrees and certificates they earn serve them well in the labor market and throughout their lives.

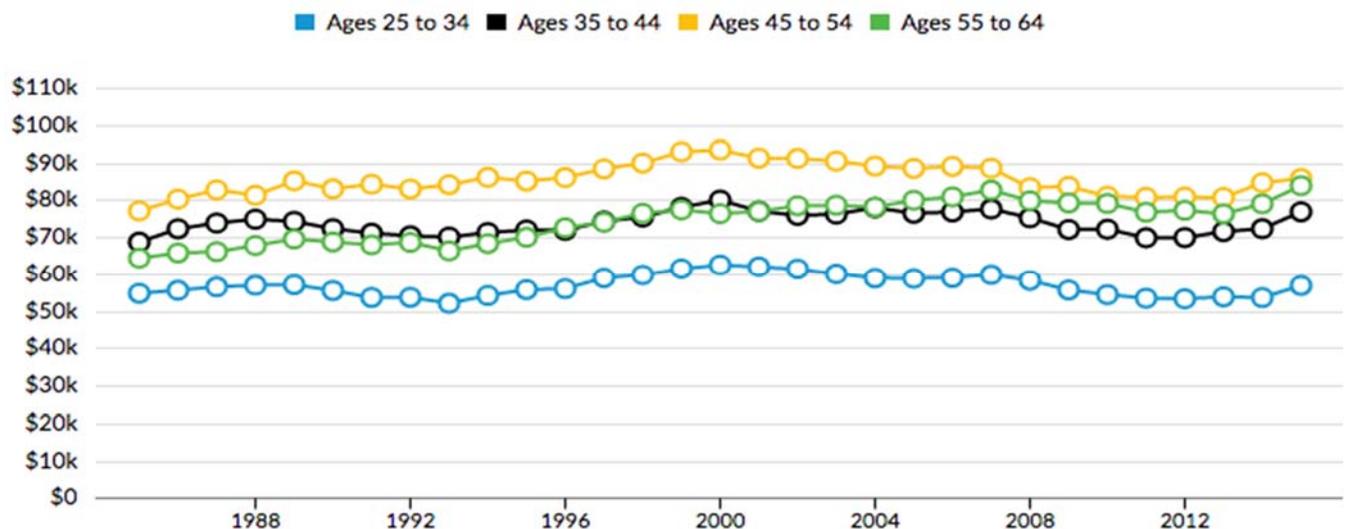
Rising prices certainly contribute to the financial strain of paying for college. But much of the hardship is caused by low completion rates of students who enroll; by stagnant family incomes and rising inequality; and by the reality that while, on average, college degrees pay off very well in the labor market, earnings vary widely among adults with similar levels of education. Postcollege income is one important indicator of the value of education; for most students, it includes a premium over what they would otherwise have earned, some of which can reasonably be devoted to repaying student loans. Higher education improves life prospects for most students substantially, but some students, especially many of those who do not complete

their degrees, end up worse off after paying for college than they would have been if they had never made the investment.

### Student and family resources

The failure of real median pretax family income to grow measurably in recent years makes it more and more difficult to pay for college (figure 1).

FIGURE 1  
Median Income of Families by Age Group, 1985–2015, in 2015 Dollars



Source: Urban Institute, “Understanding College Affordability,” [http://collegeaffordability.urban.org/covering-expenses/pre-college-income/#/income\\_over\\_time](http://collegeaffordability.urban.org/covering-expenses/pre-college-income/#/income_over_time).

Moreover, the personal savings rate is too low to support most families in planning ahead and spreading the costs of college over the years before their children enroll. The personal savings rate in the United States fell from 8.0 percent of after-tax income in December 1987 to 5.8 percent in 1997, 3.0 percent in 2007, and 2.4 percent in 2017.<sup>1</sup>

Changes in median family income understate the problems families from the lower half of the income distribution face in paying for college. Students from low- and moderate-income families get more grant aid and pay lower net prices than more affluent students, but the differences are far from what would be required to compensate for the large and growing gaps in income across families. The share of total family income accruing to those in the bottom 40 percent fell from 13 percent in 1996 to 12 percent in 2006 and to 11 percent in 2016. Over the same period, the share of the top 20 percent rose from 49 percent to 50 percent to 52 percent.<sup>2</sup> In other words, low- and moderate-income families face increasing struggles relative to others.

<sup>1</sup> Federal Reserve Bank of St. Louis, FRED Economics Data, “Personal Savings Rate,” February 3, 2018, <https://fred.stlouisfed.org/series/PSAVERT>.

<sup>2</sup> U.S. Census Bureau, Historical Tables: Income Inequality, Table H-2, 2017.

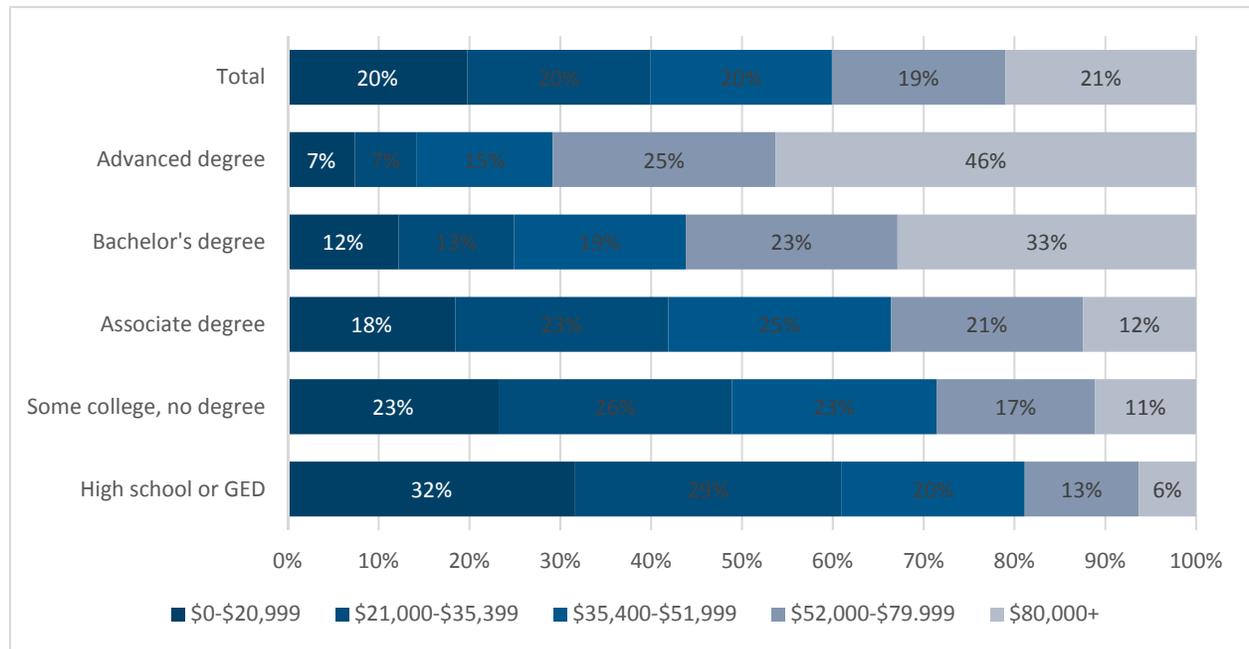
## Access versus success

Our nation has done an admirable job of increasing access to college. Significant gaps in enrollment rates across socioeconomic groups persist, but more than 85 percent of high school graduates have some college experience within 8 years.<sup>3</sup> However, students from low-income families disproportionately enroll in public two-year and for-profit institutions. They are less likely than others to complete their programs; and, when they do complete them, too often the credentials have limited value in the labor market.<sup>4</sup>

The average payoff to college degrees is quite high, but earnings vary considerably among adults with the same education level.

