

Trends in Higher Education Series

Trends in College Pricing **2017**



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Highlights

Both the published tuition and fee prices of colleges and universities and the net prices students pay after subtracting grant aid and tax credits and deductions continued to rise between 2016-17 and 2017-18, even after adjusting for inflation. Average net prices in 2017-18 remain lower at public two-year and private nonprofit four-year institutions than they were in 2007-08 (in 2017 dollars). But each year since 2011-12, net prices have risen in these sectors, as well as at public four-year institutions, as the growth in grant aid slowed relative to the growth in tuition and fees.

Trends in College Pricing 2017 reports on the prices charged by colleges and universities in 2017-18, how prices have changed over time, and how they vary within and across types of institutions and states. It also includes estimates of the net prices students and families pay after taking financial aid into consideration, both on average and across income levels. Data on institutional revenues and expenditures and on changing enrollment patterns over time supplement the data on prices to provide a clearer picture of the circumstances of students and the institutions in which they study.

PUBLISHED TUITION AND FEES AND ROOM AND BOARD

Average published in-state tuition and fees in the public four-year sector increased by \$300 (3.1% before adjusting for inflation), from \$9,670 in 2016-17 to \$9,970 in 2017-18. Average total tuition and fee and room and board charges are \$20,770. (Table 1)

- Average published out-of-state tuition and fees at public four-year institutions rose by \$800 (3.2%), from \$24,820 in 2016-17 to \$25,620 in 2017-18. Average total charges are \$36,420. (Table 1)
- Average published tuition and fees at private nonprofit four-year institutions rose by \$1,220 (3.6%), from \$33,520 in 2016-17 to \$34,740 in 2017-18. Average total charges are \$46,950. (Table 1)
- Average published in-district tuition and fees at public two-year colleges increased by \$100 (2.9%), from \$3,470 in 2016-17 to \$3,570 in 2017-18. (Table 1)
- Average tuition and fees for full-time students in the for-profit sector were \$16,000 in 2016-17. (Table 1)
- More than 70% of full-time students receive grant aid to help them pay for college. (Page 9)

GROWTH IN COLLEGE PRICES

Between 2007-08 and 2017-18, published in-state tuition and fees at public four-year institutions increased at an average rate of 3.2% per year beyond inflation, compared with 4.0% between 1987-88 and 1997-98 and 4.4% between 1997-98 and 2007-08. (Figure 4A)

- The 3.2% average annual rate of increase in tuition and fees in the public four-year sector corresponds to an average annual increase of \$270 in 2017 dollars, compared with \$160 per year from 1987-88 to 1997-98 and \$250 per year from 1997-98 to 2007-08. (Figure 4A)

- The 2.4% average annual rate of increase in published tuition and fees at private nonprofit four-year institutions over the most recent decade was a decline from 3.3% between 1987-88 and 1997-98 and 2.7% between 1997-98 and 2007-08. (Figure 4A)
- Over the past three decades, the dollar increases in published tuition and fees (in 2017 dollars) ranged from \$1,550 (from 1987-88 to 1997-98) to \$2,690 (from 2007-08 to 2017-18) at public four-year institutions and from \$5,860 (from 1987-88 to 1997-98) to \$7,220 (from 2007-08 to 2017-18) in the private nonprofit four-year sector. (Table 2)

VARIATION IN TUITION AND FEES

In 2017-18, the median tuition and fee price for full-time students attending private nonprofit four-year institutions is \$35,260. However, 10% of full-time students attend institutions with prices below \$12,000 and 13% attend institutions charging \$51,000 or more. (Figure 2)

- In 2017-18, the average in-state tuition and fee price for full-time undergraduates at public master's universities is \$8,670, compared with \$10,830 at doctoral universities. The average published tuition and fee price for undergraduates at private nonprofit master's universities is \$29,960, compared with \$42,920 at doctoral universities. (Table 1)

DIFFERENCES ACROSS STATES

Between 2012-13 and 2017-18, average published in-state tuition and fees at public four-year institutions fell or increased by less than 5% in inflation-adjusted dollars in nine states but increased by 20% or more in eight states. (Figure 6)

- Published 2017-18 in-state tuition and fees at public four-year institutions range from \$5,220 in Wyoming to \$16,070 in New Hampshire. (Figure 6)
- In-district tuition and fees at public two-year colleges range from \$1,430 in California to \$7,980 in Vermont. (Figure 5)

WHAT STUDENTS ACTUALLY PAY

In 2017-18, full-time students at public two-year colleges receive an average of about \$3,900 in grant aid and federal education tax credits and deductions—\$330 more than required to cover tuition and fees. On average after grant aid, they must cover about \$8,070 in living expenses. (Figure 8)

- In 2017-18, the average full-time in-state public four-year college student receives an estimated \$5,830 in grant aid and federal tax benefits, covering 58% of the \$9,970 published tuition and fee price. (Figure 9)
- After declining from \$15,270 (in 2017 dollars) in 2007-08 to \$13,210 in 2012-13, the average net tuition and fees paid by full-time students at private nonprofit four-year institutions rose to an estimated \$14,530 in 2017-18. (Figure 10)
- In 2014-15, at public two-year and four-year institutions, first-time full-time students who were federal aid recipients from families

with incomes below \$48,001 received enough grant aid on average to cover their tuition and fees, leaving more than \$1,500 for other expenses. (Figure 11)

- At public four-year institutions, federal aid recipients (including those who received only federal loans) with incomes \$30,000 and below paid no tuition on average, and had \$2,700 of grant aid to put toward an estimated \$14,520 in nontuition expenses, leaving \$11,820 for them to cover out of other resources. (Figure 11)

PUBLIC FUNDING

In 2015-16, appropriations per FTE student were 11% lower in inflation-adjusted dollars than they were a decade earlier and 13% lower than they were 30 years earlier. (Figure 12B)

- The \$76.1 billion in total state and local appropriations for higher education in 2015-16 (excluding Illinois) represented less than a 1% increase in inflation-adjusted dollars over a decade and a decline of 7% from the peak of \$82.0 billion (in 2015 dollars) in 2007-08. (Figure 12B)
- Between 2005-06 and 2010-11, total funding through appropriations rose by 2%, from \$75.6 billion (in 2015 dollars) to \$77.3 billion, but enrollment increased by 19%, generating a 14% decline in per-student funding. Between 2010-11 and 2015-16, total funding fell by 2%, but with a 5% decline in enrollment, per-student funding increased by 3% over these five years. (Figure 12B)
- In Vermont and New Hampshire, state and local funding per FTE student at public colleges and universities in 2015-16 was less than half the national average of \$7,120. In Wyoming and Alaska, it was more than twice the national average. (Figure 13)

INSTITUTIONAL FINANCES

The portion of per-student educational expenditures at public four-year institutions that is a subsidy to students, rather than being covered by tuition revenues, fell by 4% (\$340 in 2014 dollars) between 2004-05 and 2009-10 and by another 2% (\$130) between 2009-10 and 2014-15. (Figure 15A)

- The average subsidy per FTE student at public two-year colleges fell by 15% (\$920 in 2014 dollars) between 2004-05 and 2009-10, but increased by 14% (\$750) between 2009-10 and 2014-15 as enrollment in the sector declined. In 2014-15, it was 79% of the average subsidy at public four-year institutions. (Figure 15A)
- The average portion of per-student educational expenditures at private nonprofit master's universities that was a subsidy to students was 12% in 2014-15, compared with 45% at private doctoral universities and 36% at bachelor's colleges. (Figure 15B)
- Between 2004-05 and 2014-15, educational expenditures per FTE student increased by 16% at public four-year and private nonprofit doctoral universities in inflation-adjusted dollars, compared with 6% in public two-year and private bachelor's colleges and 8% at private master's institutions. (Figures 15A and 15B)

- Between 2004-05 and 2014-15, per-student revenue at public four-year institutions from tuition and fees and federal, state, and local governments increased by \$720 (3%) in 2014 dollars. Net tuition revenue increased by \$3,000, while revenue from government sources declined by \$2,280. (Figure 14)
- The ratio of students to non-instructional staff rose slightly between 1995 and 2015, from 8.6 to 9.2 in the public sector and from 5.6 to 5.8 at private nonprofit institutions. (Figure 20A)
- In recent years, institutions have been spending about 4% of the value of their endowments. With a 4% spending rate, the median private college endowment of \$33,200 per FTE student yields about \$1,300 a year in funding per student, compared with \$33,600 per student at the wealthiest institutions. (Figures 16A and 16B)

ENROLLMENT PATTERNS

Between 2010 and 2015, enrollment rose by 5% (340,000 students) at public four-year colleges and universities and by 6% (203,000 students) in the private nonprofit sector. Enrollment fell by 11% (908,000 students) at public two-year colleges and by 33% (677,000 students) in the for-profit sector. (Figure 18)

- The postsecondary enrollment of 19.8 million in 2015 was 30% higher than in 2000. (Figure 18)
- Public two-year colleges accounted for 50% or more of undergraduate enrollment in the public sector in seven states in 2015, but for less than 25% in another seven states. (Figure 19B)

COLLEGE AFFORDABILITY

Average published tuition and fees for in-state students attending public four-year colleges rose by \$6,560 (in 2016 dollars) between 1986-87 and 2016-17—58% of the increase in income (\$11,270) of the middle 20% of families and 8% of the increase in income (\$80,890) for families in the highest income quintile. (Figure 17A)

- Unlike those with higher incomes, the 20% of families with the lowest incomes have not yet reached the pre-recession (inflation-adjusted) income levels of their 2006 counterparts (although they have recovered some of the income lost during the recession). (Figure 17A)
- In 2016, the \$114,640 median family income for families headed by a four-year college graduate was more than twice the median for families headed by a high school graduate. (Figure 17B)
- Tuition and fees constitute 39% of the total budget for in-state students living on campus at public four-year colleges and universities and 20% of the budget for public two-year college students who pay for off-campus housing. (Figure 1)

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Introduction

Each year, *Trends in College Pricing* reports on one-year increases in tuition and fee and room and board prices at colleges and universities across the nation. We report on average national price changes by sector, as well as variation in the price levels and their rates of change across types of institutions and across states. We also clarify the role financial aid plays in reducing the share of those prices students and families actually pay.

But one-year changes tell a small part of the story. What matters to students and families, to colleges and universities, to state and federal governments, and to society as a whole, are longer-term trends. Most students do not plan to go to college for only one year, so they are concerned about price increases over a number of years. And the prices they pay are the result of the compounding of price increases over many years.

2017-18 is a good year to stand back and focus on trends over time because the price increases this year were neither larger than average nor small enough to suggest a new pattern. For a decade, from 2001-02 to 2011-12, we reported one-year price increases in the public four-year sector ranging from 5.7% to 13.3% (before adjusting for inflation). But for the past five years, these institutions have raised their prices by about 3% each year—still greater than the overall rate of inflation. Prices in the public two-year and private nonprofit four-year sectors also continue to rise relative to other prices in the economy, but somewhat more slowly than in previous years.

It is also possible now to see clearly the legacy of student aid policies during the Great Recession. Because of rapid increases in grant aid and tax benefits, particularly in 2009-10 and 2010-11, average net prices declined even in the face of unusually large increases in published tuition and fees. In the public two-year and private nonprofit four-year sectors, average net tuition and fees remain below their levels of a decade ago. But net prices have risen for eight consecutive years for full-time students at public four-year institutions, seven years at public two-year colleges, and six years at private nonprofit colleges and universities.

Rising college prices would not necessarily signal increasing financial strains on students and families if incomes were growing at a healthy pace. But earnings have been slow to recover from the recession. The average income of families in the top 20% was 7% higher (after adjusting for inflation) in 2016 than in 2006. The increases for those who are lower down in the income distribution were smaller, and the average income of those in the lowest 20% remains below that of their 2006 counterparts. Stagnant incomes and rising inequality exacerbate the barriers created by rising college prices.

As documented in *Education Pays 2016: The Benefits of Higher Education for Individuals and Society*, the payoff of college remains strong and it is actually that payoff that determines whether or not college is affordable. If students can pay for college, repay any loans they take, and still live at a higher standard of living than

they would have been able to reach without a college education, college is, in the most meaningful sense, “worth it” financially. Nonetheless, the variation in outcomes and the strains families and students experience during the college years make it imperative that policymakers both on college campuses and in federal and state governments address the issue of rising college prices.

Trends in College Pricing 2017 includes data that can provide insight into the forces underlying increases in the prices students pay for college, including changes in state funding levels and in enrollments, the composition of institutional expenditures and revenues, and the distribution of endowment resources across institutions.

PUBLISHED PRICES FOR ONE YEAR OF FULL-TIME STUDY

The prices reported in *Trends in College Pricing* are for one year of full-time study. Many students enroll part time, and prorating these prices does not always give an accurate picture of the published prices that students face, much less of the net prices generated by the grant assistance and tax benefits they receive.

Students might benefit more from focusing on the price of earning a degree, rather than the price of one year of college. But the variation in time to degree and the difficulty of measuring the number of terms for which students pay tuition makes this a challenging task. Among students who began their studies full time at a four-year institution in 2009, 40% had completed a bachelor's degree at their first institution after four years and 60% had completed a degree after six years (NCES, *Digest of Education Statistics 2016*, Table 326.10). In other words, among students who earned bachelor's degrees within six years, one-third took more than four years to do so. Not all of these students paid more than four years of full-time tuition—they may have taken time off or enrolled part time for at least a semester. But for many of those who took longer than four years to earn their degrees, tuition and fees (before accounting for grant aid) were likely to be considerably more than four times the one-year price.

Taking more than two years to earn an associate degree or more than four years to earn a bachelor's degree has financial implications beyond tuition and fee expenses. Forgone earnings from reduced participation in the labor force constitute the largest portion of the cost of college for most students. The more quickly students earn their degrees, the more time they have to earn college-level wages and reap the financial benefits of postsecondary education. Bachelor's degree recipients age 25 to 34 had median earnings 71% (\$19,497) higher than those with high school diplomas in 2016 (U.S. Census Bureau, 2016 Income Data, Table PINC-03).

WHY ARE PRICES RISING?

Trends in College Pricing does not analyze the causes of the rising price of a college education. However, the information in this report, combined with the data in *Trends in Student Aid*, lays the groundwork for understanding the trends. For example, the data

indicate that prices at public colleges and universities rise most rapidly when state and local funding per student is growing slowly or declining. In 2015-16, appropriations per FTE student were 11% lower in inflation-adjusted dollars than they were a decade earlier and 13% lower than they were 30 years earlier. Enrollment has grown rapidly and appropriations have not kept up.

Private nonprofit college prices rise at a steadier pace than public college prices. *Trends in College Pricing* includes information on the concentration of endowment assets at a small number of institutions in this sector and *Trends in Student Aid* reports on the increases in institutional grant aid or discounting, but determining the causes of the price trends requires more in-depth analysis.

PUBLISHED AND NET PRICES

We estimate that in 2017-18, the average in-state net tuition and fee price at public four-year institutions is about \$4,140, compared with a published price of \$9,970. Between 2007-08 and 2012-13, growth in financial aid covered the entire published price increases at public two-year and private nonprofit four-year institutions, and most of the increase in the public four-year sector. But between 2012-13 and 2017-18, increases in grant aid and tax credits and deductions for full-time students covered only about 7% of the \$730 (in 2017 dollars) increase in published tuition and fees at public four-year institutions and about two-thirds of the \$3,770 increase in published tuition and fees at private nonprofit four-year colleges and universities. For public two-year college students, the \$200 increase in tuition and fees over these five years was accompanied by a \$90 decline in average grant aid and tax benefits.

Averages across sectors conceal considerable variation among students within sectors. As the data in this report indicate, net prices are lowest for low-income students and rise with income. But even within income groups averages do not tell the stories of all students. The distribution of net prices is more critical for college access than the overall average since there are sharp differences in financial capacity among families and students.

TUITION AND FEES VERSUS TOTAL CHARGES

In addition to tuition and fees, we report room and board charges for residential students, living costs for commuter students, and other components of student budgets. Whether students live on campus or off campus, they must pay for housing and food, buy books and supplies, and cover transportation and other basic living costs. Many of these expenses are not really additional costs associated with attending college, but are expenses people face whether or not they are in school. The largest real college cost many students face is forgone earnings. It is very difficult to succeed in college while working full time. However, the cost of students' time is difficult to measure, and we make no attempt to do so in this report. Because students tend to think of living expenses as part of the cost of going to college, and because they must come up with the funds to cover these outlays, it is useful to use these expenses as a proxy

for forgone earnings. The cost of living poses a significant hurdle for many students. Even those who receive grant aid sufficient to cover tuition and fee charges may struggle to meet living expenses. It is not so much the prices charged by institutions, but the very real costs that students incur by devoting their time to school and forgoing the income needed to support themselves and their families while in school that create the burden for these students.

