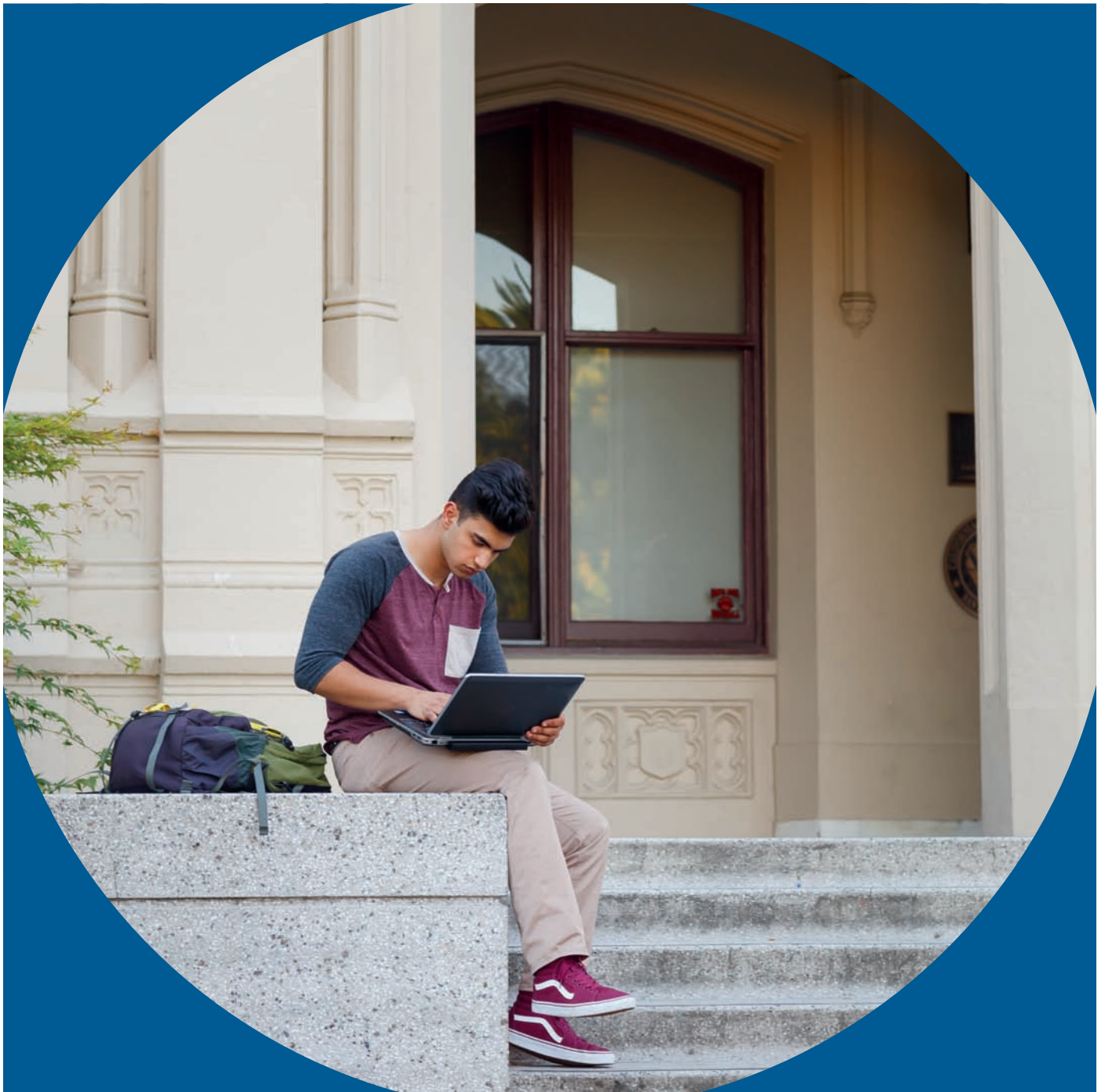



Trends in Higher Education Series

Trends in College Pricing **2018**



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Highlights

Published tuition and fee prices of colleges and universities were about the same in 2018-19 as in 2017-18, after adjusting for inflation. Published prices rose much more slowly in all sectors between 2013-14 and 2018-19 than over the preceding five years. Growth in grant aid kept the dollar increases in net tuition and fee prices below the dollar increases in published prices. However, increases in grant aid and tax benefits covered a smaller share of the price increases over the last five years than between 2008-09 and 2013-14.