FIGURE 2

Earnings Distribution of Employed Workers Ages 35–44, by Educational Attainment



Source: Urban Institute, "Understanding College Affordability," [http://collegeaffordability.urban.org/after-college/variation-in-earnings/#/variation\\_within\\_education\\_levels](http://collegeaffordability.urban.org/after-college/variation-in-earnings/#/variation_within_education_levels).

A third of 35- to 44-year-olds whose highest degree is a bachelor's degree had incomes of \$80,000 or higher between 2009 and 2013, compared with just 6 percent of those with only a high school diploma. But a quarter of bachelor's degree recipients earned less than \$35,400. Not all bachelor's degrees—or degrees

<sup>3</sup> American Academy of Arts and Sciences Commission on the Future of Undergraduate Education, 2017, *Top Ten Takeaways About Undergraduates* (based on data from NCES, Education Longitudinal Study), <https://www.amacad.org/multimedia/pdfs/publications/researchpapersmonographs/PRIMER-cfue/PRIMER-Top-Ten-Takeaways.pdf>.

<sup>4</sup> Harry Holzer and Sandy Baum, *Making College Work: Pathways to Success for Disadvantaged Students* (Washington, DC: Brookings Institution Press, 2017).

of any other type—pay off equally well in the labor market. For those whose degrees do not pay off, college turns out not to have been affordable.<sup>5</sup>

The reality is that lowering college prices for students is an important strategy for helping them succeed. More generous grant aid can make a real difference in student success. But ensuring that students have the support they need to make good choices about where to enroll and what to study and to succeed in completing their programs is also critical. College is a very good investment but an uncertain one. Insurance against unexpected weak outcomes is an important part of the federal government's role in ensuring college affordability.

## Seeking Solutions: The Federal Role

The federal student aid system plays a significant role in reducing the barriers to college access and success. Federal grants and loans have allowed millions of Americans to earn college credentials that improve their lives and increase their contributions as citizens and as workers.

Many of the significant remaining barriers originate outside the higher education system. Largely because of extreme inequalities of income and wealth and limited access to high-quality early education and health care for many Americans, too many young adults are not prepared to succeed in college.<sup>6</sup>

The federal government is also limited by the reality that a great strength of our higher education system is the diversity of institutions and credentials it offers. The autonomy of states, and of colleges and universities, to innovate and meet the needs of differing populations is central to our success.

Reauthorization of the Higher Education Act cannot solve all the problems facing higher education and its students. But Congress does have the opportunity to create a more equitable society and a more efficient economy by making changes such as these to the existing system:

1. *Simplify the application process for federal student aid.* Reducing the amount of information students must provide on the FAFSA and relying more on data the IRS already has would increase the number of students who successfully access federal aid.<sup>7</sup>
2. *Simplify the formula for calculating eligibility for Pell grants so prospective students can predict well in advance how much aid they will receive.* The federal government could actively work to improve awareness of Pell grants and encourage young people to prepare for college both financially and academically. A good option would be to send out notices to school children and their parents,

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<sup>5</sup> Graduates who make the choice to follow career paths with low earnings are in very different situations from those who do not have viable choices.

<sup>6</sup> See, for example Helen Ladd, "Education and Poverty: Confronting the Evidence," *Journal of Policy Analysis and Management* 31, no. 2 (2012): 203–27; and Phillip Oreopoulos, Mark Stabile, Leslie Roos, and Randy Walld, "The Short, Medium, and Long Term Effects of Poor Infant Health," *Journal of Human Resources* 43, no. 1 (2008): 88–138.

<sup>7</sup> For clear evidence of the role of easing the application process, see, for example, Eric Bettinger, Bridget Long, Philip Oreopoulos, and Lisa Sanbonmatsu, "The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA Experiment," *Quarterly Journal of Economics* 127, no. 3 (2012). A summary of the results is available from The National Bureau of Economic Research at <http://www.nber.org/digest/feb10/w15361.html>.

based on the families' tax returns, that would provide information about the federal and state grant available to them if their circumstances stay the same.

3. *Ensure that the Pell grant program is amply and securely funded.* Award levels should be indexed for inflation and the system designed to provide assurance that political and economic vicissitudes will not threaten the program from year to year.
4. *Place meaningful restrictions on institutional eligibility for participation in federal student aid programs and better guide students making postsecondary choices.* Students should not be able to use their aid at institutions with very low transfer and completion rates, low student loan repayments rates, or poor employment outcomes.<sup>8</sup>
5. *Even with the least successful institutions eliminated from the system, students need better guidance about choosing where and what to study.* Proposals to integrate personalized guidance into the federal aid system, such as one from myself and Judith Scott-Clayton in *Redesigning the Pell Grant Program for the Twenty-First Century* could increase the value of students' investments in postsecondary education—thus increasing its affordability.<sup>9</sup>
6. *Hold institutions that receive federal student aid funds accountable for student outcomes.* Developing ideas about holding institutions responsible for a share of the federal loans their students do not repay deserve serious consideration. Most promising is a recent proposal from Tiffany Chou, Adam Looney, and Tara Watson that would base institutional obligations on the repayment rate—the amount each institution's students have repaid after five years—and use the recovered funds to provide support to institutions that serve low-income students well.<sup>10</sup>
7. *Design effective incentives to increase state funding of need-based grant aid and of the public institutions that educate most low-income students.* Federal dollars can go farther toward increasing educational attainment if they support state efforts to subsidize students who do not have the resources they need to enroll and succeed in college.
8. *Simplify and reform the federal student loan repayment system.* Income-driven student loan repayment is a critical component of college affordability. While it should be possible to diminish the number of students whose investments in higher education do not pay off by restricting institutional eligibility for participation in federal student aid programs and providing better guidance for students, outcomes will always be variable. There will always be students for whom college does not pay off well financially, and even if they have borrowed responsibly, they will struggle to repay their loans. The federal government should provide reliable insurance against these unanticipated poor outcomes by linking loan repayment obligations to postcollege incomes.