INTERPRETING THE DATA

Measuring Tuition

A growing number of institutions charge different prices for different years of study and/or for different academic majors. In other words, many students on a campus may face published prices quite different from those reported by institutions in the College Board's Annual Survey of Colleges. Even more fundamental, the lines between sectors are increasingly blurry as more two-year colleges offer some four-year degrees. For these reasons, the average published prices for each sector that *Trends in College Pricing 2017* reports are not precise measures.

Trends in College Pricing 2017 presents detailed pricing data for public two-year and four-year colleges and private nonprofit four-year colleges and universities. Although in the past we have provided estimates of tuition and fees at for-profit institutions, the data are no longer adequate for this purpose. Instead, we report the estimated average price in this sector from last year's report.

Price Changes

While the information reported here provides a best approximation of trends in college charges over time, we caution readers about placing too much reliance on either precise dollar amounts or annual percentage changes. Each year we revise the average prices calculated the previous year to account for revised data we receive from institutions and for changes in enrollment patterns. Details relating to our methodology and to other technical issues and data reliability can be found at the end of the report in Notes and Sources.

The tables supporting all of the graphs in the Trends publications, PDF versions of the publications, PowerPoint files containing individual slides for all of the graphs, and other detailed data on student aid and college pricing are available at trends.collegeboard.org. Please feel free to cite or reproduce the data in Trends for noncommercial purposes with proper attribution.

Published Charges by Sector and Carnegie Classification, 2017-18

The average published tuition and fee price for full-time in-state students at public four-year colleges and universities is \$9,970 in 2017-18, \$300 (3.1% before adjusting for inflation) higher than it was in 2016-17.

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
Tuition and Fees											
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%
Room and Board											
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%
Tuition and Fees and Room and Board											
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%

NOTES: Prices in Table 1 are not adjusted for inflation. Prices reported for 2016-17 have been revised and may differ from those reported in *Trends in College Pricing 2016*. Public two-year room and board charges are based on commuter housing and food costs. The latest tuition and fee estimate available for the for-profit sector is for 2016-17 and should be interpreted with caution because of the small sample size.

SOURCES: College Board, Annual Survey of Colleges; NCES, IPEDS Fall 2015 Enrollment data.

Enrollment-weighted tuition and fees weight the price charged by each institution by the number of full-time undergraduate students enrolled in fall 2015. Public four-year in-state charges are weighted by total fall 2015 full-time undergraduate enrollment in each institution, including both in-state students and out-of-state students. Out-of-state tuition and fees are computed by adding the average in-state price to the out-of-state premium weighted by the number of full-time out-of-state undergraduate students enrolled at each institution. Room and board charges are weighted by the number of undergraduate students residing on campus for four-year institutions and by the number of commuter students for public two-year institutions.

- The 2017-18 increase in published tuition and fees was largest in the private nonprofit sector, where the price increased by 3.6% (\$1,220) to \$34,740.
- Within both the public and private nonprofit sectors, prices vary by type of institution. Public four-year tuition and fee prices range from \$8,230 at bachelor's colleges and \$8,670 at master's institutions to \$10,830 at doctoral universities. Average published prices for these types of institutions in the private nonprofit sector are \$33,450, \$29,960, and \$42,920, respectively.
- In 2017-18, the average published tuition and fee price of \$3,570 at public two-year colleges is 36% of the average in-state public four-year price. The average public four-year out-of-state tuition and fee price of \$25,620 is 74% of the published private nonprofit four-year tuition and fee price.
- The \$16,000 average tuition and fee price for full-time students enrolled in for-profit institutions in 2016-17 was more than 4.6 times as high as the average price at public two-year colleges and 1.7 times as high as the average in-state price at public four-year institutions.

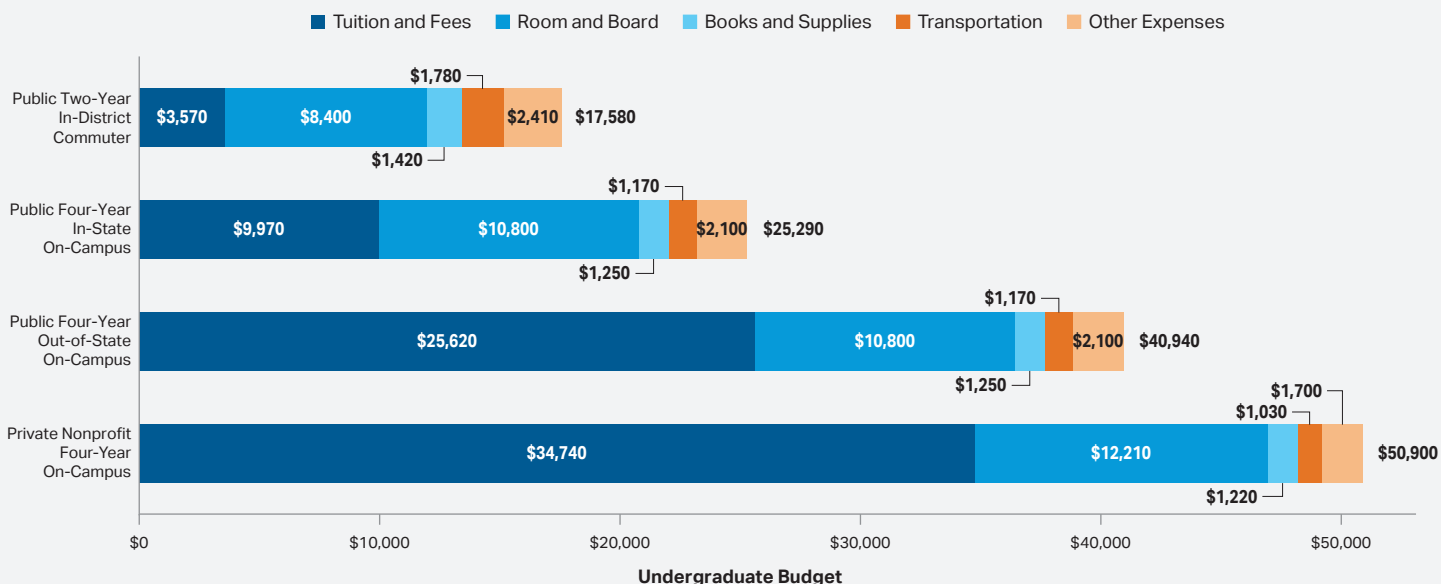
ALSO IMPORTANT:

- The prices shown in Table 1 are published or sticker prices. In 2011-12, more than 70% of full-time undergraduate students received grants that reduced the actual price of college (NCES, NPSAS 2012). Average institutional grant aid is generally higher at higher-price institutions. In addition, many states and institutions grant tuition waivers to groups such as veterans, teachers, or dependents of employees.
- The prices shown in Table 1 are for one academic year. The total price of a college education depends on how long a student is enrolled before completing a degree. Many students spend more than four years earning a bachelor's degree. Average time to degree is longer in public than in private nonprofit institutions.
- The prices shown in Table 1 are for full-time students. Prices for part-time students are less than those for full-time students.
- About 18% of full-time public two-year students are in California, which has the lowest tuition and fee price in that sector. Excluding California raises the average published price of public two-year colleges from \$3,570 to \$4,040.

Student Budgets, 2017-18

Tuition and fees constitute 39% of the total budget for in-state students living on campus at public four-year institutions and 20% of the budget for public two-year college students who pay for off-campus housing.

FIGURE 1 Average Estimated Full-Time Undergraduate Budgets (Enrollment-Weighted) by Sector, 2017-18



NOTES: Expense categories are based on institutional budgets for students as reported in the College Board's Annual Survey of Colleges. Figures for tuition and fees and room and board mirror those reported in Table 1. Other expense categories are the average amounts allotted in determining the total cost of attendance and do not necessarily reflect actual student expenditures.

SOURCES: College Board, Annual Survey of Colleges; NCES, IPEDS Fall 2015 Enrollment data.

- Student budgets are constructed by institutional financial aid offices. These budgets form the basis for determining the total cost of attendance, which can affect the amount of financial aid for which students are eligible.
- Room and board and other components of student budgets vary less across sectors than tuition and fees. As a result, while the average in-state published tuition and fee price at public two-year institutions is 36% of the price at public four-year colleges, the total student budget is 70% as high.
- The average in-state published tuition and fee price at public four-year institutions is 29% of the average at private nonprofit four-year institutions, but the average student budget is 50% as high.

ALSO IMPORTANT:

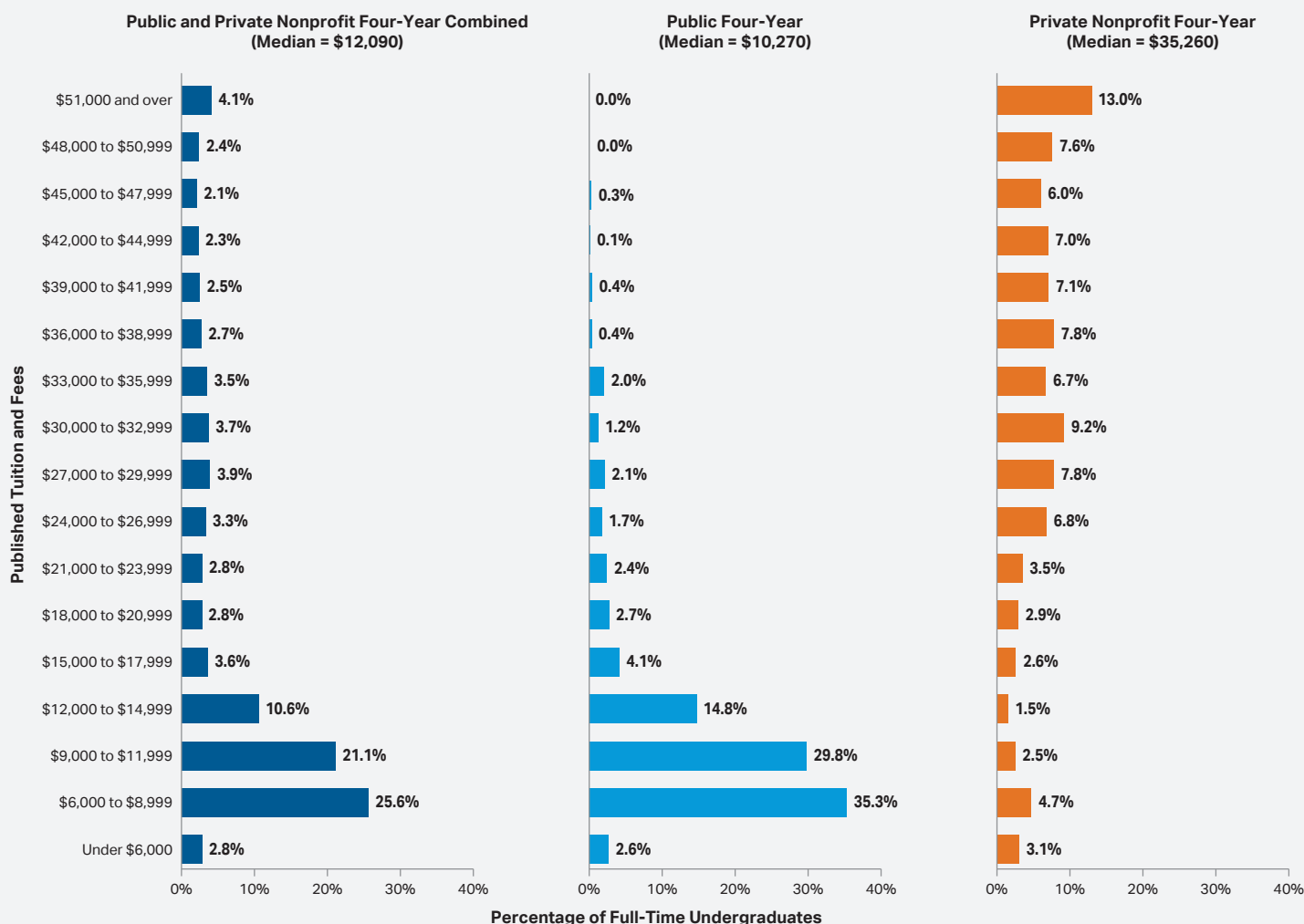
- According to the National Association of College Stores, the average price of a new textbook increased from \$58 in 2011-12 to \$80 in 2015-16. The average price of a used textbook was \$53 in 2011-12 and \$51 in 2015-16. (<https://www.nacs.org/research/HigherEdRetailMarketFactsFigures.aspx>)
- Most forms of financial aid, including federal and state grants and federal loans, can cover any expenses included in student budgets, not just tuition and fees. However, federal education tax credits and deductions cover books, supplies, and equipment required for attendance, but not room and board.
- Not all of the housing, food, and other living expenses are actually additional costs associated with attending college since people must pay for these things whether or not they are in college. However, a very significant cost of going to college is forgone earnings from the time devoted to school instead of the labor market. Without adequate earnings, many students struggle to meet daily expenses, and nontuition components of student budgets can easily interfere with student success.



Variation in Tuition and Fees, 2017-18

In 2017-18, while the median price for full-time students attending private nonprofit four-year institutions is \$35,260, 10% of full-time students attend institutions with prices below \$12,000 and 13% attend institutions charging \$51,000 or more.

FIGURE 2 Distribution of Full-Time Undergraduates at Four-Year Institutions by Published Tuition and Fees, 2017-18



NOTES: For out-of-state students enrolled in public four-year institutions, the nonresident premium has been added to in-state tuition and fees. Some out-of-state students benefit from reciprocity agreements, which allow students from neighboring states to pay less than the full out-of-state price. The distribution of students across institutions is based on the latest available enrollment data, which are for fall 2015. Percentages may not sum to 100 because of rounding.

SOURCES: College Board, Annual Survey of Colleges; NCES, IPEDS Fall 2015 Enrollment data.

- In 2017-18, among all full-time public four-year undergraduates, including both in-state and out-of-state students, 35% are enrolled in institutions with published tuition and fee levels between \$6,000 and \$8,999, 3% are in institutions with lower prices, and 17% face published prices of \$15,000 or more.
- Half of the full-time students enrolled at public and private nonprofit four-year colleges and universities in 2017-18 face published tuition and fee prices of \$12,090 or above.

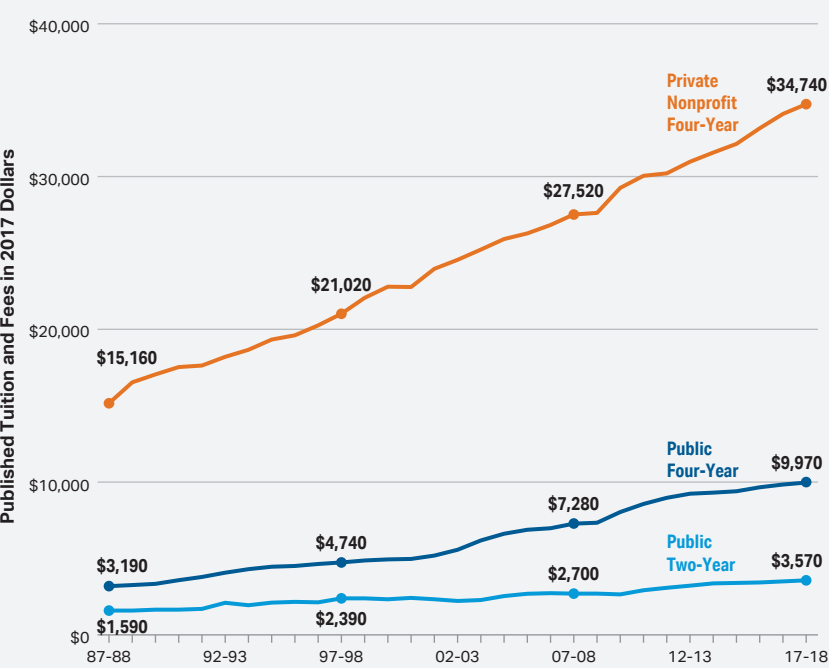
ALSO IMPORTANT:

- Figure 2 includes both in-state and out-of-state students attending public four-year institutions and the associated published prices. About 80% of those facing charges of \$15,000 or more are enrolled outside their states of residence.

Published Charges over Time

Published in-state tuition and fees at public four-year institutions increased from \$3,190 in 2017 dollars in 1987-88 to \$9,970 in 2017-18.