Trends in College Pricing 2018 reports on the prices charged by colleges and universities in 2018-19, 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 groups. In addition, data on institutional revenues and expenditures, combined with trends in enrollment patterns over time, help 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 \$250 (2.5% before adjusting for inflation), from \$9,980 in 2017-18 to \$10,230 in 2018-19. Average total tuition and fee and room and board charges in 2018-19 are \$21,370. (Table 1)

- Average published out-of-state tuition and fees at public four-year institutions rose by \$620 (2.4%), from \$25,670 in 2017-18 to \$26,290 in 2018-19. Average total charges in 2018-19 are \$37,430. (Table 1)
- Average published tuition and fees at private nonprofit four-year institutions rose by \$1,130 (3.3%), from \$34,700 in 2017-18 to \$35,830 in 2018-19. Average total charges in 2018-19 are \$48,510. (Table 1)
- Average published in-district tuition and fees at public two-year colleges increased by \$100 (2.8%), from \$3,560 in 2017-18 to \$3,660 in 2018-19. (Table 1)
- Average tuition and fee charges for full-time students in the for-profit sector were \$14,000 in 2017-18. (Table 1)
- About three-quarters of full-time students receive grant aid to help them pay for college. (Page 9)

GROWTH IN COLLEGE PRICES

Between 2008-09 and 2018-19, published in-state tuition and fees at public four-year institutions increased at an average rate of 3.1% per year beyond inflation, compared with 4.1% between 1988-89 and 1998-99 and 4.2% between 1998-99 and 2008-09. (Figure 4A)

- The 3.1% average annual rate of increase in tuition and fees in the public four-year sector corresponds to an average annual increase of \$270 in 2018 dollars, compared with \$170 per year

from 1988-89 to 1998-99 and \$250 per year from 1998-99 to 2008-09. (Figure 4A)

- In the public two-year and private nonprofit four-year sectors, published prices are more than twice as high in 2018-19 as they were in 1988-89. The average in-state tuition and fee price in the public four-year sector is about three times as high in inflation-adjusted dollars as it was in 1988-89. (Figure 4B)

VARIATION IN TUITION AND FEES

While the median tuition and fee price for full-time students attending private nonprofit four-year institutions in 2018-19 is \$36,890, 11% of full-time students attend institutions with prices below \$15,000 and 20% attend institutions charging \$51,000 or more. (Figure 2)

- In 2018-19, average public four-year tuition and fee prices range from \$8,600 at bachelor's colleges and \$8,850 at master's institutions to \$11,120 at doctoral universities. Average published prices for these types of institutions in the private nonprofit sector are \$34,920, \$30,450, and \$44,020, respectively. (Table 1)
- In five states, average published in-state tuition and fees at public four-year institutions fell between 2013-14 and 2018-19, after adjusting for inflation. In another nine states, the five-year increase was below 5%, but in five states, the increase was 20% or more. (Figure 6)
- In 2018-19, average published tuition and fee prices for in-state students at public four-year institutions range from \$5,400 in Wyoming and \$6,360 in Florida to \$16,460 in New Hampshire and \$16,610 in Vermont. (Figure 6)
- In 2018-19, average published tuition and fees for in-district students at public two-year colleges range from \$1,430 in California and \$1,840 in New Mexico to \$7,090 in New Hampshire and \$8,190 in Vermont. (Figure 5)

WHAT STUDENTS ACTUALLY PAY

On average, full-time students at public two-year colleges receive more than enough grant aid and federal tax benefits in 2018-19 to cover tuition and fees. After this aid, they face an average of \$8,270 in living expenses out of pocket. (Figure 8)

- The average published tuition and fee price at public four-year institutions rose by 7% (\$640), from \$9,590 (in 2018 dollars) in 2013-14 to \$10,230 in 2018-19. Over these five years, the average net tuition and fee price rose by 10% (\$350). (Figure 9)
- After declining from \$15,500 (in 2018 dollars) in 2007-08 to \$13,200 in 2011-12, the average net tuition and fees paid by full-time students at private nonprofit four-year institutions rose to an estimated \$14,600 in 2018-19. (Figure 10)
- In 2015-16, more than half of full-time students at public two-year colleges received enough grant aid to cover all of their tuition and fees. Almost 60% of full-time dependent students from families with incomes below \$35,000 at public four-year colleges received enough grant aid to cover their tuition and fees. (Figure 11)

- Average net budgets after grant aid for students from families with incomes below \$35,000 were \$27,860 in the for-profit sector and \$19,960 at private nonprofit four-year institutions in 2015-16. (Figure 12)