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<sup>8</sup> For discussion of setting benchmarks for these measures of institutional success, see Sandy Baum and Saul Schwartz, *For Which Institutions Should Students Borrow? Setting Benchmarks*, Urban Institute, forthcoming

<sup>9</sup> Sandy Baum and Judith Scott-Clayton, *Redesigning the Pell Grant Program for the Twenty-First Century*, Hamilton Project Policy Brief 2013-04 (Washington, DC: Brookings Institution, 2013).

<sup>10</sup> Tiffany Chou, Adam Looney, and Tara Watson, *A Risk-Sharing Proposal for Student Loans*, Hamilton Project Policy Proposal 2017-04 (Washington, DC: Brookings Institution, 2017).

There should be one income-driven loan repayment plan, and Congress should authorize a pilot program to develop a system of collecting payments through payroll withholding. The system should be designed so payments are manageable for all borrowers and most borrowers repay their debts with appropriate interest. The amount repaid should relate to the amount borrowed, possibly by linking the length of time before balances are forgiven to the amount of debt. There is no solid evidence of the availability of federal student aid contributing significantly to rising college prices outside the for-profit sector, but allowing students to borrow virtually unlimited amounts they are never likely to have to repay will surely diminish the incentive to hold tuition prices down.<sup>11</sup>

## College Prices

Members of Congress, students and families, and everyone interested in ensuring broad access to higher education should be concerned about high levels of tuition and fees and the rapid rise in these prices. However, these prices constitute only one piece of the complex picture of college affordability in the United States.

### *Published tuition and fees over time*

The prices colleges and universities list for tuition and fees do not represent what students actually pay. Many institutions, particularly private nonprofit colleges and universities but also many public four-year ones, provide considerable amounts of institutional grant aid. In other words, they discount the prices they charge many—and in some cases, all—students. But the published prices still matter. A significant number of students *do* pay these prices. In 2015–16, 63 percent of students received grant aid from some source and 27 percent did not. Among full-time students, 77 percent received grant aid and 23 percent did not.<sup>12</sup> Moreover, high sticker prices may discourage students, particularly low-income students whose parents lack college experience, from even applying to college.

What has happened to published tuition and fees over time? As the College Board's *Trends in College Pricing 2017* report (of which I am a coauthor) documents, in 2017–18, average tuition at public four-year colleges and universities is more than three times as high, after adjusting for inflation, as it was 30 years ago. Prices in the public two-year and private nonprofit four-year sectors are more than twice as high in real terms as they were in 1987–88 (figure 3).

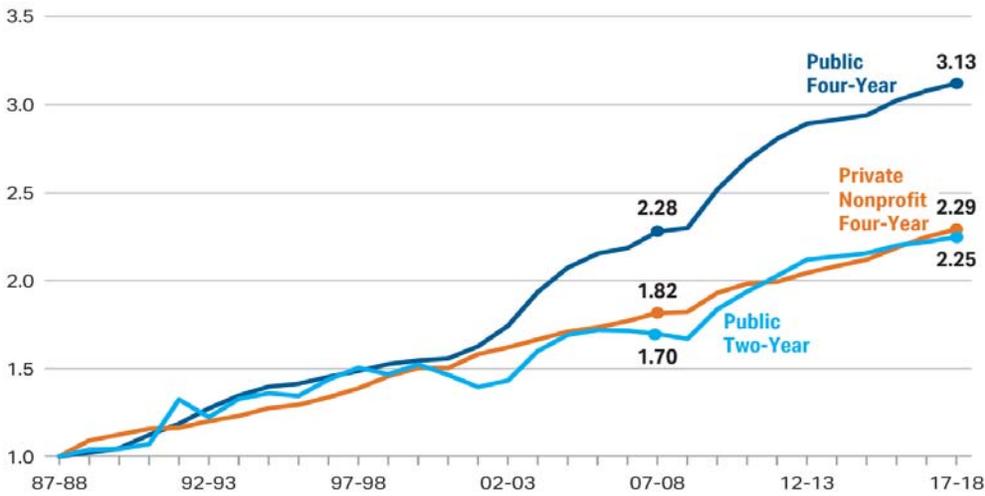
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<sup>11</sup> For careful overviews of the evidence—or lack thereof—for the relationship between federal aid and tuition prices, see Adam Stoll, David Bradley, and Shannon Mahan, *Overview of the Relationship between Federal Student Aid and Increases in College Prices*, 7-5700 (Washington, DC: Congressional Research Service, 2014), <http://cymcdn.com/sites/www.ncher.us/resource/collection/1CFB07FA-74C6-4F0A-8E79-3ADB2C453546/R43692.pdf>; U.S. Government Accountability Office, *Federal Student Loans: Patterns in Tuition, Enrollment, and Federal Stafford Loan Borrowing Up to the 2007-08 Loan Limit Increase* (Washington, DC: GAO, 2011), <https://www.gao.gov/assets/100/97510.pdf>; and Bridget Terry Long, “College Tuition Pricing and Federal Financial Aid: Is there a Connection?” testimony before the U.S. Senate Committee on Finance, December 5, 2006, <https://www.finance.senate.gov/imo/media/doc/120506bltest.pdf>.

<sup>12</sup> David Radwin et al., 2015–16 National Postsecondary Student Aid Study (NPSAS:16) *Student Financial Aid Estimates for 2015–16: First Look*, National Center for Education Statistics, NCES 2018-466, table 1 (January 2018).

FIGURE 3

**Inflation-Adjusted Published Tuition and Fees Relative to 1987–88, 1987–88 to 2017–18**  
 1987–88 = 1.0



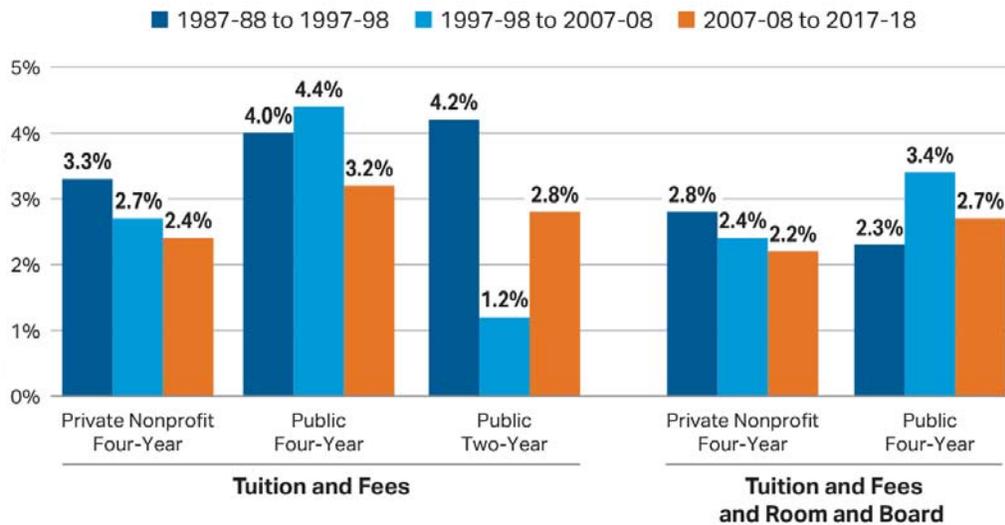
Source: Jennifer Ma, Sandy Baum, Matea Pender, and Meredith Welch, *Trends in College Pricing 2017* (New York: The College Board, 2017), figure 4B.