FIGURE 3 Average Published Tuition and Fees in 2017 Dollars by Sector, 1987-88 to 2017-18



- The 10-year dollar increases (in 2017 dollars) over the past three decades ranged from \$310 to \$870 at public two-year colleges, from \$1,550 to \$2,690 at public four-year institutions, and from \$5,860 to \$7,220 in the private nonprofit four-year sector.
- At private nonprofit four-year institutions, published tuition and fees rose at about the same rates from 2007-08 to 2012-13 and from 2012-13 to 2017-18—12% and 13% over five years after adjusting for inflation. In contrast, average prices at public two-year and four-year institutions rose at about twice that rate over the first five years of the decade, but more slowly—6% and 8%—between 2012-13 and 2017-18.

ALSO IMPORTANT:

- The increases in the net prices that students actually pay, after taking grant aid and tax benefits into consideration, have been smaller over the long term than increases in published prices. See Figures 8, 9, and 10 for details on net prices over time.
- The price increases reported in Table 1 are higher than those in Table 2 because they are not adjusted for inflation.

TABLE 2 Average Tuition and Fees and Room and Board in 2017 Dollars, 1987-88 to 2017-18, Selected Years

	Tuition and Fees in 2017 Dollars						Tuition and Fees and Room and Board in 2017 Dollars			
	Private Nonprofit Four-Year	Ten-Year \$ Increase	Public Four-Year	Ten-Year \$ Increase	Public Two-Year	Ten-Year \$ Increase	Private Nonprofit Four-Year	Ten-Year \$ Increase	Public Four-Year	Ten-Year \$ Increase
1987-88	\$15,160		\$3,190		\$1,590		\$22,490		\$9,030	
1997-98	\$21,020	\$5,860	\$4,740	\$1,550	\$2,390	\$800	\$29,530	\$7,040	\$11,390	\$2,360
2007-08	\$27,520	\$6,500	\$7,280	\$2,540	\$2,700	\$310	\$37,600	\$8,070	\$15,930	\$4,540
2017-18	\$34,740	\$7,220	\$9,970	\$2,690	\$3,570	\$870	\$46,950	\$9,350	\$20,770	\$4,840
	Private Nonprofit Four-Year	One-Year % Change	Public Four-Year	One-Year % Change	Public Two-Year	One-Year % Change	Private Nonprofit Four-Year	One-Year % Change	Public Four-Year	One-Year % Change
2007-08	\$27,520		\$7,280		\$2,700		\$37,600		\$15,930	
2008-09	\$27,620	0.4%	\$7,340	0.8%	\$2,650	-1.9%	\$37,610	0.0%	\$15,990	0.4%
2009-10	\$29,260	5.9%	\$8,040	9.5%	\$2,920	10.2%	\$39,860	6.0%	\$17,320	8.3%
2010-11	\$30,050	2.7%	\$8,570	6.6%	\$3,080	5.5%	\$40,940	2.7%	\$18,160	4.8%
2011-12	\$30,210	0.5%	\$8,970	4.7%	\$3,220	4.5%	\$41,140	0.5%	\$18,590	2.4%
2012-13	\$30,970	2.5%	\$9,240	3.0%	\$3,370	4.7%	\$42,150	2.5%	\$19,040	2.4%
2013-14	\$31,570	1.9%	\$9,310	0.8%	\$3,400	0.9%	\$42,920	1.8%	\$19,260	1.2%
2014-15	\$32,140	1.8%	\$9,400	1.0%	\$3,430	0.9%	\$43,610	1.6%	\$19,450	1.0%
2015-16	\$33,180	3.2%	\$9,670	2.9%	\$3,490	1.7%	\$45,010	3.2%	\$20,070	3.2%
2016-17	\$34,100	2.8%	\$9,840	1.8%	\$3,530	1.1%	\$46,150	2.5%	\$20,500	2.1%
2017-18	\$34,740	1.9%	\$9,970	1.3%	\$3,570	1.1%	\$46,950	1.7%	\$20,770	1.3%

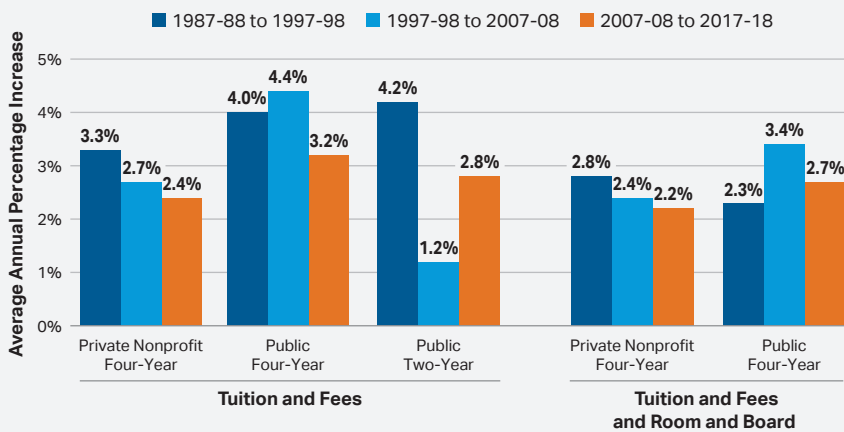
NOTE: Average tuition and fee prices reflect in-district charges for public two-year institutions and in-state charges for public four-year institutions.

SOURCES: College Board, Annual Survey of Colleges; NCES, IPEDS Fall Enrollment data.

Published Charges over Time

Between 2007-08 and 2017-18, published in-state tuition and fees at public four-year institutions increased at an average rate of 3.2% per year beyond inflation, compared with average annual increases of 4.0% and 4.4% over the two prior decades.

FIGURE 4A Average Annual Percentage Increase in Inflation-Adjusted Published Prices by Decade, 1987-88 to 2017-18

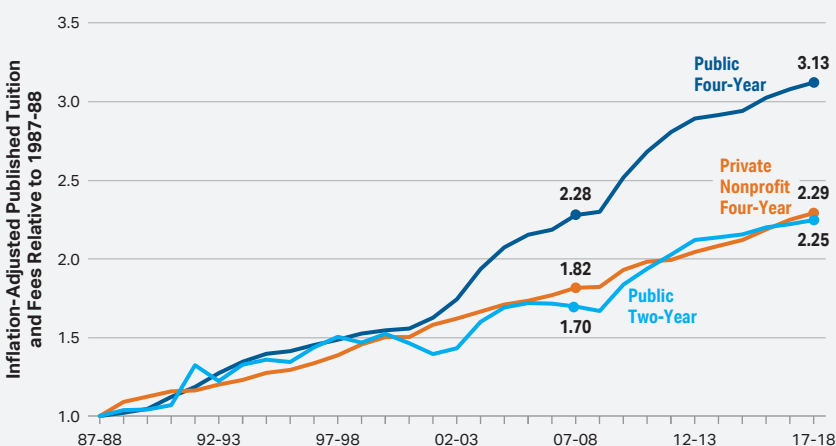


NOTES: Each bar in Figure 4A shows the average annual rate of growth of published prices in inflation-adjusted dollars over a 10-year period. For example, from 2007-08 to 2017-18, average published tuition and fees at private nonprofit four-year colleges increased by an average of 2.4% per year beyond increases in the Consumer Price Index. Average tuition and fee prices reflect in-district charges for public two-year institutions and in-state charges for public four-year institutions.

SOURCE: College Board, Annual Survey of Colleges.

- The 3.2% 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. (Table 2)
- The average annual rate of increase in published tuition and fees at private nonprofit four-year institutions declined from 3.3% between 1987-88 and 1997-98 to 2.7% over the next decade and to 2.4% between 2007-08 and 2017-18. The average dollar increase rose from \$590 per year to \$650 and to \$720 over these decades. (Table 2)
- Because room and board charges consistently rise more slowly than tuition and fees, the average annual rate of increase including room and board is lower than the rate of increase in tuition and fees.
- In 2017-18, the average in-state tuition and fee price in the public four-year sector is over three times as high in inflation-adjusted dollars as it was in 1987-88. In the public two-year and private nonprofit four-year sectors, published prices are 2.25 and 2.29 times as high in 2017-18 as they were in 1987-88, respectively.
- The rates of increase in published tuition and fees were similar across all three sectors of nonprofit higher education between 1987-88 and 2000-01. However, from 2001-02 through 2011-12, the growth rate of prices at public four-year institutions exceeded that in other sectors. In 2013-14 and more recent years, the highest rate of increase has been at private nonprofit four-year institutions. (Table 2)

FIGURE 4B Inflation-Adjusted Published Tuition and Fees Relative to 1987-88, 1987-88 to 2017-18 (1987-88 = 1.0)



NOTES: Figure 4B shows published tuition and fees by sector, adjusted for inflation, relative to 1987-88 published prices. For example, a value of 3.13 indicates that the tuition and fee price in the public four-year sector in 2017-18 is 3.13 times as high as it was in 1987-88, after adjusting for increases in the Consumer Price Index. Average tuition and fee prices reflect in-district charges for public two-year institutions and in-state charges for public four-year institutions.

SOURCE: College Board, Annual Survey of Colleges.

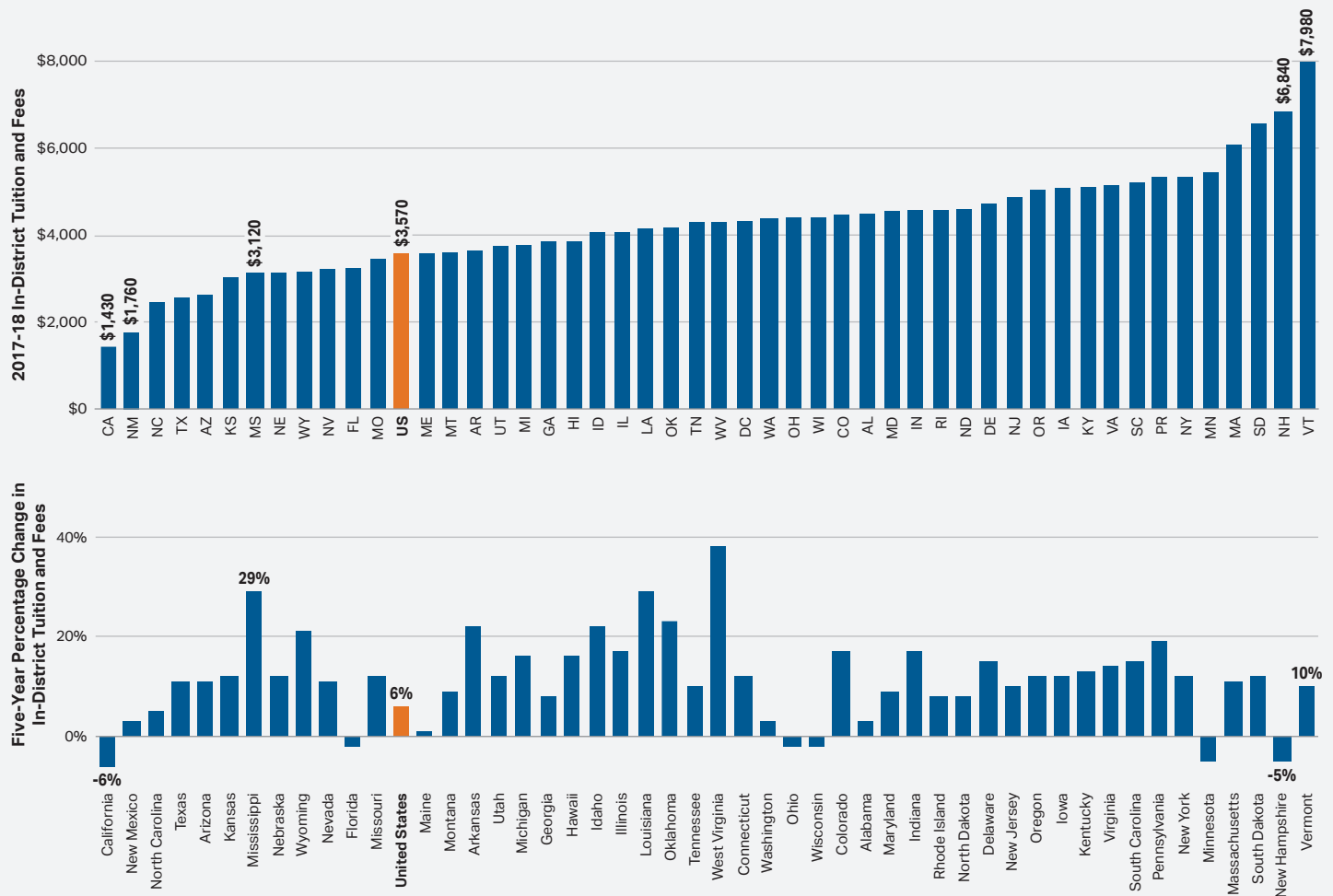
ALSO IMPORTANT:

- Median family income in the United States increased at an average rate of 0.6% per year between 1987 and 1997, 0.7% per year between 1997 and 2007, and 0.3% per year between 2007 and 2016 (after adjusting for inflation). Median family income was 18% higher in 2016 than in 1986. (U.S. Census Bureau, 2016 Income Data, Table F-6; calculations by the authors)

Tuition and Fees by State: Public Two-Year

In 2017-18, average published tuition and fees for in-district students at public two-year colleges range from \$1,430 in California and \$1,760 in New Mexico to \$6,840 in New Hampshire and \$7,980 in Vermont.

FIGURE 5 Average 2017-18 In-District Tuition and Fees at Public Two-Year Institutions and Five-Year Percentage Change in Inflation-Adjusted In-District Tuition and Fees, by State



NOTE: Alaska is not included in Figure 5 because it does not have a separate community college system.

SOURCES: College Board, Annual Survey of Colleges; NCES, IPEDS Fall 2015 Enrollment data.

- In six states, average tuition and fees at public two-year colleges fell in inflation-adjusted dollars between 2012-13 and 2017-18. In New Hampshire, which has the second highest average price in the country, the average tuition and fees declined by 5% in real terms over the last five years, but remained more than \$3,000 above the national average.
- In seven states, average tuition and fees at public two-year colleges increased by more than 20% in inflation-adjusted dollars between 2012-13 and 2017-18. Despite a 29% price increase in Mississippi, compared with the national average increase of 6%, that state's 2017-18 price is \$450 below the national average.

ALSO IMPORTANT:

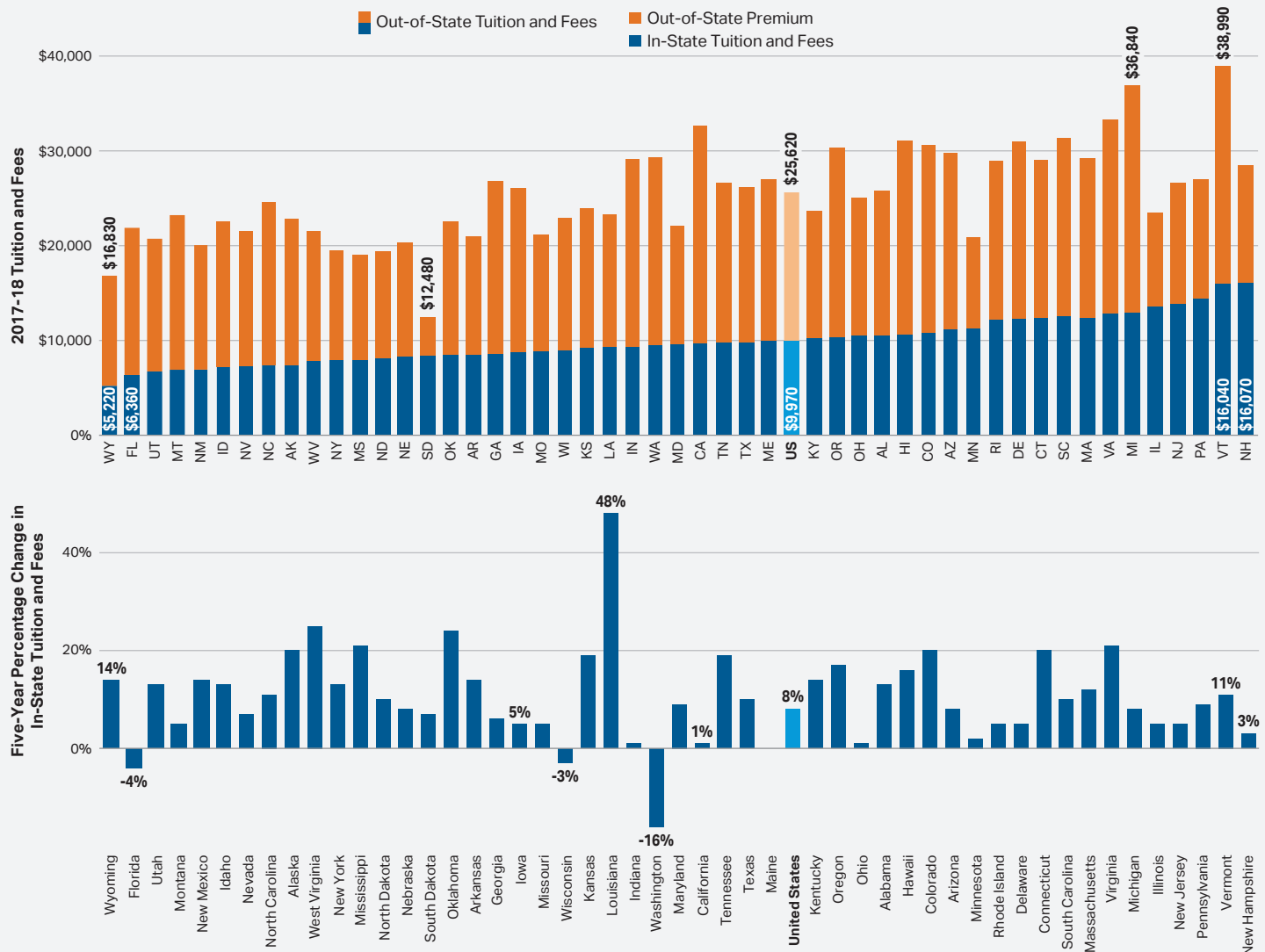
- California enrolled about 18% of the nation's full-time public two-year students in fall 2015.
- State initiatives to make community college tuition free for some students are not evident in the data reported in Figure 5. For example, the Tennessee Promise program fills the gap between community college tuition and fees and Pell Grants and other grant aid for recent high school graduates who meet certain requirements. This program provides aid to students, rather than eliminating the tuition price.