Tuition rising more rapidly than average prices in the economy (the consumer price index) is not a new development. In fact, between 2007–08 and 2017–18, average prices at private nonprofit four-year and public four-year institutions rose at a slower rate than they had over the previous two decades. In the private nonprofit sector, average published tuition and fees rose by 3.3 percent beyond inflation between 1987–88 and 1997–98, by 2.7 percent over the following decade, and by 2.4 percent over the most recent decade. These figures, reported in figure 4, compare percentage rates of growth. In dollar terms, the 3.2 percent average annual rate of increase in published in-state tuition and fees in the public four-year sector between 2007–08 and 2017–18 corresponds to an average annual increase of \$270 in 2017 dollars, compared with \$160 per year between 1987–88 and 1997–98 and \$250 per year between 1997–98 and 2007–08.<sup>13</sup>

<sup>13</sup> Jennifer Ma, Sandy Baum, Matea Pender, and Meredith Welch, *Trends in College Pricing 2017* (New York: College Board, 2017), p. 13.

FIGURE 4

Average Annual Percentage Increase in Inflation-Adjusted Published Prices by Decade, 1987–88 to 2017–18



Source: Jennifer Ma, Sandy Baum, Matea Pender, and Meredith Welch, *Trends in College Pricing 2017* (New York: The College Board, 2017), figure 4A.

*Variation in tuition and fees*

Elite private colleges frequently make the headlines with their tuition prices. It’s true that published tuition and fee prices at the most expensive colleges exceed \$50,000 and, when room and board are added in, the price tag for students not receiving aid can be about \$65,000. But even at private nonprofit colleges, only 13 percent of students are enrolled at institutions charging more than \$50,000 in tuition and fees, and about a quarter face charges less than half that amount.<sup>14</sup>

In 2017–18, average published tuition and fees were \$3,570 for full-time students at community colleges. The average for full-time in-state undergraduates at public master’s universities was \$8,670, compared with \$10,830 at public doctoral universities. In the private nonprofit sector, average published tuition and fees ranged from \$29,960 at master’s institutions to \$42,920 at doctoral universities (table 1).

<sup>14</sup> Ma et al., *Trends in College Pricing 2017*, figure 2.

TABLE 1

**Average Published Charges (Enrollment-Weighted) for Full-Time Undergraduates,  
2016–17 and 2017–18**

	Sector					Carnegie Classification					
	Public Two-Year In-District	Public Four-Year In-State	Public Four-Year Out-of-State	Private Nonprofit Four-Year	For-Profit	Public Four-Year			Private Nonprofit Four-Year		
						Doctoral	Master's	Bachelor's	Doctoral	Master's	Bachelor's
<b>Tuition and Fees</b>											
2017-18	\$3,570	\$9,970	\$25,620	\$34,740	—	\$10,830	\$8,670	\$8,230	\$42,920	\$29,960	\$33,450
2016-17	\$3,470	\$9,670	\$24,820	\$33,520	\$16,000	\$10,510	\$8,360	\$7,980	\$41,340	\$28,930	\$32,050
\$ Change	\$100	\$300	\$800	\$1,220	—	\$320	\$310	\$250	\$1,580	\$1,030	\$1,400
% Change	2.9%	3.1%	3.2%	3.6%	—	3.0%	3.7%	3.1%	3.8%	3.6%	4.4%
<b>Room and Board</b>											
2017-18	\$8,400	\$10,800	\$10,800	\$12,210	—	\$11,220	\$10,020	\$10,160	\$13,800	\$11,490	\$11,370
2016-17	\$8,170	\$10,480	\$10,480	\$11,850	—	\$10,900	\$9,690	\$9,970	\$13,370	\$11,170	\$11,000
\$ Change	\$230	\$320	\$320	\$360	—	\$320	\$330	\$190	\$430	\$320	\$370
% Change	2.8%	3.1%	3.1%	3.0%	—	2.9%	3.4%	1.9%	3.2%	2.9%	3.4%
<b>Tuition and Fees and Room and Board</b>											
2017-18	\$11,970	\$20,770	\$36,420	\$46,950	—	\$22,050	\$18,690	\$18,390	\$56,720	\$41,450	\$44,820
2016-17	\$11,640	\$20,150	\$35,300	\$45,370	—	\$21,410	\$18,050	\$17,950	\$54,710	\$40,100	\$43,050
\$ Change	\$330	\$620	\$1,120	\$1,580	—	\$640	\$640	\$440	\$2,010	\$1,350	\$1,770
% Change	2.8%	3.1%	3.2%	3.5%	—	3.0%	3.5%	2.5%	3.7%	3.4%	4.1%

Source: Jennifer Ma, Sandy Baum, Matea Pender, and Meredith Welch, *Trends in College Pricing 2017* (New York: The College Board, 2017), table 1.

Charges also differ significantly within sectors. In 2017–18, average published tuition and fee prices for in-state students at public four-year institutions range from \$5,220 in Wyoming and \$6,360 in Florida to \$16,040 in Vermont and \$16,070 in New Hampshire (table 2).

TABLE 2

**Average 2017–18 Tuition and Fees and Public Four-Year Institutions and Five-Year Percentage Change in Inflation-Adjusted In-State Tuition and Fees, by State**

State	2017-18 In-State Tuition and Fees	State	2017-18 In- State Tuition and Fees
Wyoming	\$5,220	Maryland	\$9,580
Florida	\$6,360	California	\$9,680
Utah	\$6,790	Tennessee	\$9,790
Montana	\$6,910	Texas	\$9,840
New Mexico	\$6,920	Maine	\$9,970
Idaho	\$7,250	<b>United States</b>	<b>\$9,970</b>
Nevada	\$7,270	Kentucky	\$10,300
North Carolina	\$7,380	Oregon	\$10,360
Alaska	\$7,440	Ohio	\$10,510
West Virginia	\$7,890	Alabama	\$10,530
New York	\$7,940	Hawaii	\$10,660
Mississippi	\$7,990	Colorado	\$10,800
North Dakota	\$8,200	Arizona	\$11,220
Nebraska	\$8,270	Minnesota	\$11,300
South Dakota	\$8,450	Rhode Island	\$12,230
Oklahoma	\$8,460	Delaware	\$12,270
Arkansas	\$8,550	Connecticut	\$12,390
Georgia	\$8,570	South Carolina	\$12,610
Iowa	\$8,760	Massachusetts	\$12,730
Missouri	\$8,870	Virginia	\$12,820
Wisconsin	\$8,960	Michigan	\$12,930
Kansas	\$9,230	Illinois	\$13,620
Louisiana	\$9,300	New Jersey	\$13,870
Indiana	\$9,360	Pennsylvania	\$14,440
Washington	\$9,480	Vermont	\$16,040
		New Hampshire	\$16,070

Source: Jennifer Ma, Sandy Baum, Matea Pender, and Meredith Welch, *Trends in College Pricing 2017* (New York: The College Board, 2017), figure 6.

## Net Prices

As noted above, most students receive grant aid to help them pay for college. Many students also benefit from federal tuition tax credits. (In 2017–18, more than 13 million students—almost twice the number of Pell grant recipients—received education tax credits and deductions.)

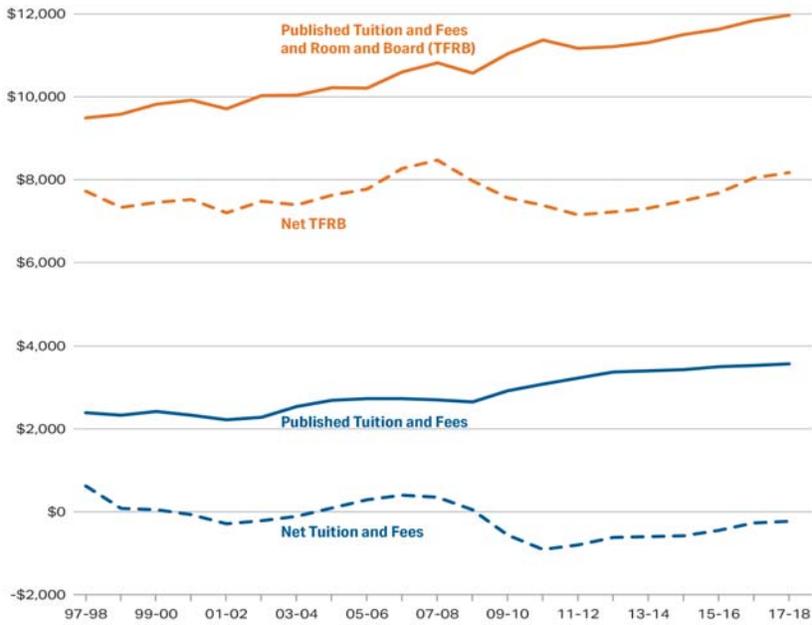
Because of this aid, the average tuition prices students pay are much lower than the average published prices. Moreover, net prices have risen more slowly than published prices. Federal and institutional aid explain most of this difference. Figure 5 reveals a few key points about the difference between net prices and published prices:

- At public two-year colleges (community colleges), on average grant aid and tax benefits combined more than cover tuition and fees. However, the average net tuition and fee price reached a low of -\$910 in 2010–11 and has risen every year since, as increases in grant aid have failed to keep pace with price increases. In 2017–18, the average full-time community college student has \$330 of grant aid left to put toward books and other expenses after paying tuition and fees. Net tuition, fees, room, and board average over \$8,000.
- At public four-year colleges and universities, the average net price fell dramatically in 2008–09 and 2009–10 as the federal government increased Pell grants and tax credits in the face of diminished state subsidies and rising tuition prices. The average net price has risen every year since 2009–10 and is now about \$4,100—less than half the published price. When room and board are added, the average net price for full-time, public four-year college students is about \$15,000 a year—expenses that have to be covered with a combination of parental support, work, and loans.
- The average full-time student at a private nonprofit four-year institution receives about \$20,000 a year in a combination of grant aid and federal tax benefits to help pay for college. About three-quarters of that aid comes from the institutions in which the students are enrolled. The average 2017–18 net tuition and fee price of \$14,500 is lower (after adjusting for inflation) than the average net price in 2007–08, but it has risen every year since 2011–12. Average net tuition, fees, room and board is almost \$27,000 per year.

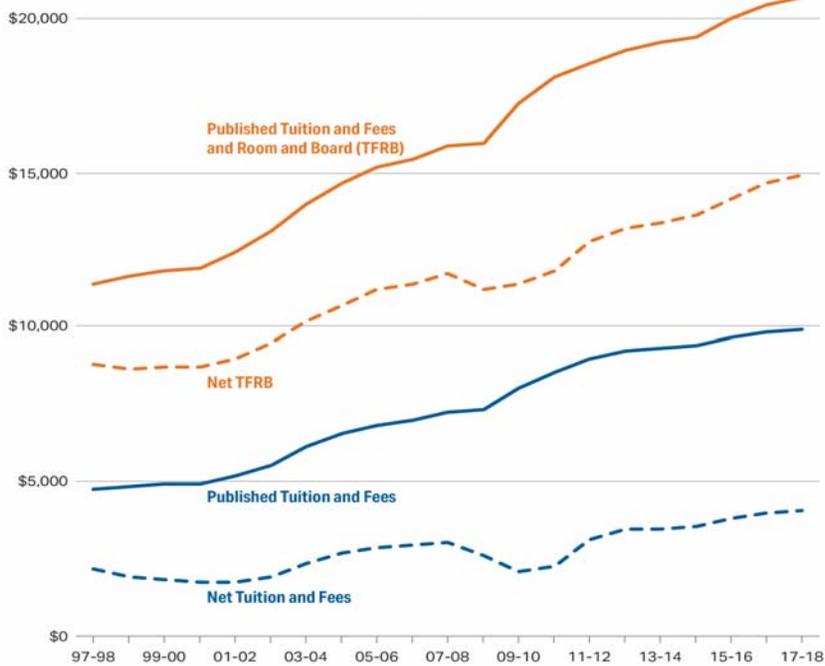
FIGURE 5

**Average Published and Net Prices in 2017 Dollars, 1997–98 to 2017–18**

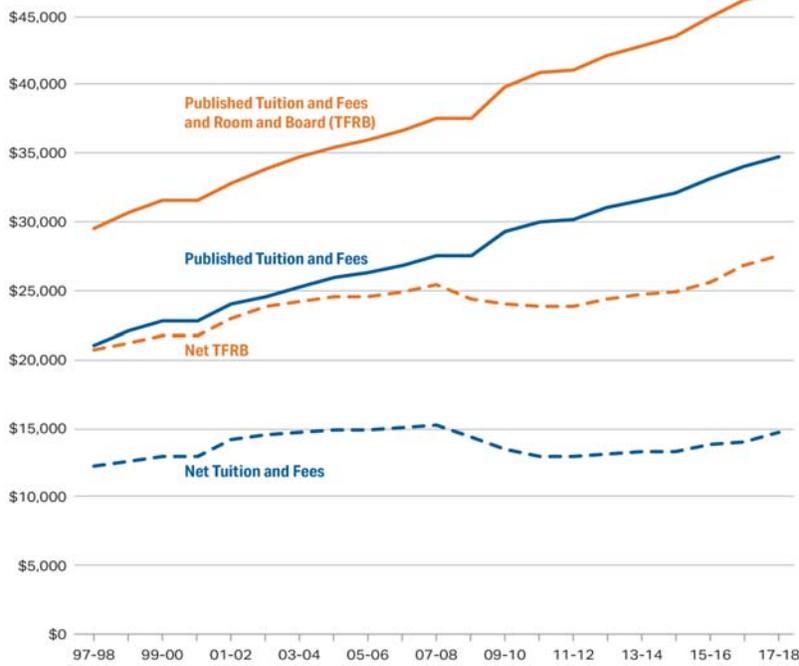
*Full-time in-district undergraduate students at public two-year institutions*