Tuition and Fees by State: Public Four-Year

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.

FIGURE 6 Average 2017-18 Tuition and Fees at Public Four-Year Institutions and Five-Year Percentage Change in Inflation-Adjusted In-State Tuition and Fees, by State



SOURCES: College Board, Annual Survey of Colleges; NCES, IPEDS Fall 2015 Enrollment data.

- In 2017-18, the highest average published out-of-state tuition and fees at public four-year institutions are in Michigan (\$36,840) and Vermont (\$38,990). The lowest prices are in South Dakota (\$12,480) and in Wyoming (\$16,830).
- In nine states, average published in-state tuition and fees at public four-year institutions fell or increased by less than 5% in inflation-adjusted dollars between 2012-13 and 2017-18. In six of those states, the 2017-18 prices for in-state students are the same as or below the national average but, in three states, the prices are above the national average.
- In eight states, average in-state tuition and fees at public four-year institutions increased by 20% or more in inflation-adjusted dollars between 2012-13 and 2017-18. The 2017-18 in-state prices are above the national average in only three of those states.

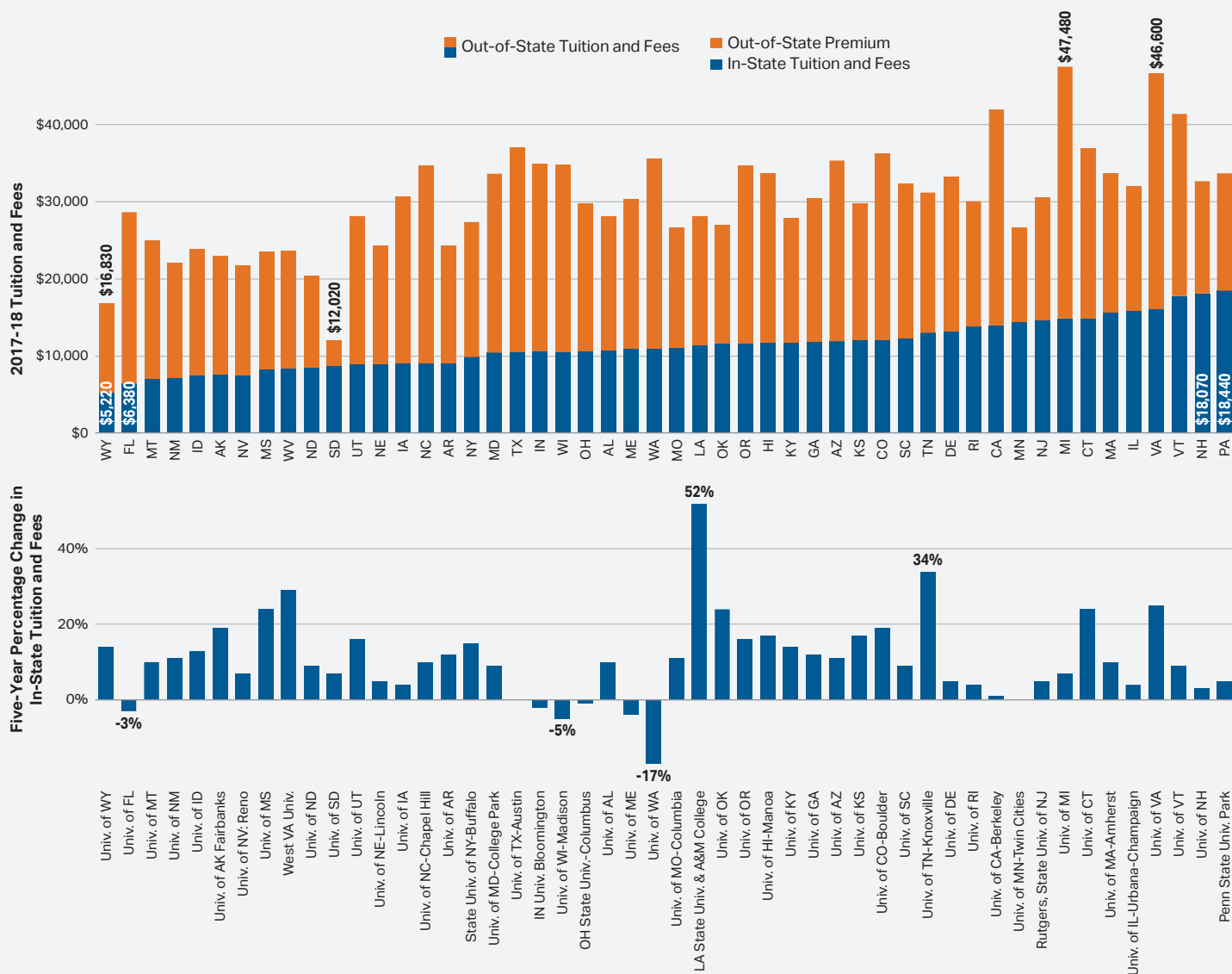
ALSO IMPORTANT:

- Because of reciprocity agreements, not all out-of-state students pay the prices reported here, even before taking financial aid into consideration. For details, see https://www.nasfaa.org/State_Regional_Tuition_Exchanges.

Tuition and Fees by State: Flagship Universities

In 2017-18, published tuition and fees for full-time first-year in-state students at flagship universities range from \$5,220 at the University of Wyoming and \$6,380 at the University of Florida to \$18,070 at the University of New Hampshire and \$18,440 at Penn State, University Park.

FIGURE 7 2017-18 Tuition and Fees at Flagship Universities and Five-Year Percentage Change in Inflation-Adjusted In-State Tuition and Fees



SOURCES: College Board, Annual Survey of Colleges; NCES, IPEDS Fall 2015 Enrollment data.

- Flagship public universities in six states had lower tuition and fees (after adjusting for inflation) in 2017-18 than in 2012-13. The steepest price decline was 17% (\$2,260) in Washington. The largest five-year increases were 52% in Louisiana and 34% in Tennessee.
- In 2017-18, published tuition and fees for out-of-state students at flagship universities range from \$12,020 in South Dakota and \$16,830 in Wyoming to \$46,600 in Virginia and \$47,480 in Michigan.
- In Florida, Montana, North Carolina, and Texas, the out-of-state price is more than three and a half times as high as the in-state

price. In Minnesota, New Hampshire, Pennsylvania, and South Dakota, the published 2017-18 out-of-state tuition and fee price is less than twice the in-state price.

ALSO IMPORTANT:

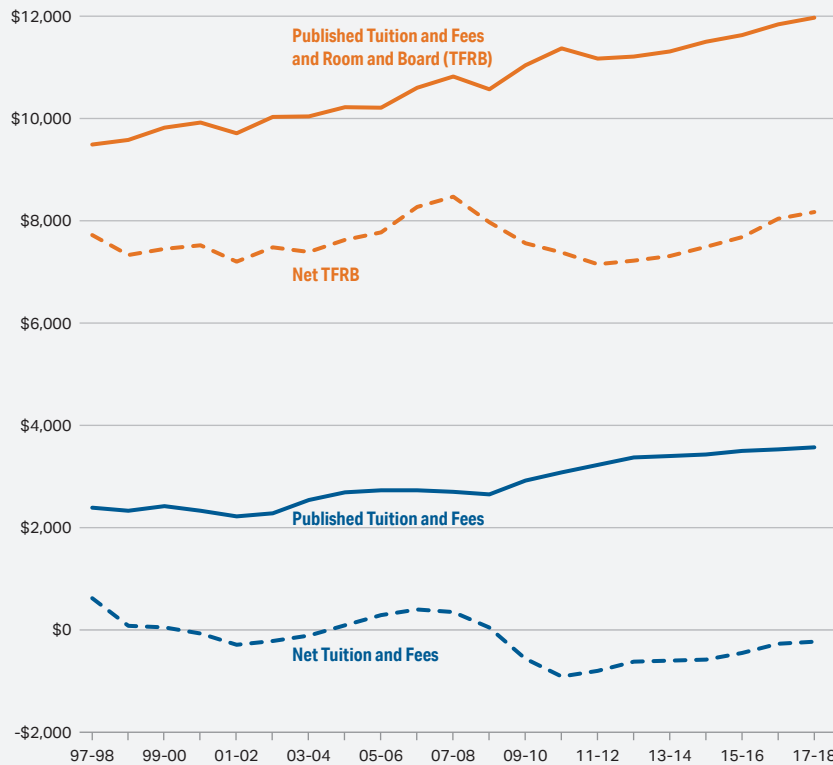
- The flagship universities in Florida and Hawaii did not raise their tuition in 2017-18. The largest one-year increase was 14% (before adjusting for inflation) at the University of Montana, where the published price of \$7,060 is still the third lowest in the nation.



Average Net Price: Public Two-Year

In 2017-18, full-time students at public two-year colleges receive an average of about \$3,900 in grant aid and federal education tax credits and deductions—\$330 more than required to cover tuition and fees.

FIGURE 8 Average Published and Net Prices in 2017 Dollars, Full-Time In-District Undergraduate Students at Public Two-Year Institutions, 1997-98 to 2017-18



NOTES: Estimates of net price exclude military/veterans aid, which awards relatively large amounts to a small number of students. Because information on grant aid and education tax benefits for 2017-18 is not yet available, the net price for 2017-18 is estimated based on 2016-17 financial aid data. Room and board in this sector refers to housing and food costs for commuter students since few community colleges provide on-campus housing.

SOURCES: College Board, Annual Survey of Colleges; *Trends in Student Aid 2017*; NCES, IPEDS Fall Enrollment data.

- In 2017-18, full-time students at public two-year colleges must cover about \$8,070 in room and board on average after grant aid, in addition to paying for books and supplies and other living expenses.
- In 2017-18, the average net tuition and fee price paid by full-time public two-year college students is \$680 (in 2017 dollars) less than in 2007-08—but \$290 more than in 2012-13.
- Between 2007-08 and 2017-18, the average published tuition and fees at public two-year colleges increased by \$870 (32%) after adjusting for inflation. Average combined grant aid and tax benefits increased by \$1,550 (66%) over the decade.

ALSO IMPORTANT:

- The national average published tuition and fees and average net price are higher if California, with the lowest tuition and fees and about 18% of the nation's public two-year full-time college students, is not included in the estimate.
- The decline in average Pell Grant funding per full-time public two-year college student was the main factor explaining the increase in net price between 2012-13 and 2017-18.

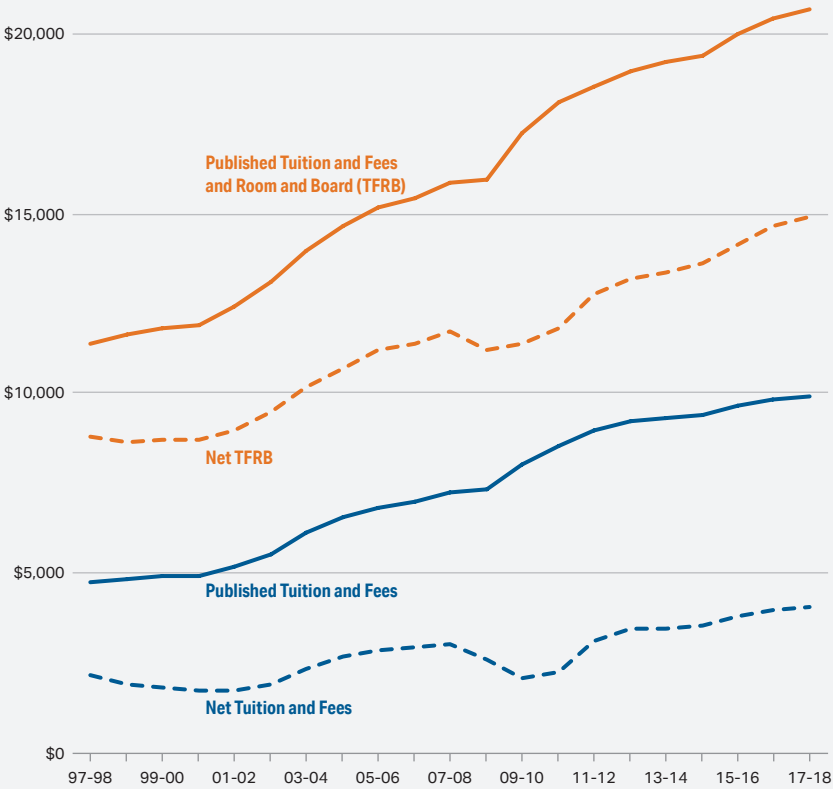
Average Published and Net Prices and Average Grant Aid and Tax Benefits per Student in 2017 Dollars, Full-Time In-District Undergraduate Students at Public Two-Year Institutions, 1997-98 to 2017-18, Selected Years

	97-98	02-03	07-08	12-13	13-14	14-15	15-16	16-17	17-18
Published Tuition and Fees	\$2,390	\$2,280	\$2,700	\$3,370	\$3,400	\$3,430	\$3,490	\$3,530	\$3,570
Published Tuition and Fees and Room and Board (TFRB)	\$9,490	\$10,030	\$10,820	\$11,210	\$11,310	\$11,500	\$11,620	\$11,840	\$11,970
Net Tuition and Fees	\$620	-\$270	\$350	-\$620	-\$600	-\$580	-\$460	-\$370	-\$330
Net TFRB	\$7,720	\$7,480	\$8,470	\$7,220	\$7,310	\$7,490	\$7,670	\$7,940	\$8,070
Grant Aid and Tax Benefits per Student	\$1,770	\$2,550	\$2,350	\$3,990	\$4,000	\$4,010	\$3,950	\$3,900	\$3,900

Average Net Price: Public Four-Year

In 2017-18, the average full-time in-state public four-year college student receives an estimated \$5,830 in grant aid and federal tax credits and deductions, covering 58% of the \$9,970 published tuition and fee price.

FIGURE 9 Average Published and Net Prices in 2017 Dollars, Full-Time In-State Undergraduate Students at Public Four-Year Institutions, 1997-98 to 2017-18



NOTES: Estimates of net price exclude military/veterans aid, which awards relatively large amounts to a small number of students. Because information on grant aid and education tax benefits for 2017-18 is not yet available, the net price for 2017-18 is estimated based on 2016-17 financial aid data.

SOURCES: College Board, Annual Survey of Colleges; *Trends in Student Aid 2017*; NCES, IPEDS Fall Enrollment data.

- In 2017-18, the estimated average net tuition and fee price paid by full-time in-state students at public four-year institutions is \$4,140, \$1,070 (in 2017 dollars) higher than the net price a decade earlier and \$2,020 higher than the 2009-10 low of \$2,120.
- On average, the \$1,570 (in 2017 dollars) increase in grant aid and federal tax credits and deductions covered 80% of the \$1,960 increase in published tuition and fees between 2007-08 and 2012-13. But the \$50 increase in aid between 2012-13 and 2017-18 covered only 7% of the \$730 price increase.
- In 2017-18, full-time in-state students at public four-year institutions face an average of \$14,940 in charges for tuition and fees and room and board combined, net of grant aid and tax benefits.