*Full-time in-state undergraduate students at public four-year institutions*



Full-time in-state undergraduate students at private four-year institutions



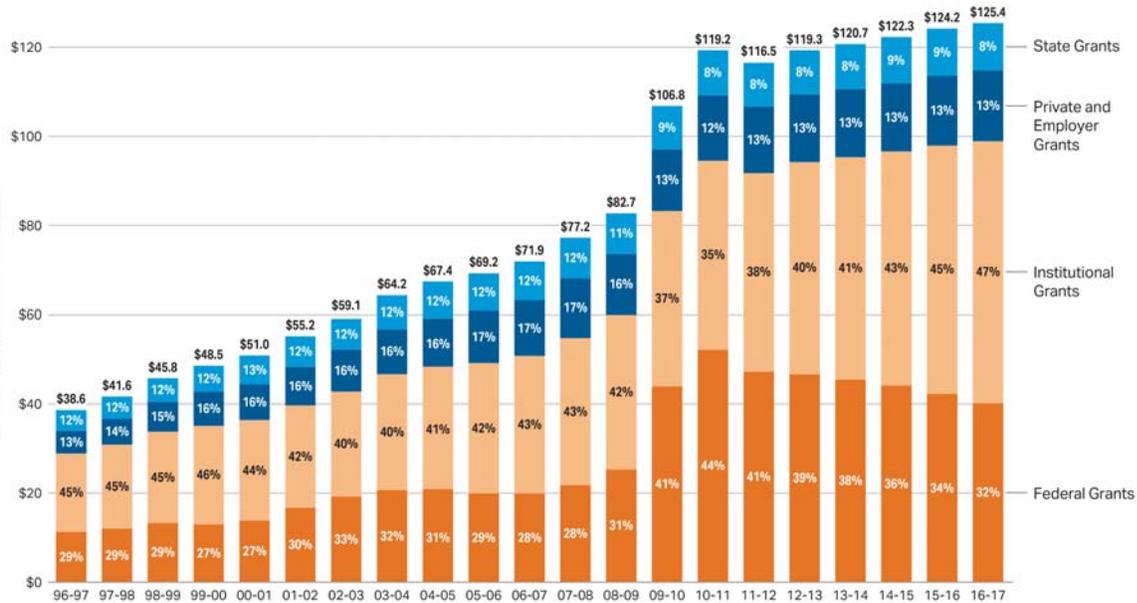
Source: Jennifer Ma, Sandy Baum, Matea Pender, and Meredith Welch, *Trends in College Pricing 2017* (New York: The College Board, 2017), figures 8-10.

## Student Aid

The difference between the published prices and the net prices students actually pay results from aid provided by federal and state governments, colleges and universities, and employers and other private sources. In addition to this aid, federal education loans help students and families spread their payments for college over time.

FIGURE 6

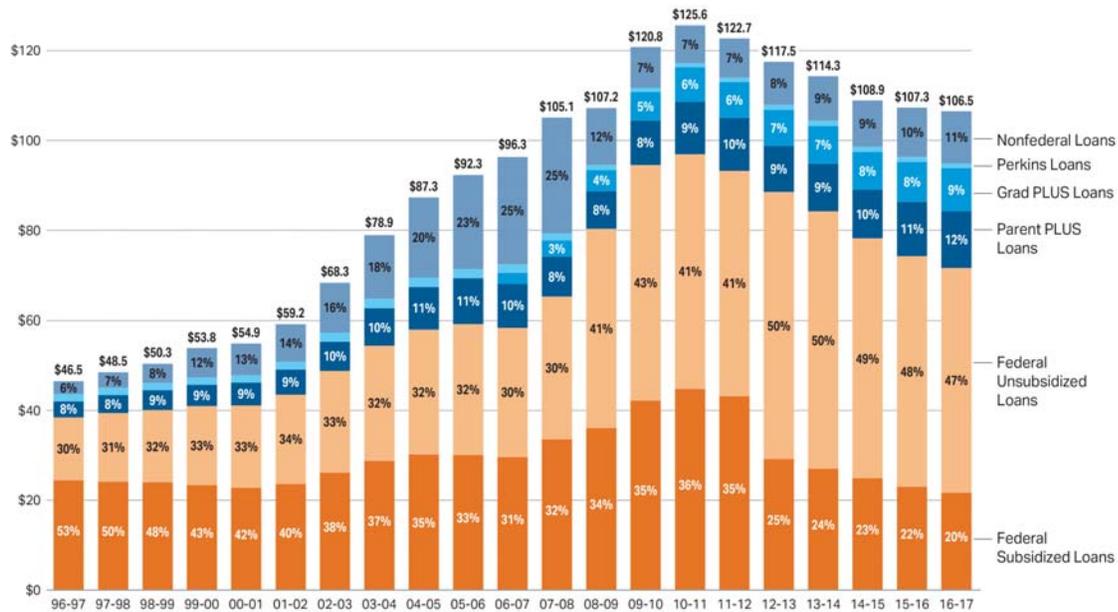
**Total Grant Aid in 2016 Dollars by Source of Grant, 1996-97 to 2016-17**  
*Billions of 2016 dollars*



Source: Sandy Baum, Jennifer Ma, Matea Pender, and Meredith Welch, *Trends in College Aid 2017* (New York: The College Board, 2017), figure 3.

FIGURE 7

**Total Federal and Nonfederal Loans, 1996-97 to 2016-17**  
*Billions of 2016 dollars*

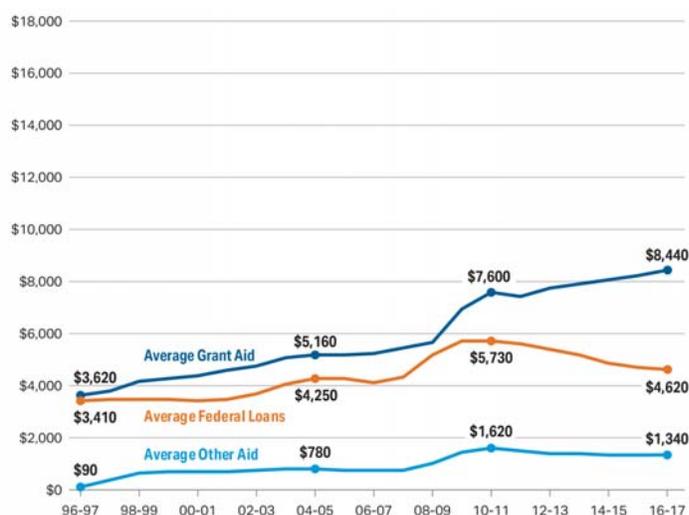


Source: Sandy Baum, Jennifer Ma, Matea Pender, and Meredith Welch, *Trends in College Aid 2017* (New York: The College Board, 2017), figure 4.

Since 2010–11, as the economy has been recovering from the Great Recession, total grant aid has risen (figure 6), but total education borrowing has declined year after year (figure 7). Part of the decline in borrowing is due to declining enrollments in the for-profit sector and, to a lesser extent, community colleges. But borrowing per students has also declined (figure 8).

FIGURE 8

Average Aid per Full-Time Equivalent Undergraduate Student in 2016 Dollars, 1996–97 to 2016–17



Source: Sandy Baum, Jennifer Ma, Matea Pender, and Meredith Welch, *Trends in College Aid 2017* (New York: The College Board, 2017), figure 1.

Understanding trends in the grant aid that helps students pay for college is complicated by the recession. The choice of beginning years can dramatically alter the picture that emerges. For example, the \$26.6 billion in total Pell grant expenditures in 2016–17 represented a 75 percent increase in inflation-adjusted dollars over 10 years—but a 26 percent decline from 2011–12. Federal aid to veterans and active military has grown dramatically and now represents 30 percent of all federal grant aid to undergraduate students.

TABLE 3

Aid to Undergraduate Students in Millions of 2016 Dollars

	2006–07	2011–12	2016–17	5 -year change	10-year change
Pell grants	\$15,157	\$35,763	\$26,562	-26%	75%
Federal aid to veterans and military	\$2,938	\$9,575	\$11,532	20%	293%
Total federal grants	\$19,611	\$46,122	\$38,834	-16%	98%
Federal loans	\$47,143	\$75,941	\$58,128	-23%	23%
Federal education tax benefits	\$7,423	\$19,551	\$16,074	-18%	117%
State grants	\$8,498	\$9,700	\$10,426	7%	23%
Institutional grants	\$23,971	\$34,881	\$46,126	32%	92%
Private and employer grants	\$7,903	\$10,125	\$10,753	6%	36%
Federal grants as a share of total grants	33%	46%	37%		

Source: Sandy Baum, Jennifer Ma, Matea Pender, and Meredith Welch, *Trends in Student Aid 2017* (New York: College Board, 2017), table 1A.

In 2011–12, institutional grant aid to undergraduates was similar to Pell grants—\$34.9 billion versus \$35.8 billion. But by 2016–17, institutional grant dollars for undergraduates were 75 percent higher than Pell grants—\$46.1 billion versus \$26.6 billion. Federal grants (including aid to veterans and active military) declined from 46 percent of total grant aid in 2011–12 to 37 percent in 2016–17 (table 3).

Federal Pell grants provided basic funding to more than 7 million low- and moderate-income students in 2016–17. More than half of those students were independent, not relying on parents for financial support. Among dependent recipients, three-quarters came from families with incomes of \$40,000 or lower. In 2016–17, when the maximum Pell grant was \$5,820, the average award was \$3,740.<sup>15</sup> These funds do not come close to covering expenses for low-income students, but they do make it possible for many who would otherwise be unable to piece together the necessary funds to enroll in college.

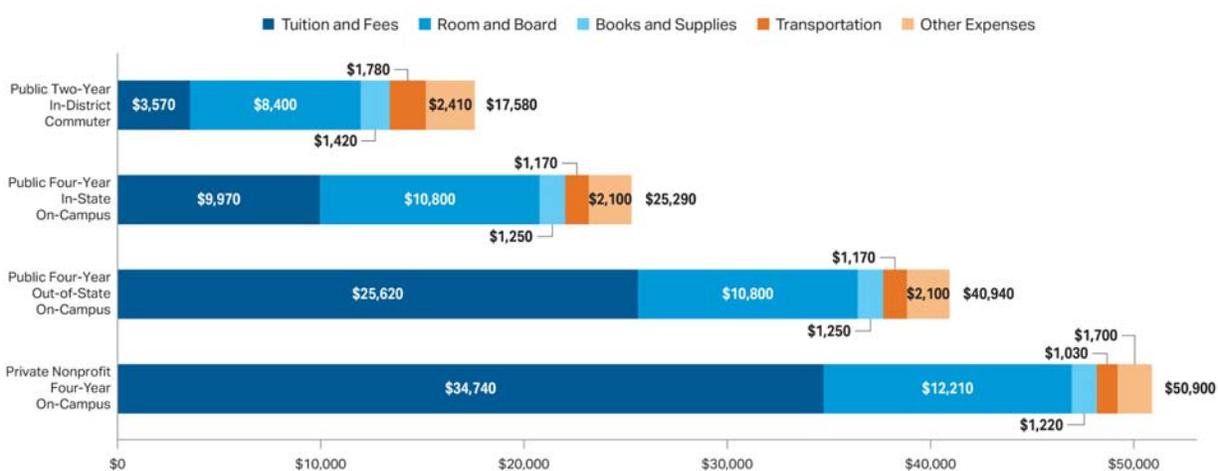
## Nontuition Expenses

Because it is difficult to combine successful engagement in college studies with full-time work, many students struggle to cover their living expenses while they are in school. These living expenses, especially when added to the cost of books and other necessary supplies, are considerably larger than published tuition and fees for most students.

In 2016–17, tuition and fees represented 20 percent of the total estimated expense budgets for full-time students at public two-year colleges and 39 percent for those at public four-year institutions. Published tuition and fees constitute more than half the budget only for public four-year college students enrolled outside their state of residence and for private nonprofit four-year college students (figure 9).

FIGURE 9

Average Estimated Full-Time Undergraduate Budgets (Enrollment-Weighted) by Sector, 2017–18