ALSO IMPORTANT:

- Full-time out-of-state students at public four-year institutions, who face significantly higher published tuition and fees than those reported in Figure 9 for state residents, received \$370 more in grant aid per student in 2011-12 than in-state students. (NPSAS 2012)
- Average net prices conceal considerable differences among students both within institutions and across institutions within the sector.

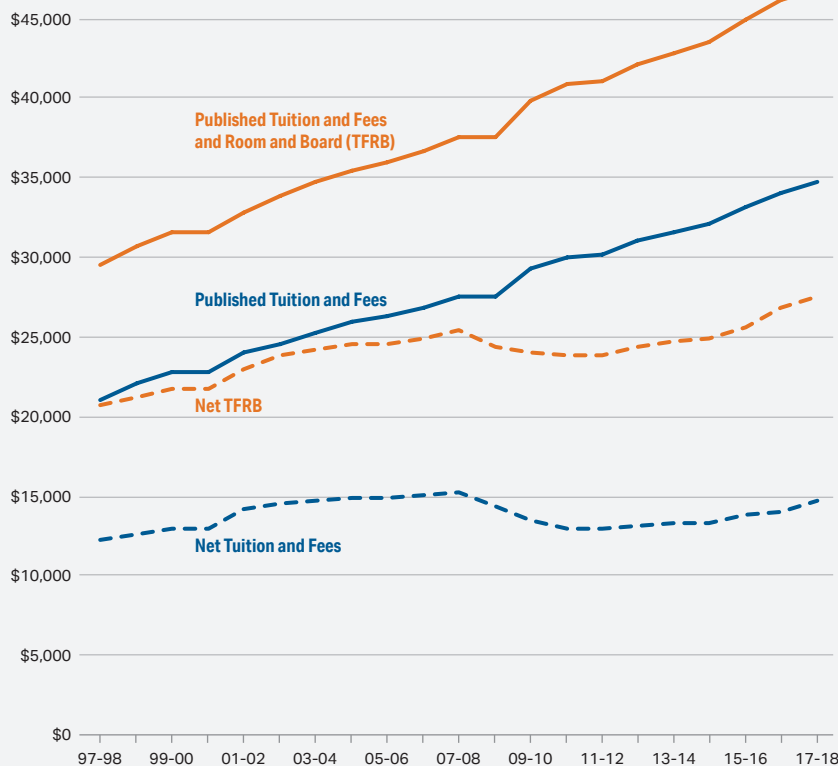
Average Published and Net Prices and Average Grant Aid and Tax Benefits per Student in 2017 Dollars, Full-Time In-State Undergraduate Students at Public Four-Year Institutions, 1997-98 to 2017-18, Selected Years

	97-98	02-03	07-08	12-13	13-14	14-15	15-16	16-17	17-18
Published Tuition and Fees	\$4,740	\$5,570	\$7,280	\$9,240	\$9,310	\$9,400	\$9,670	\$9,840	\$9,970
Published Tuition and Fees and Room and Board (TFRB)	\$11,390	\$13,150	\$15,930	\$19,040	\$19,260	\$19,450	\$20,070	\$20,500	\$20,770
Net Tuition and Fees	\$2,180	\$1,960	\$3,070	\$3,460	\$3,480	\$3,580	\$3,810	\$4,010	\$4,140
Net TFRB	\$8,830	\$9,540	\$11,720	\$13,260	\$13,430	\$13,630	\$14,210	\$14,670	\$14,940
Grant Aid and Tax Benefits per Student	\$2,560	\$3,610	\$4,210	\$5,780	\$5,830	\$5,820	\$5,860	\$5,830	\$5,830

Average Net Price: Private Nonprofit Four-Year

After declining from \$15,270 (in 2017 dollars) in 2007-08 to \$13,210 in 2012-13, the average net tuition and fee price paid by full-time students at private nonprofit four-year institutions increased to an estimated \$14,530 in 2017-18.

FIGURE 10 Average Published and Net Prices in 2017 Dollars, Full-Time Undergraduate Students at Private Nonprofit Four-Year Institutions, 1997-98 to 2017-18



NOTES: Estimates of net price exclude military/veterans aid, which awards relatively large amounts to a small number of students. Because information on grant aid and education tax benefits for 2017-18 is not yet available, the net price for 2017-18 is estimated based on 2016-17 financial aid data.

SOURCES: College Board, Annual Survey of Colleges; *Trends in Student Aid 2017*; NCES, IPEDS Fall Enrollment data.

- The average net tuition and fee price at private nonprofit four-year institutions is lower in 2017-18 than it was in 2007-08 because the increase in average grant aid and tax benefits was larger than the increase in published prices.
- Between 2012-13 and 2017-18, average published tuition and fees at private nonprofit institutions increased by \$3,770 (in 2017 dollars). The \$2,450 increase in grant aid and tax benefits per student covered 65% of that increase.
- Average grant aid from all sources and federal education tax benefits covered 41% to 45% of published tuition and fees at private four-year institutions from 1997-98 through 2007-08, compared with between 57% and 59% since 2010-11.
- The average net tuition and fee and room and board price is \$26,740 in 2017-18, an increase of 5% (\$1,390 in 2017 dollars) over the last decade.

ALSO IMPORTANT:

- In 2017-18, about three-quarters of the \$20,210 in aid per student that lowers net prices for full-time students in the private nonprofit sector comes from colleges and universities in the form of discounts from their published prices.
- In 2011-12, 67% of full-time students at private nonprofit four-year institutions received grant aid from their institutions. Thirty-six percent received federal grant aid and 24% received state grant aid. (NPSAS 2012)

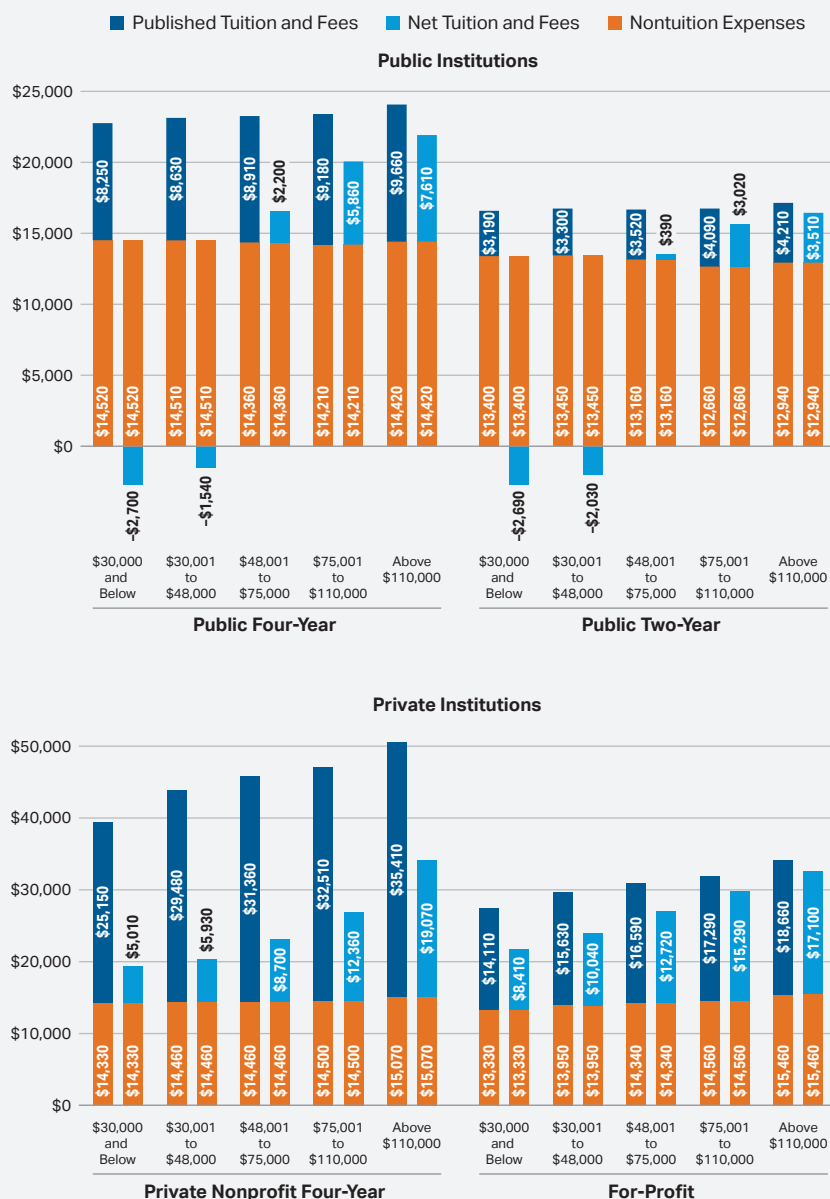
Average Published and Net Prices and Average Grant Aid and Tax Benefits per Student in 2017 Dollars, Full-Time Undergraduate Students at Private Nonprofit Four-Year Institutions, 1997-98 to 2017-18, Selected Years

	97-98	02-03	07-08	12-13	13-14	14-15	15-16	16-17	17-18
Published Tuition and Fees	\$21,020	\$24,550	\$27,520	\$30,970	\$31,570	\$32,140	\$33,180	\$34,100	\$34,740
Published Tuition and Fees and Room and Board (TFRB)	\$29,530	\$33,800	\$37,600	\$42,150	\$42,920	\$43,610	\$45,010	\$46,150	\$46,950
Net Tuition and Fees	\$12,210	\$14,560	\$15,270	\$13,210	\$13,330	\$13,380	\$13,790	\$13,890	\$14,530
Net TFRB	\$20,720	\$23,810	\$25,350	\$24,390	\$24,680	\$24,850	\$25,620	\$25,940	\$26,740
Grant Aid and Tax Benefits per Student	\$8,810	\$9,990	\$12,250	\$17,760	\$18,240	\$18,760	\$19,390	\$20,210	\$20,210

Average Net Price by Family Income

In 2014-15, at public two-year and four-year institutions, first-time full-time students who were federal aid recipients from families with incomes below \$48,001 received enough grant aid on average to cover their tuition and fees, leaving more than \$1,500 for other expenses.

FIGURE 11 Published and Net Tuition and Fees and Nontuition Expenses, First-Time Full-Time Undergraduates Receiving Federal Aid, by Family Income and Sector, 2014-15



NOTES: Includes only degree/certificate-seeking undergraduates who received Title IV federal financial aid. Income includes that of parents for dependent students, but for independent students, only that of students and spouses. Nontuition expenses include room and board, books and supplies, and other expenses. Nontuition expenses are for students living on campus in the public and private nonprofit four-year sectors and for students living off campus in the public two-year and for-profit sectors.

SOURCES: NCES, IPEDS 2015 Institutional Characteristics and Student Financial Aid data; calculations by the authors.

- At public four-year institutions, federal aid recipients (including those who received only federal loans) with incomes \$30,000 and below paid no tuition on average, and had \$2,700 of grant aid to put toward an estimated \$14,520 in nontuition expenses, leaving \$11,820 for them to cover out of other resources.
- At public two-year colleges, federal aid recipients with incomes \$75,000 and below paid an average of \$390 or less in tuition and fees net of grant aid.
- At private nonprofit four-year institutions, average tuition and fees net of grant aid from all sources ranged from \$5,010 for federal aid recipients from families with incomes \$30,000 and below to \$19,070 for those with incomes above \$110,000.
- At for-profit institutions, average tuition and fees net of grant aid from all sources ranged from \$8,410 for federal aid recipients from families with incomes \$30,000 and below to \$17,100 for those with incomes above \$110,000.
- Percentages of students receiving federal aid are lowest for higher-income students and at public two-year colleges.

ALSO IMPORTANT:

- Average net price estimates in Figures 8, 9, and 10 include all full-time students, whether or not they received federal financial aid. Those estimates include federal tax credits and deductions and exclude nontuition expenses other than room and board. Figure 11 is based on full student budgets for first-time students who received federal student aid, including those who received only non-need-based federal loans, and excludes tax credits and deductions.

Percentage of First-Time Full-Time Students Receiving Federal Aid, 2011-12

	\$30,000 and Below	\$30,001 to \$48,000	\$48,001 to \$75,000	\$75,001 to \$110,000	Above \$110,000
Public Four-Year	91%	88%	79%	67%	49%
Private Nonprofit Four-Year	92%	94%	84%	75%	53%
Public Two-Year	84%	72%	46%	26%	21%
For-Profit	91%	78%	78%	73%	58%

NOTES: Excludes international students. Excludes Parent PLUS Loans and military and veterans' aid.

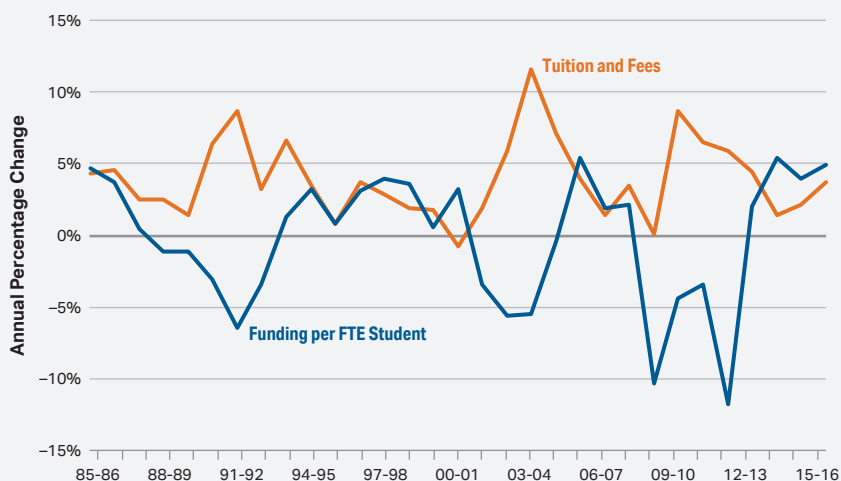
SOURCE: NCES, NPSAS 2012.



Institutional Revenues: State and Local Funding

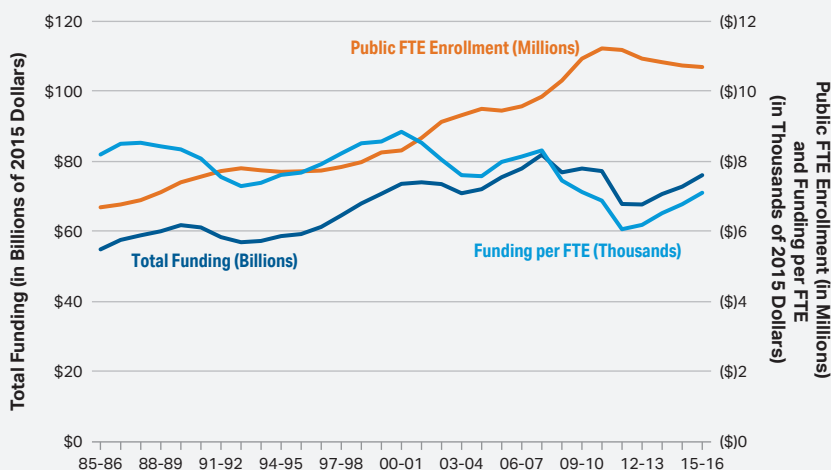
The largest increases in tuition and fees at public colleges and universities occur during periods when per-student state and local funding for higher education is declining.

FIGURE 12A Annual Percentage Change in Inflation-Adjusted Per-Student State and Local Funding for Higher Education and in Tuition and Fees at Public Institutions, 1985-86 to 2015-16



- Funding per student fell (in inflation-adjusted dollars) each year from 2008-09 through 2011-12, before rising in 2012-13 and the following three years.
- Average tuition and fees rose rapidly each year from 2009-10 through 2011-12 but then more slowly the following years as state funding recovered.
- Changes in per-student funding are the result of changes in total funding levels and enrollment patterns. Between 2005-06 and 2010-11, total funding rose by 2%, from \$75.6 billion (in 2015 dollars) to \$77.3 billion. At the same time, enrollment increased by 19%, generating a 14% decline in per-student funding over these five years.
- Between 2010-11 and 2015-16, total funding fell by 2%. Combined with a 5% decline in enrollment, this generated a 3% increase in per-student funding over these five years.
- In 2015-16, appropriations per student were 11% lower in inflation-adjusted dollars than a decade earlier, and 13% lower than 30 years earlier.