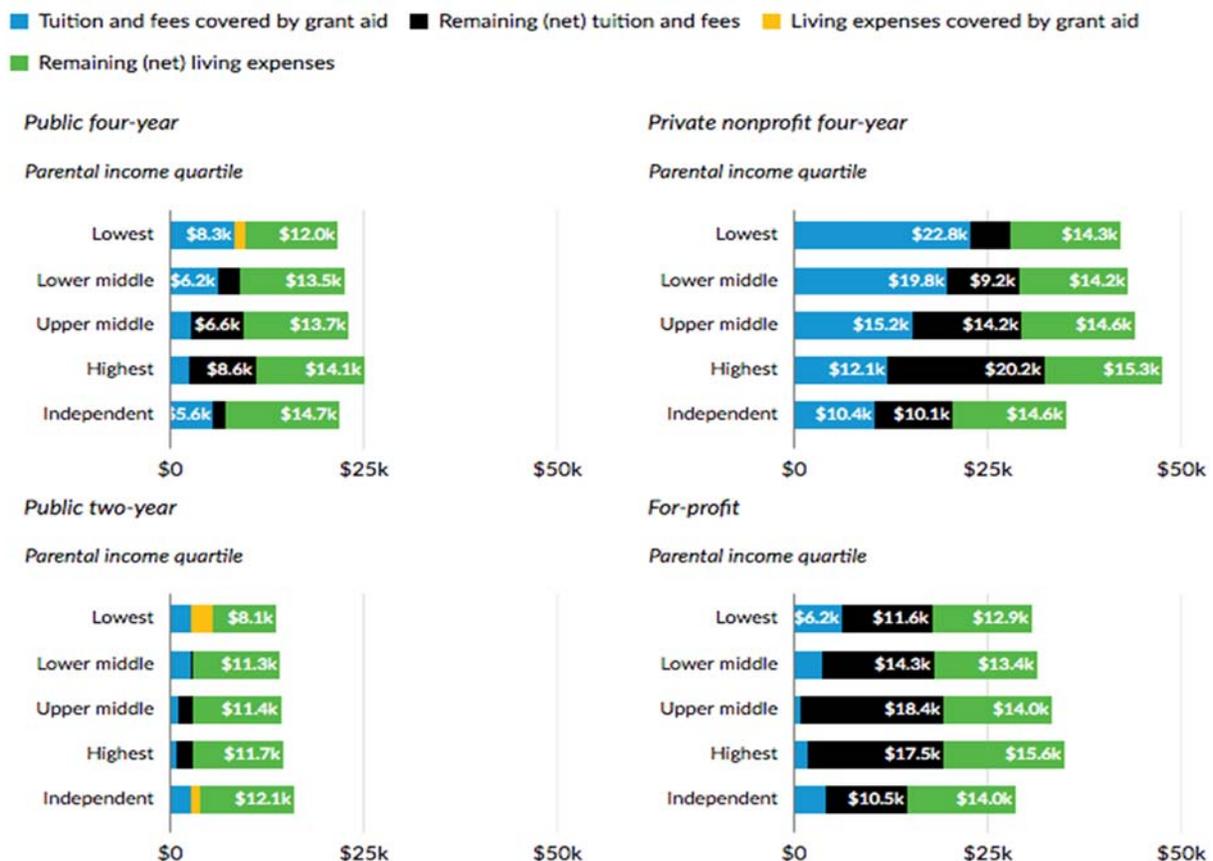
Source: Sandy Baum, Jennifer Ma, Matea Pender, and Meredith Welch, *Trends in College Pricing 2017* (New York: The College Board, 2017), figure 1.

<sup>15</sup> Sandy Baum, Jennifer Ma, Matea Pender, and Meredith Welch, *Trends in Student Aid 2017* (New York: College Board, 2017), figures 16, 18B.

These total budgets are based on estimates of living expenses developed by financial aid offices. They include many expenses that people would incur even if they were not in school, such as food and rent. But even though most students work at least part time, few earn enough to cover these expenses.

Many low-income students do not actually pay tuition and fees. In fact, on average, low-income students at both two-year and four-year public institutions paid \$0 in net tuition and fees in 2011–12, the latest year for which these detailed data are available (figure 10). Still, we know that many low-income students struggle financially while they are in school. Research from the Urban Institute has documented a significant amount of food insecurity, particularly among community college students.<sup>16</sup> While it is difficult to isolate the role of finances in students’ dropping out without completing their programs, it is clear that many need assistance with meeting other expenses—not just tuition and fees—if they are to succeed.

**FIGURE 10**  
**Tuition and Fees and Living Expenses Divided into the Amount Covered by Grant Aid and the Amount Remaining, by Parental Income Quartile, 2011–12**



Source: Urban Institute, “Understanding College Affordability,” [http://collegeaffordability.urban.org/prices-and-expenses/net-price/#/by\\_income](http://collegeaffordability.urban.org/prices-and-expenses/net-price/#/by_income).

<sup>16</sup> Kristin Blagg, Craig Gundersen, Diane Schanzenbac, and James Ziliak, “Assessing Food Insecurity on Campus,” (Washington, DC: Urban Institute, 2017), [https://www.urban.org/sites/default/files/publication/92331/assessing\\_food\\_insecurity\\_on\\_campus\\_3.pdf](https://www.urban.org/sites/default/files/publication/92331/assessing_food_insecurity_on_campus_3.pdf).

## Student Debt

Much of the current concern over college affordability relates to the attention to rising student debt levels. There is no question that an increasing share of undergraduates are borrowing to help finance their education and that average debt levels are growing. But there is a considerable amount of misunderstanding about where the real problems lie.

As noted above, investing in college pays off well on average and for most students. The 60 percent of those who completed bachelor's degrees at private nonprofit and public institutions in 2015–16 who had taken students loans borrowed an average of \$28,400.<sup>17</sup> Median annual income for 25- to 34-year-olds with bachelor's degrees is \$19,500 higher than the median for high school graduates.<sup>18</sup> It doesn't require a large share of this earnings premium to repay the average debt in a few years.

The debt levels of four-year college graduates, however, vary considerably. Students who earn their degrees at for-profit institutions, independent students, and black students are particularly likely to borrow at high levels.<sup>19</sup>

The real problems lie with students who borrow relatively little but leave school without a degree or certificate or earn a credential with little labor market value. Among students who entered repayment in 2011–12, 24 percent of those who had not completed their programs had defaulted within two years, compared with 9 percent of completers.<sup>20</sup> Default rates are highest for those with the lowest levels of debt, and about two-thirds of defaulters owe less than \$10,000.<sup>21</sup> Improving rates of program completion is an important policy goal in improving college affordability.

Households in the upper quartile of the income distribution hold most of the outstanding student debt.<sup>22</sup> They have advanced degrees or at least bachelor's degrees, and the vast majority will successfully repay their loans. The more serious student debt problem is too many students borrowing for programs in which they have a low chance of succeeding and accruing debts that will impede their abilities to support themselves and their families.

## Conclusion

Many factors combine to create challenges for students and families paying for postsecondary education. The federal government has a responsibility to ensure that those with the most limited resources can

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<sup>17</sup> Baum et al., *Trends in Student Aid 2017* (New York: College Board, 2017), figure 12.

<sup>18</sup> U.S. Census Bureau, Educational Attainment—People 25 Years Old and Over, by Total Money Earnings, Work Experience, Age, Race, Hispanic Origin, and Sex, PINC-03 (2017).

<sup>19</sup> Urban Institute, "Understanding College Affordability," <http://collegeaffordability.urban.org/after-college/student-debt/#/>.

<sup>20</sup> Urban Institute, "Understanding College Affordability," [http://collegeaffordability.urban.org/after-college/loan-repayment-and-default/#/delinquency\\_and\\_default](http://collegeaffordability.urban.org/after-college/loan-repayment-and-default/#/delinquency_and_default).

<sup>21</sup> Baum et al., *Trends in Student Aid 2017*, figure 12B.

<sup>22</sup> Sandy Baum and Victoria Lee, "Affluent households owe the most student debt," *Urban Wire*, January 22, 2018, <https://www.urban.org/urban-wire/affluent-households-owe-most-student-debt>.

overcome the multiple challenges they face in earning college credentials that will allow them to lead successful and productive lives and create opportunities for their children.

Congress should use the reauthorization of the Higher Education Act to strengthen the student aid system so it better supports student success and protects against unanticipated poor outcomes and to ensure that institutions provide high-quality educational opportunities to their students.