FIGURE 12B Total and Per-Student State and Local Funding for Higher Education in 2015 Dollars and Public FTE Enrollment, 1985-86 to 2015-16



NOTES: Because of the unavailability of data for 2015-16, all years of data exclude Illinois. Enrollment figures are fall FTE enrollments for public two-year and four-year institutions, excluding medical students. Tuition and fees reflect an FTE enrollment-weighted average of two-year and four-year prices. Funding is for both two-year and four-year institutions and includes tax revenues and other state and local funds for higher education, but not funding for capital expenditures.

SOURCES: College Board, Annual Survey of Colleges; NCES, *Digest of Education Statistics 2016*, Table 307.10; State Higher Education Executive Officers Association (SHEEO), State Higher Education Finance (SHEF) reports; calculations by the authors.

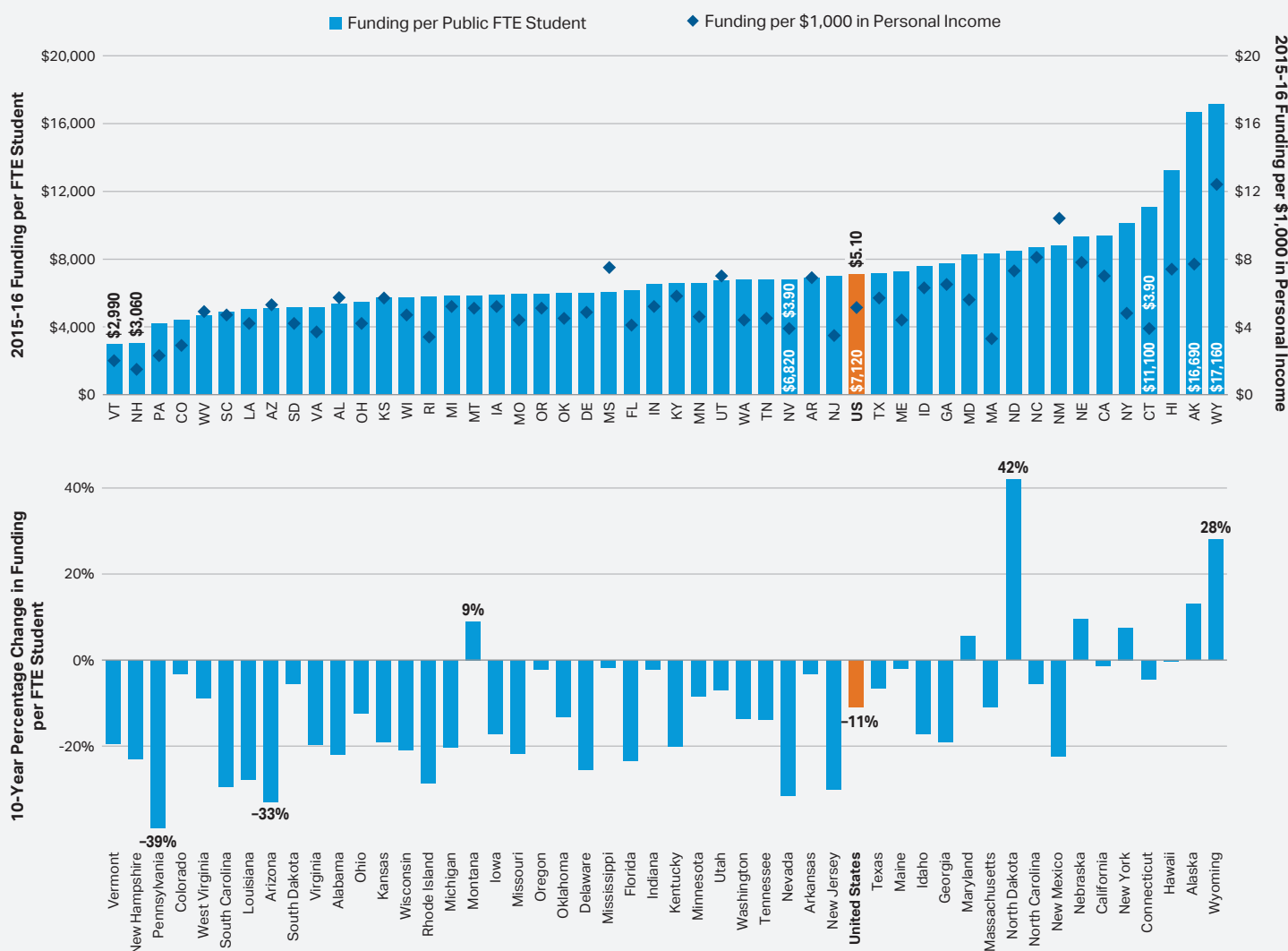
ALSO IMPORTANT:

- In 2015-16, local funding represented less than 1% of the total educational appropriations for higher education in 23 states, but was more than half of the total in Arizona and more than a quarter of the total in Kansas and Oregon.
- Between 2005-06 and 2015-16, total inflation-adjusted per-student state and local funding for higher education declined by 39% in Pennsylvania and by 25% or more in another seven states; it increased by 42% in North Dakota and by smaller amounts in six other states.

Institutional Revenues: State and Local Funding

In Vermont and New Hampshire, state and local funding per full-time equivalent (FTE) student at public colleges and universities in 2015-16 was less than half the national average of \$7,120. In Wyoming and Alaska, it was more than twice the national average.

FIGURE 13 2015-16 State and Local Funding for Higher Education per Student and per \$1,000 in Personal Income and 10-Year Percentage Change in Inflation-Adjusted Funding per Student, by State



NOTE: Data for Illinois are not available.

SOURCES: SHEEO, SHEF reports; Bureau of Economic Analysis, Annual State Personal Income 2015; calculations by the authors.

- A given level of funding per \$1,000 in personal income yields higher per-student support in states with higher levels of personal income (and also in states with lower enrollment rates). For example, both Nevada and Connecticut provided about \$3.90 per \$1,000 in personal income, but Nevada's \$6,820 in fiscal support per FTE student was considerably smaller than Connecticut's \$11,100.
- Between 2005-06 and 2015-16, all but seven states saw declines in funding per student.

ALSO IMPORTANT:

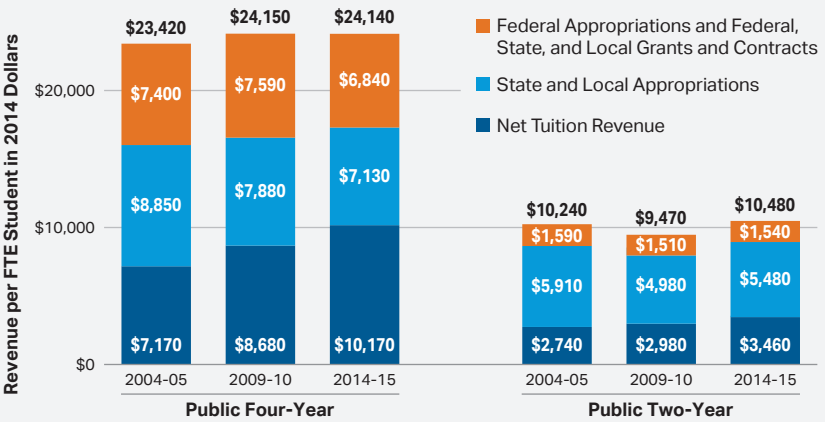
- In some states, such as Arizona, large per-student funding declines were at least partly the result of large enrollment increases. But in other states, such as Pennsylvania, the funding decline occurred even with modest enrollment growth.
- Most states with increases in funding per student over the past decade experienced below average growth in student enrollment. However, in New York and Maryland above average enrollment growth was accompanied by increases in funding per student.



Institutional Revenues: Public Institutions

Between 2004-05 and 2014-15, per-student revenue at public four-year institutions from tuition and fees and federal, state, and local governments increased by \$720 (3%) in 2014 dollars. Net tuition revenue per student increased by \$3,000 while revenue from government sources declined by \$2,280.

FIGURE 14 Institutional Revenues per Full-Time Equivalent (FTE) Student in 2014 Dollars at Public Institutions, 2004-05, 2009-10, and 2014-15



Distribution of Institutional Revenues by Source

	Public Four-Year			Public Two-Year		
	Net Tuition Revenue	State and Local Appropriations	Federal Appropriations and Federal, State, and Local Grants and Contracts	Net Tuition Revenue	State and Local Appropriations	Federal Appropriations and Federal, State, and Local Grants and Contracts
2004-05	31%	38%	32%	27%	58%	16%
2009-10	36%	33%	31%	31%	53%	16%
2014-15	42%	30%	28%	33%	52%	15%

NOTES: Net tuition revenue is the amount of revenue an institution takes in from tuition and fees, net of all institutional grant aid provided to students. Some of this revenue comes in the form of Pell Grants and other financial aid from federal and state governments and other sources. Institutional averages are weighted by 12-month FTE enrollments. Percentages may not sum to 100 because of rounding.

SOURCES: NCES, IPEDS Finance data, 2005, 2010, and 2015; calculations by the authors.

- Over the decade, revenue per student at public two-year colleges from these sources increased by \$240 (2%) in 2014 dollars. Net tuition revenue increased by \$720, but funding from federal, state, and local sources declined by \$480.
- In 2014-15, per-student revenue at public two-year colleges from the combination of tuition and federal, state, and local governments was less than half of the revenue from these sources at public four-year colleges and universities (\$10,480 vs. \$24,140).
- The increase in per-student state and local appropriations at public two-year colleges between 2009-10 and 2014-15 resulted from a decline in enrollment, rather than from changes in state appropriations, which were stable over this period.

ALSO IMPORTANT:

- Revenues from auxiliary enterprises such as residence and dining facilities, hospitals, and independent operations, not included in Figure 14, are usually dedicated to running those operations.

Institutional Revenues and Expenditures

The portion of per-student educational expenditures at public four-year colleges and universities that is a subsidy to students, rather than being covered by tuition revenues, fell by \$340 (4%) in 2014 dollars between 2004-05 and 2009-10 and by another \$130 (2%) between 2009-10 and 2014-15.

FIGURE 15A Net Tuition Revenues, Subsidies, and Education and Related Expenditures per Full-Time Equivalent (FTE) Student in 2014 Dollars at Public Institutions, 2004-05, 2009-10, and 2014-15

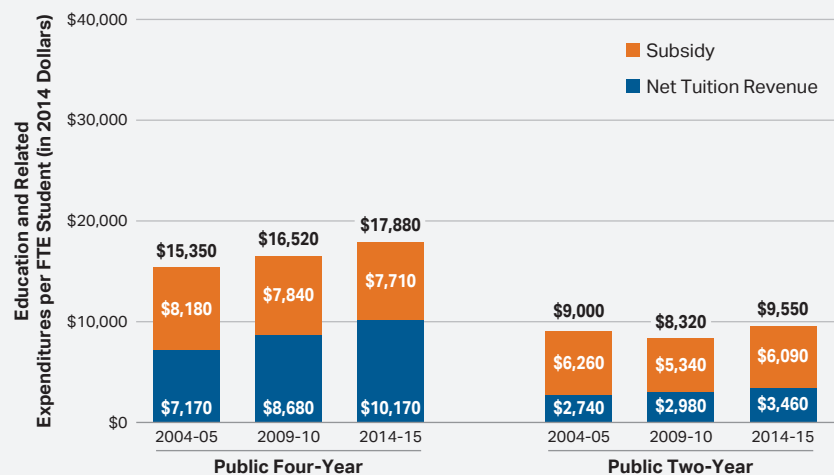
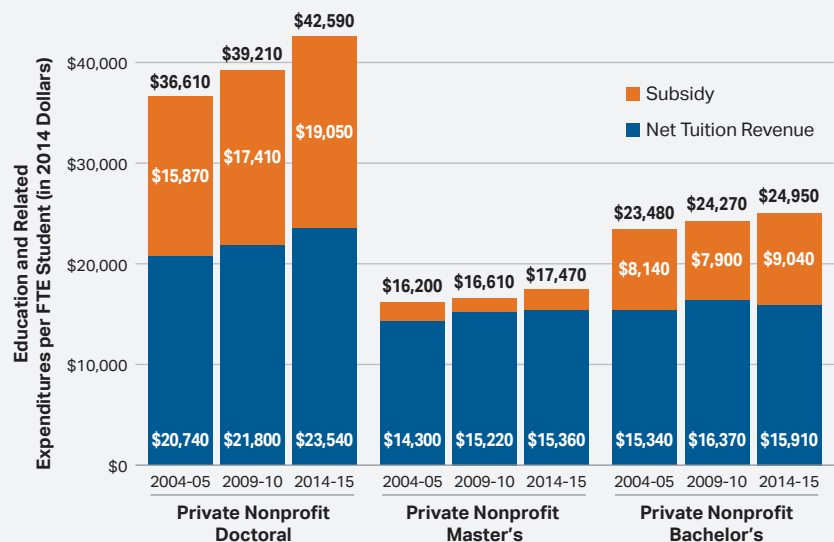


FIGURE 15B Net Tuition Revenues, Subsidies, and Education and Related Expenditures per Full-Time Equivalent (FTE) Student in 2014 Dollars at Private Nonprofit Institutions, 2004-05, 2009-10, and 2014-15



NOTES: Net tuition revenue is the amount of revenue an institution takes in from tuition and fees, net of all institutional grant aid provided to students. Some of this revenue comes in the form of Pell Grants and other financial aid from federal and state governments and other sources. Subsidies are defined as the portion of the cost of educating students not covered by net tuition revenue. Education and related expenditures include spending on instruction, student services, and the education share of spending on central academic and administrative support, as well as operations and maintenance. Expenditures for both undergraduate and graduate students are included in these estimates. Institutional averages are weighted by 12-month FTE enrollments.

SOURCES: NCES, IPEDS Finance data, 2005, 2010, and 2015; calculations by the authors.

- The average subsidy per full-time equivalent (FTE) student at public two-year colleges fell by \$920 (15%) in 2014 dollars between 2004-05 and 2009-10, but increased by \$750 (14%) between 2009-10 and 2014-15 as enrollment in the sector declined.
- Between 2004-05 and 2014-15, educational expenditures per FTE student at public four-year institutions increased by 16% in inflation-adjusted dollars. The increase over the decade in the public two-year sector was 6%.
- Net tuition revenue covers a much larger share of educational costs at private nonprofit master's institutions than at either doctoral universities or bachelor's colleges in the sector.
- Between 2004-05 and 2014-15, average educational expenditures per FTE student at private nonprofit doctoral universities increased by 16% in inflation-adjusted dollars. The increases over the decade in private nonprofit master's and bachelor's institutions were 8% and 6%, respectively.

ALSO IMPORTANT:

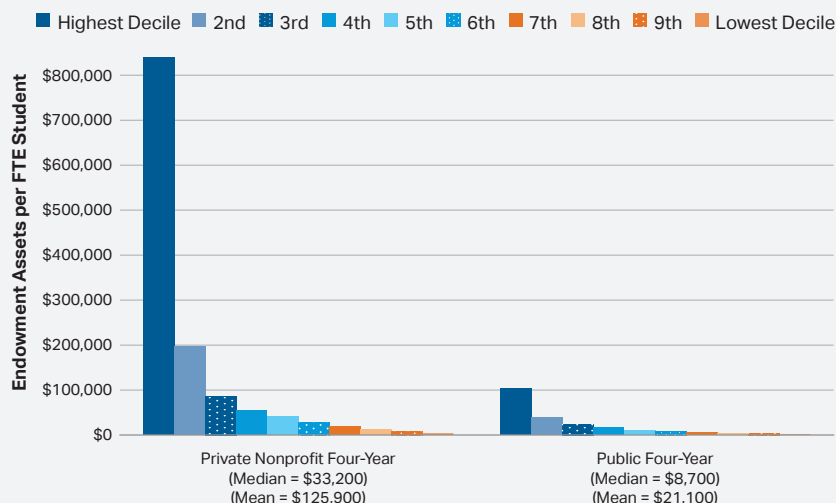
- Doctoral and master's universities enroll both undergraduate and graduate students, while bachelor's institutions enroll almost exclusively undergraduate students. Because average expenditures for graduate students are generally higher than average expenditures for undergraduate students, per-student revenues and expenditures at different types of institutions are not strictly comparable.
- In addition to the amounts included in "education and related expenditures," institutional budgets include expenditures for other purposes such as research, public service, and auxiliary enterprises.

	Public		Private Nonprofit		
	Four-Year	Two-Year	Doctoral	Master's	Bachelor's
2004-05	53%	70%	43%	12%	35%
2009-10	47%	64%	44%	8%	33%
2014-15	43%	64%	45%	12%	36%

Endowments

In 2014-15, the 10% of students enrolled at private nonprofit four-year institutions with the highest endowments per student benefited from endowment assets averaging \$840,600 per full-time equivalent (FTE) student, compared with a median of \$33,200 for the sector as a whole.

FIGURE 16A Endowment Assets per Full-Time Equivalent (FTE) Student at Four-Year Colleges and Universities, 2014-15

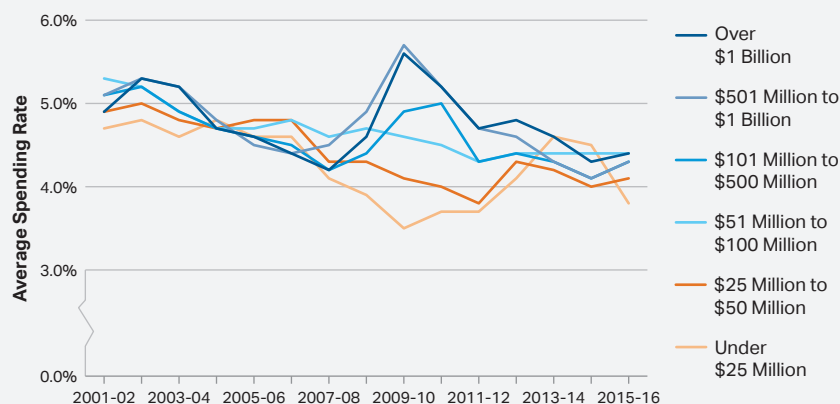


NOTES: Endowment values are as of the end of FY15 based on data for 511 public and 1,022 private nonprofit four-year institutions. Average endowment per student by decile is calculated by ordering institutions by assets per student and dividing students in the sector into deciles. Total assets in institutions enrolling 10% of students are divided by the number of students in those schools.

SOURCES: NCES, IPEDS 2015 Finance data; calculations by the authors.

- In recent years, institutions have been spending about 4% of the value of their endowments. With a 4% spending rate, the median private college endowment of \$33,200 per FTE student yields about \$1,300 a year in funding per student, compared with \$33,600 per student at the institutions in the top decile.
- In 2014-15, the 10% of students enrolled at public institutions with the highest endowments per student benefited from endowment assets averaging \$103,100 per FTE student, compared with a median of \$8,700 for the sector as a whole.
- With a 4% spending rate, the median public college endowment yields about \$350 a year in funding per student, compared with \$4,100 at the public institutions in the top decile.
- Endowment spending rates fluctuate from year to year, but there has been a downward trend from an average of 5.0% in 2001-02 to 4.3% in 2015-16.
- The highest-endowment institutions increased their spending rates during the Great Recession, reaching 5.6% to 5.7% in 2009-10. But in 2015-16, spending rates ranged from 3.8% for institutions with endowments below \$25 million to 4.4% for institutions with endowments exceeding \$1 billion.

FIGURE 16B Average Reported Spending Rates for College and University Endowments by Endowment Size, 2001-02 to 2015-16



Endowment Spending Rates

Endowment Size	01-02	03-04	05-06	07-08	09-10	11-12	13-14	15-16
Over \$1 Billion	4.9%	5.2%	4.6%	4.2%	5.6%	4.7%	4.6%	4.4%
\$501 Million to \$1 Billion	5.1%	5.2%	4.5%	4.5%	5.7%	4.7%	4.3%	4.3%
\$101 Million to \$500 Million	5.1%	4.9%	4.6%	4.2%	4.9%	4.3%	4.3%	4.3%
\$51 Million to \$100 Million	5.3%	4.9%	4.7%	4.6%	4.6%	4.3%	4.4%	4.4%
\$25 Million to \$50 Million	4.9%	4.8%	4.8%	4.3%	4.1%	3.8%	4.2%	4.1%
Under \$25 Million	4.7%	4.6%	4.6%	4.1%	3.5%	3.7%	4.6%	3.8%
All	5.0%	4.9%	4.7%	4.3%	4.5%	4.2%	4.4%	4.3%

ALSO IMPORTANT:

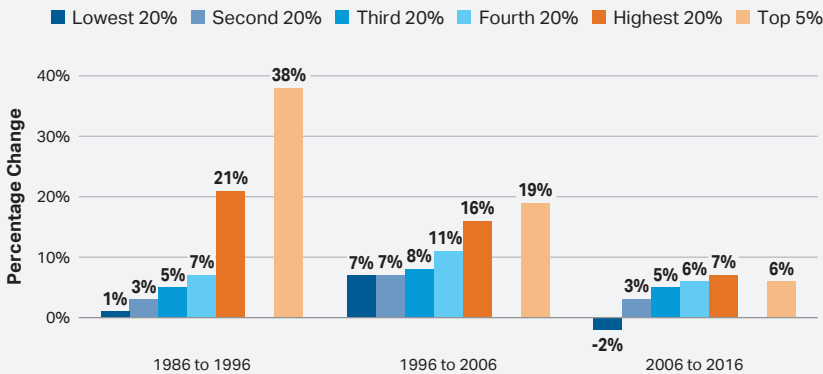
- By law, the principal of some endowment funds must be preserved in perpetuity; restricted endowment funds can only be used to support purposes specified by the donor. Institutions have more flexibility over the use of unrestricted endowment funds.
- In 2014-15, four private and six public institutions held 25% of the total endowment assets in their sectors.
- In 2014-15, 13 private nonprofit colleges and universities—less than 1% of all institutions in this sector—had endowment assets exceeding \$1 million per student. Fifty-four had total endowments exceeding \$1 billion.

SOURCE: National Association of College and University Business Officers (NACUBO), 2016 NACUBO-Commonfund Study of Endowment.

Family Income

Inequality in family incomes increased in each of the three decades from 1986 to 2016 as income grew faster for those with higher incomes.

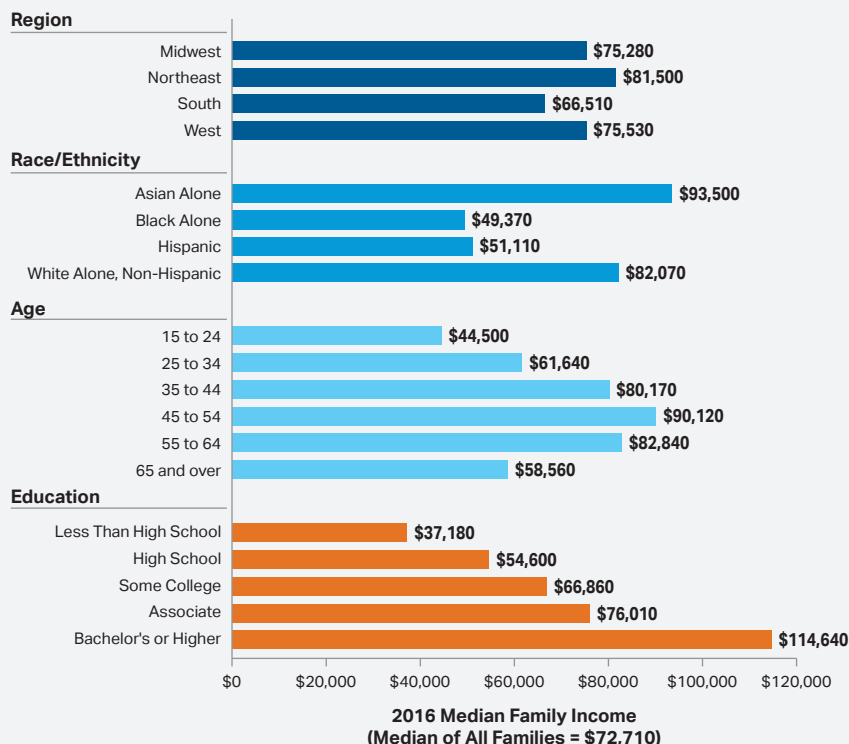
FIGURE 17A Percentage Change in Inflation-Adjusted Mean Family Income by Quintile, 1986 to 1996, 1996 to 2006, and 2006 to 2016



	Lowest 20%	Second 20%	Third 20%	Fourth 20%	Highest 20%	Top 5%
\$ Change from 1986 to 2016	\$970	\$5,160	\$11,270	\$23,190	\$80,890	\$176,240
% Change from 1986 to 2016	6%	13%	18%	26%	51%	73%
2016 Income Bracket	\$32,400 or less	\$32,401 to \$57,944	\$57,945 to \$89,769	\$89,770 to \$139,568	\$139,569 or higher	\$251,183 or higher
2016 Mean Income	\$18,200	\$44,940	\$72,900	\$111,250	\$239,490	\$417,090

- Between 1986 and 2016, the average income for the highest 20% of families increased from 2.6 times as high as that for the middle 20% (\$158,600 vs. \$61,630) to 3.3 times as high (\$239,490 vs. \$72,900).
- Between 1986 and 2016, the average income for the middle 20% of families increased from 3.6 times as high as that for the lowest 20% (\$61,630 vs. \$17,230) to 4.0 times as high (\$72,900 vs. \$18,200).
- Unlike those with higher incomes, the 20% of families with the lowest incomes have not yet reached the prerecession (inflation-adjusted) income levels of their 2006 counterparts, although they have recovered some of the income lost during the recession.
- In 2016, median family income for families headed by individuals age 45 to 54—the age bracket of most parents of traditional age college students—was 24% higher than the overall median (\$90,120 compared with \$72,710).
- In 2016, median incomes for black and Hispanic families were 60% and 62%, respectively, of the median for white families.
- In 2016, the \$114,640 median family income for families headed by a four-year college graduate was more than twice the median for families headed by a high school graduate.

FIGURE 17B Median Family Income by Selected Characteristics, 2016



ALSO IMPORTANT:

- Average incomes for all groups fell between 2006 and 2010. Average incomes began to recover in 2011 for the top 5% and the top 20% of families and in 2013 for the lowest two quintiles. (U.S. Census Bureau, Table F-3)
- The share of all income going to the 20% of families with the lowest incomes has steadily declined, from 4.7% in 1986 to 4.2% in 1996, to 4.0% in 2006, and to 3.7% in 2016. The share of income going to the top 5% of families rose from 16.5% in 1986 to 20.3% in 1996 and to 21.5% in 2006, and was 21.4% in 2016. (U.S. Census Bureau, Table F-2)
- Average published tuition and fees for in-state students attending public four-year colleges rose by \$6,560 (in 2016 dollars) over this 30-year period—58% of the increase in income (\$11,270) of the middle 20% of families and 8% of the increase in income (\$80,890) of the 20% of families in the highest income bracket. (Online Table 2; calculations by the authors)

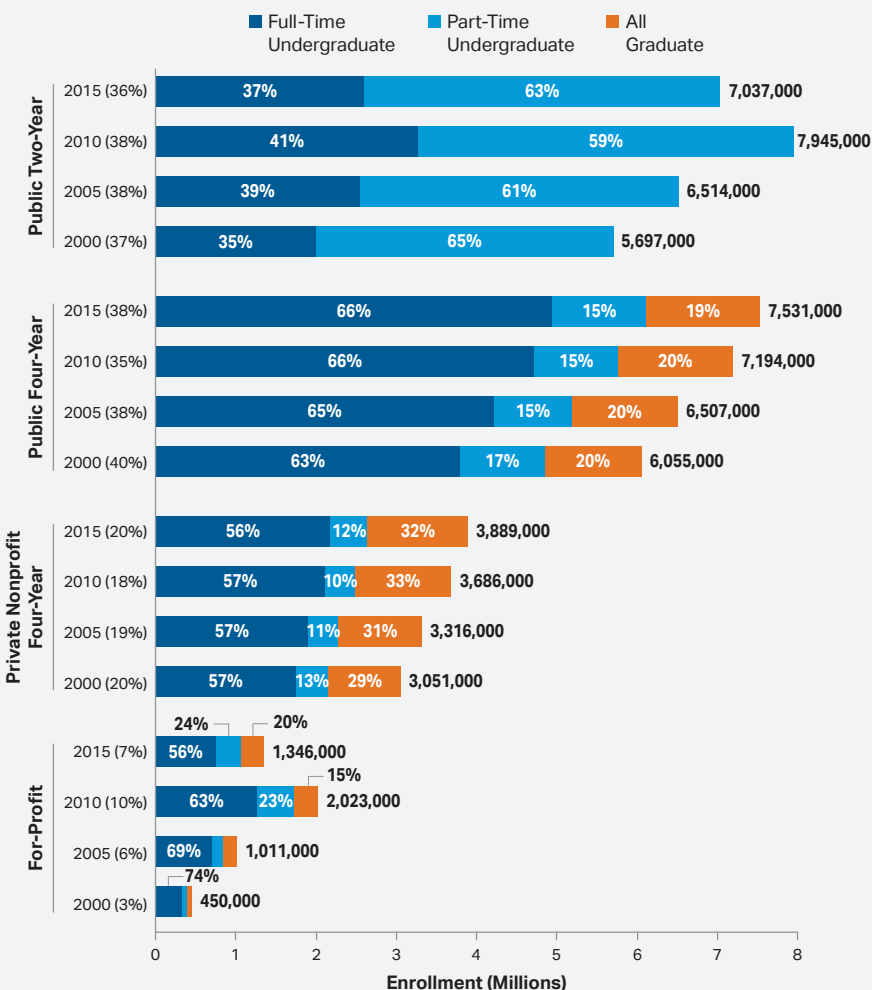
SOURCES: U.S. Census Bureau, Current Population Survey, 2017 Annual Social and Economic Supplement, Table F-1, Table F-3, Table F-5, and FINC-01; calculations by the authors.



Enrollment Patterns over Time

Since 2000, total postsecondary enrollment has steadily increased in the public and private nonprofit four-year sectors. However, total enrollment at for-profit and public two-year institutions, which increased rapidly from 2000 to 2010, has since declined.

FIGURE 18 Postsecondary Fall Enrollment by Attendance Status and Level of Enrollment (with Percentage of All Students Enrolled in Each Sector), 2000 to 2015, Selected Years



- Enrollment in the for-profit sector, which was more than four times as high in 2010 as in 2000 (2.02 million vs. 450,000), fell by about a third (to 1.35 million) between 2010 and 2015.
- The enrollment decline in the for-profit sector was primarily among full-time undergraduate students. In 2015, these students made up 56% of for-profit enrollment—a decline from 63% in 2010.

ALSO IMPORTANT:

- All of the students reported in Figure 18 were enrolled in degree-granting institutions that participate in federal student aid programs. In the late 2000s, about 600,000 to 800,000 students were enrolled in for-profit institutions that do not participate in these programs. (S. Cellini & C. Goldin, "Does Federal Student Aid Raise Tuition? New Evidence on For-Profit Colleges," *American Economic Journal: Economic Policy*, November 2014)
- Students enrolled in non-degree-granting institutions, not included in Figure 18, may be eligible for federal student aid if they are working toward certificates at accredited institutions. Some students enrolled in degree-granting institutions are not eligible for federal student aid because they are enrolled in non-credit-bearing programs.
- Some colleges offer both two-year and four-year degrees. In Figure 18, four-year colleges are defined as institutions where four-year degrees comprise more than half of all degrees awarded. Reclassifying colleges offering any four-year degrees as four-year institutions would increase the percentage of public enrollments in four-year colleges from the 38% reported here to 42%.

NOTES: Percentages on the y-axis represent the enrollment in each sector as a percentage of total enrollment. Four-year institutions include only those where more than 50% of degrees/certificates awarded are bachelor's degrees or higher. Percentages may not sum to 100 because of rounding.

SOURCES: NCES, IPEDS Fall Enrollment data, 2000, 2005, 2010, and 2015; calculations by the authors.

Public Enrollment by State

Total full-time equivalent (FTE) enrollment in public colleges and universities in the United States increased by 12% between 2005 and 2015—from 9.2 million to almost 10.5 million. However, changes across states ranged from declines of 7% in Illinois and 2% in Maine to increases of 23% in Oregon and Texas.

FIGURE 19A Percentage Change in Full-Time Equivalent (FTE) Enrollment in Public Institutions by State, Fall 2005 to Fall 2015

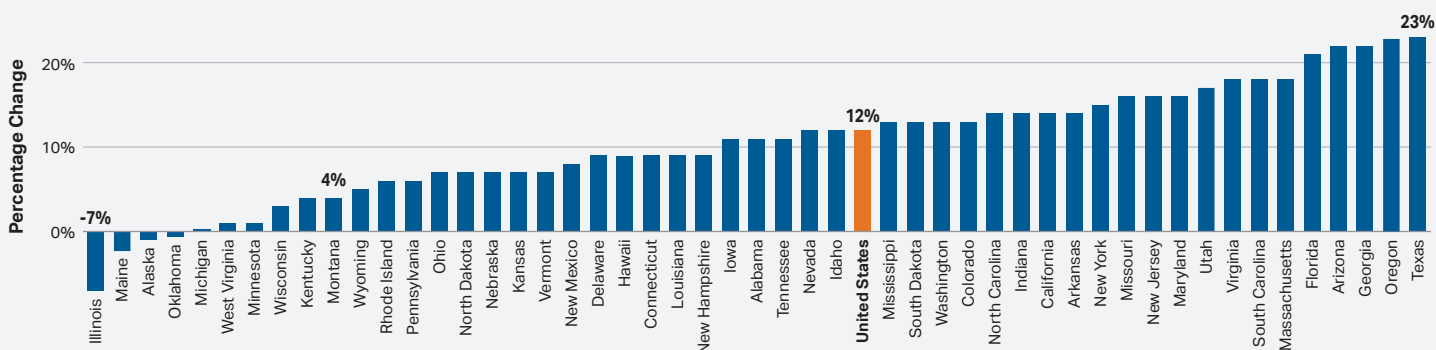
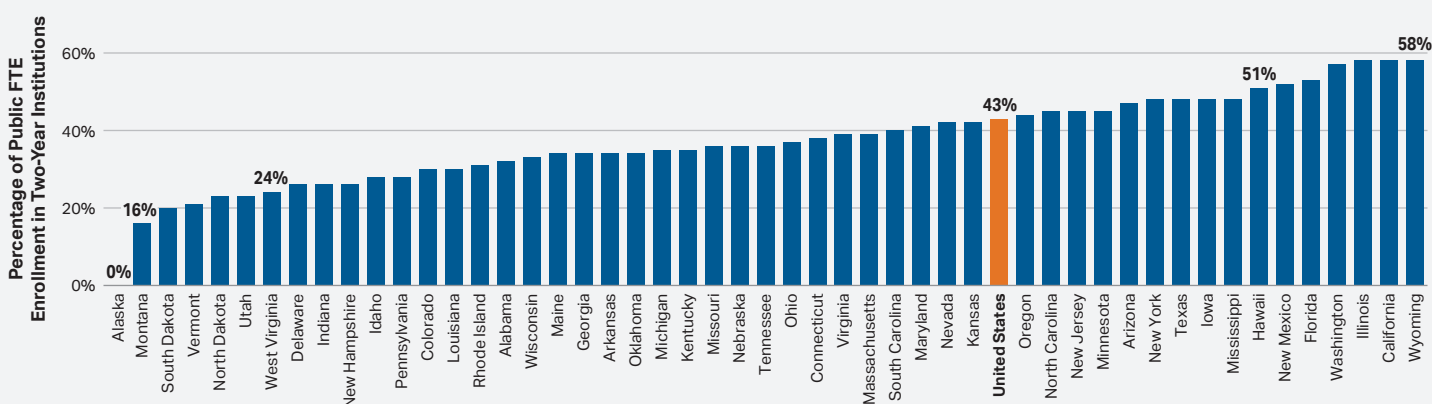


FIGURE 19B Percentage of All Public Full-Time Equivalent (FTE) Undergraduate Enrollment in Two-Year Institutions by State, Fall 2015



NOTES: Four-year institutions include only those institutions where more than 50% of degrees/certificates awarded are bachelor's degrees or higher. Students who are not included in the percentages reported in Figure 19B are enrolled in public four-year colleges and universities.

SOURCES: NCES, IPEDS Fall Enrollment data, 2005 and 2015; calculations by the authors.

- Between 2005 and 2015, enrollment increased by more than the national average of 12% in 21 states and declined in four states.
- Overall, two-year colleges, some of which offer a limited number of bachelor's degrees, accounted for 43% of the public FTE undergraduate enrollment in 2015. In seven states, this share exceeded 50% and in another seven states, it was less than 25%.

ALSO IMPORTANT:

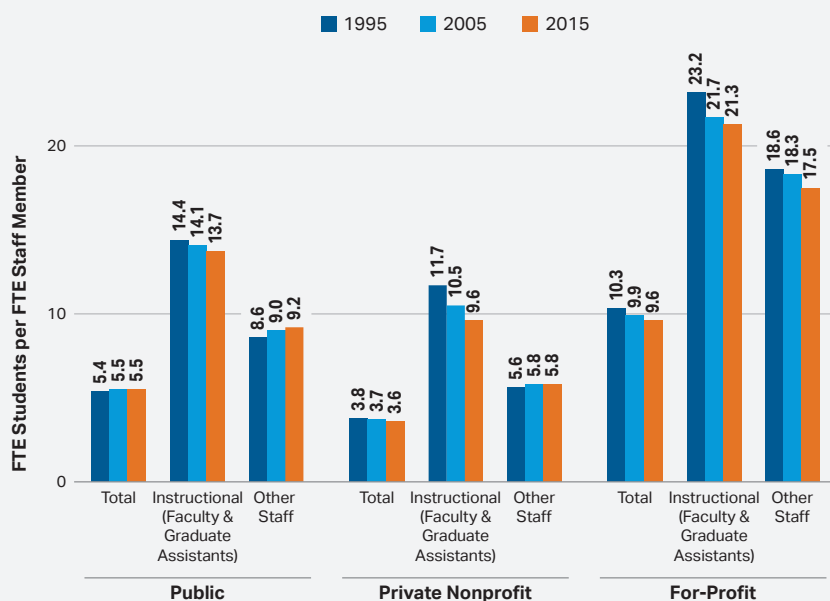
- California and Texas, which together enrolled 23% of the nation's public college and university students in 2015, accounted for 31% of the overall increase in FTE enrollment over the decade.
- In both 2005 and 2015, 90% of the FTE students enrolled in public colleges and universities were undergraduates and the remaining 10% were graduate students.



Faculty and Staff

The number of full-time equivalent (FTE) students per non-instructional staff member has increased slightly over time in the public and private nonprofit sectors; it has declined in the for-profit sector, where student/staff ratios are much higher.

FIGURE 20A Full-Time Equivalent (FTE) Students per FTE Staff Member in Postsecondary Institutions, Fall 1995, Fall 2005, and Fall 2015



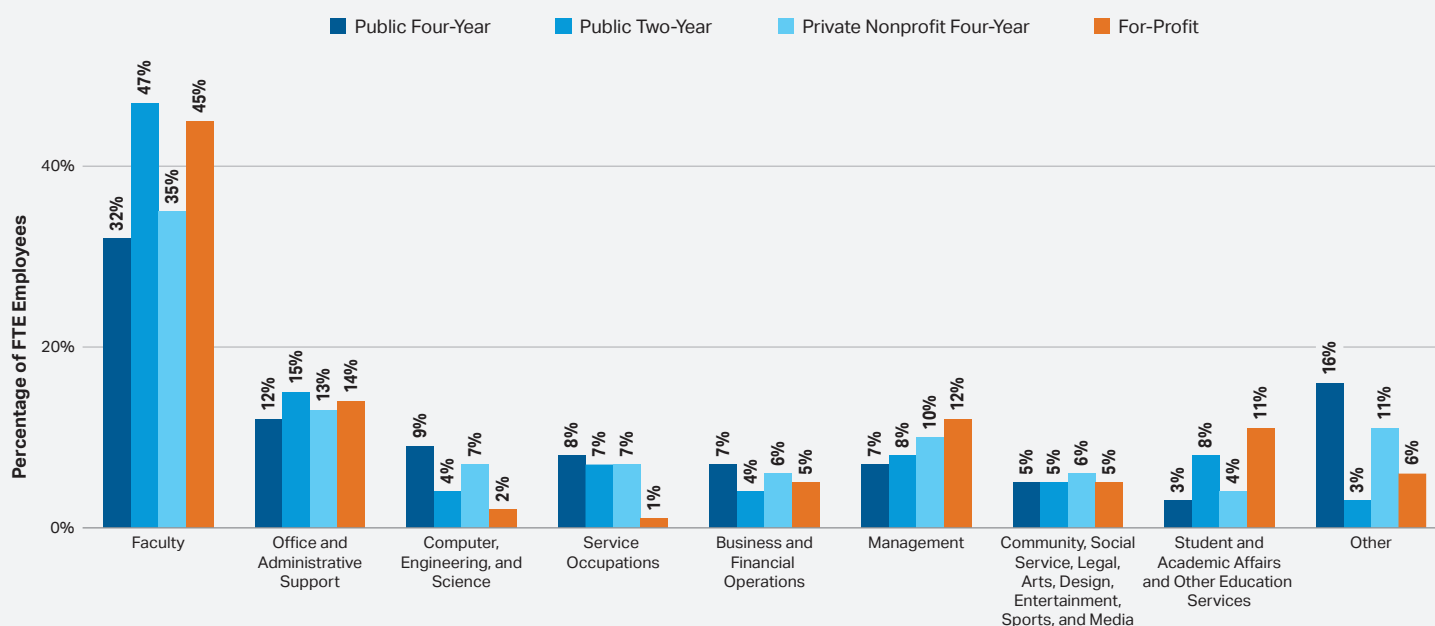
NOTE: Other staff refers to all non-instructional staff.

- In 2015, the number of FTE students per instructional staff member (faculty and graduate assistants) ranged from an average of 9.6 at private nonprofit and 13.7 at public institutions to 21.3 at for-profit institutions.
- The composition of non-instructional staff varies across sectors. In 2015, the largest category in all sectors was office and administrative support. Management staff ranged from 7% of employees at public four-year institutions to 12% in the for-profit sector.

ALSO IMPORTANT:

- The ratio of non-instructional staff to instructional staff was lower in all sectors in 2015 than in 2005.
- Figures 20A and 20B report on the composition of FTE faculty and staff counting three part-time employees as equivalent to one full-time employee. Across all sectors, 97% of management employees and 93% of those in business and financial operations were employed full time in 2015. In contrast, 52% of faculty and none of the graduate assistants were full-time.

FIGURE 20B Distribution of FTE Employees at Postsecondary Institutions by Occupation, Fall 2015



NOTES: Includes Title IV participating institutions. Full-time-equivalent staff is the number of full-time staff members plus one-third of the number of part-time staff members. Other occupations include healthcare practitioners and technicians; graduate assistants; librarians, curators, and archivists; natural resources, construction and maintenance; production, transportation, and material moving; and sales and related occupations. Percentages may not sum to 100 due to rounding.

SOURCE: NCES, *Digest of Education Statistics 2016*, Tables 314.10 and 314.30.

Notes and Sources

THE ANNUAL SURVEY OF COLLEGES

Prices described in this report are based on data reported to the College Board in its Annual Survey of Colleges. Data for 2017-18 are from an online questionnaire distributed in October 2016, with data collected and reviewed through early September 2017. Tuition and fee figures are based on charges to full-time first-year undergraduate students over the course of a nine-month academic year of 30 semester hours or 45 quarter hours.

ENROLLMENT-WEIGHTED AND UNWEIGHTED DATA

This report provides enrollment-weighted average prices. Charges of institutions with larger full-time enrollments are weighted more heavily than those of institutions with smaller enrollments.

Enrollment-weighted and unweighted averages describe different phenomena. The weighted averages may be more helpful to students and families in anticipating future education expenses. Some researchers, policy analysts, and academic administrators find unweighted averages useful in studying longitudinal trends and evaluating a particular institution's practices against a larger set. Thus, we compute both weighted and unweighted averages. Tables reporting unweighted tuition data can be found online at trends.collegeboard.org.

Weighted averages for each price are based on relevant populations:

- In-state tuition and fees are weighted by full-time undergraduate enrollment.
- Out-of-state tuition and fees are calculated by adding the nonresident premium, weighted by full-time out-of-state enrollment, to average in-state tuition and fees. Data are not available on out-of-state students receiving a waiver of the full tuition premium or a portion of it.
- Resident room and board charges are weighted by the number of undergraduates living in campus housing at each institution.
- Estimated other student budget components are weighted as follows:
 - ◆ Books and supplies are weighted by full-time undergraduate enrollment.
 - ◆ Resident transportation and other expenses are weighted by the number of undergraduates living in campus housing.
 - ◆ Commuter room and board, transportation, and other expenses are weighted by the number of commuting undergraduates at each institution.

REVISIONS OF BASE-YEAR VALUES

The prices for 2016-17 used in this analysis differ somewhat from the 2016-17 averages reported last year because of revised price data and updated enrollment-weighting. Prices for all years through 2015-16 are weighted by same-year full-time enrollments. 2016-17 and 2017-18 prices are weighted by fall 2015 full-time undergraduate enrollments.

LONGITUDINAL DATA

In online Table 2, tuition averages for years prior to 1987-88 are from the Integrated Postsecondary Education Data System (IPEDS). The two data sets, IPEDS and the College Board's Annual Survey of Colleges, track very closely, but IPEDS averages are weighted by full-time equivalent enrollments, while the Annual Survey of Colleges prices are weighted by full-time enrollments. In addition, IPEDS tuition and fee data may be based on 24 semester hours while the Annual Survey of Colleges data are based on 30 semester hours. Annual historical data are available online at trends.collegeboard.org.

NET PRICE CALCULATIONS

The calculations of average net price for full-time undergraduates in Figures 8, 9, and 10, as well as the calculations in online Table 7, are a best approximation and are based on the aggregate amounts of each type of aid reported in *Trends in Student Aid 2017* and on the allocation of each type of aid across institution types and between part-time and full-time students reported in 1993, 1996, 2000, 2004, 2008, and 2012 National Postsecondary Student Aid Study (NPSAS) data when such detailed information is not available in specific program data. Because financial aid data for 2017-18 are not yet available, amounts for that year are estimated based on past years. Total charges for public two-year students include an estimate of housing and food expenses for students not living with their parents, based on commuter room and board expenses reported by institutions when available and derived from public four-year room and board charges for earlier years in the analysis. The net price estimates reported here are not exactly comparable to those that appeared in 2016 because some figures have been updated.

INFLATION ADJUSTMENT

We use the Consumer Price Index for all urban consumers (CPI-U) to adjust for inflation. We use the CPI-U in July of the year in which the academic year begins. See www.bls.gov/data/ for changes in the CPI-U over time. Online Table A1 provides CPI data used to adjust for inflation.

CARNEGIE CLASSIFICATION 2015: BASIC CLASSIFICATION

"Doctoral universities" include institutions that award at least 20 research/ scholarship doctoral degrees during the update year (excluding doctoral degrees that qualify recipients for entry into professional practice, such as the J.D., M.D., Pharm.D., DPT, etc.); "master's colleges and universities" include institutions that award at least 50 master's and fewer than 20 doctoral degrees during the update year; "bachelor's colleges" include institutions where bachelor's degrees represent at least 50% of all degrees but where fewer than 50 master's or 20 doctoral degrees were awarded during the update year. All of the categories above exclude "special focus institutions" and "tribal colleges."

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Trends in College Pricing and its companion report, *Trends in Student Aid*, are supplemented by a website that makes detailed data available for reference and downloading. The PDF versions of these reports, along with PowerPoint slides of all the graphs, are available on the web: trends.collegeboard.org.

Hard copies may be requested by contacting trends@collegeboard.org.

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

Jaclyn Bergeron and Edward Lu provided critical support for this publication. We also benefited from comments from Melanie Corrigan, Jessica Howell, Michael Hurwitz, and Anne Sturtevant. Sandy Alexander provided expert graphic design work. The publication would not have been possible without the cooperation and support of many individuals at the College Board, including Connie Betterton, David Christ, Robert Gordon, Ernest Graham, Chris Hagan, Karen Lanning, Alejandro Leal, Robert Majoros, Kathryn McGinley, Kevin Morris, Jose Rios, Kayla Tompkins, Matt Walsh, and Joe Williams.

We thank all of those who contributed to the data collection for this publication, including institutional research department staff and campus administrators who provided us with invaluable data through the Annual Survey of Colleges.

DEFINING TERMS

"Costs" refer to the expenditures associated with delivering instruction, including physical plant and salaries.

"Prices" are the expenses that students and parents face.

"Published price" is the price institutions charge for tuition and fees as well as room and board, in the case of students residing on campus. A full student expense budget also includes books, supplies, transportation, and other basic living costs.

"Net price" is what the student and/or family must cover after grant aid and savings from tax credits and deductions are subtracted.

"General subsidies" make it possible for institutions to charge less than the actual costs of instruction. State, federal, and local appropriations, as well as private philanthropy, reduce the prices faced by all students—whether or not they receive financial aid.



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00693-003
October 2017