PUBLIC FUNDING

State and local funding per student rose in 2016-17 (in inflation-adjusted dollars) for the fifth consecutive year, following four years of decline. Funding per student fell by 24% from \$8,270 (in 2016 dollars) in 2006-07 to \$6,320 in 2011-12, and then rose by 21% to \$7,640 in 2016-17. (Figure 15B)

- In 2016-17, total appropriations were 2% higher (after adjusting for inflation) than a decade earlier, but appropriations per student were 8% lower. Total appropriations were 38% higher than 30 years earlier, but appropriations per student were 11% lower. (Figure 15B)
- In 2016-17, state and local funding for public higher education ranged from \$2,960 per full-time equivalent (FTE) student in New Hampshire and \$3,020 in Vermont to \$15,820 in Wyoming and \$16,390 in Alaska. (Figure 16)

INSTITUTIONAL FINANCES

Between 2005-06 and 2015-16, educational expenditures per FTE student at public doctoral universities increased by 17% in inflation-adjusted dollars. The increase over the decade was 18% at public master's universities, 12% at public bachelor's colleges, and 11% in the public two-year sector. (Figure 18)

- Between 2005-06 and 2015-16, average educational expenditures per FTE student rose by 17% in inflation-adjusted dollars at private nonprofit doctoral universities, 11% at private nonprofit master's institutions, and 9% at bachelor's institutions. (Figure 18)
- In 2015-16, 14% of educational costs at private nonprofit master's institutions was a subsidy to students rather than being covered by net tuition revenue. The subsidy share was 46% at doctoral universities and 39% at bachelor's colleges in the sector. (Figure 18)
- The average subsidy per FTE student at public two-year colleges declined by \$940 (15%) in 2015 dollars between 2005-06 and 2010-11; it increased by \$1,190 (22%) between 2010-11 and 2015-16, as enrollment in the sector declined. (Figure 18)
- Between 2005-06 and 2015-16, inflation-adjusted increases in net tuition revenue per student at public four-year institutions ranged from 20% at public bachelor's colleges to 42% at public doctoral universities. Because of declines in government support, total revenue from tuition and government sources increased by 2% at both bachelor's and doctoral institutions and by 6% at public master's universities. (Figure 17)
- Between 2001-02 and 2016-17, average faculty salaries increased by less than 1% (after adjusting for inflation) at public doctoral universities, by 5% at private nonprofit bachelor's colleges, and by 29% at for-profit institutions. Average faculty salaries did not keep up with inflation in other sectors. (Figure 24A)

- In 2015-16, the 10% of students at the private doctoral universities with the highest endowments per student benefited from endowments averaging \$1.15 million per FTE student; median endowment per FTE student in this sector was \$55,200. (Figure 19)

ENROLLMENT PATTERNS

Public two-year colleges enrolled about 1 million fewer students in fall 2016 than in fall 2010 (a decline of 12%), and for-profit institutions enrolled about 840,000 fewer students (a decline of 42%). But both sectors enrolled more students in 2016 than they did in 2005. The for-profit sector enrolled 1.2 million students in fall 2016, compared with 450,000 in fall 2000. (Figure 21)

- Total FTE enrollment in public colleges and universities in the United States increased by 11% between 2006 and 2016—from 9.4 million to 10.4 million. Changes across states ranged from declines of 10% in Illinois and 5% in Alaska to increases of 24% in Oregon and 25% in Texas. (Figure 22A)
- Overall, two-year colleges accounted for 43% of the public FTE undergraduate enrollment in 2016. In seven states, this share was 50% or more; in another seven states, it was less than 25%. (Figure 22B)
- The percentage of first-time public four-year college students who were residents of the states in which they were enrolled declined from 83% in fall 2006 to 78% in fall 2016. (Figure 23)


COLLEGE AFFORDABILITY

Average published tuition and fees for in-state students attending public four-year colleges rose by \$6,770 (in 2017 dollars) between 1987-88 and 2017-18—57% of the increase in income (\$11,840) of the middle 20% of families and 9% of the increase in income (\$77,650) of the 20% of families in the highest income bracket. (Page 29)





- In 2017, the average income for the highest 20% of families was 3.2 times as high as that for the middle 20% (\$245,040 vs. \$75,840 in 2017 dollars). It was just 2.6 times as high in 1987 (\$167,390 vs. \$64,000). (Figure 20A)
- In 2017, the \$119,120 median 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 20B)
- Taking longer to earn a degree increases the price of college. Students who completed bachelor's degrees in 2014-15 were enrolled for an average of 5.1 full-time academic years. Those who completed associate degrees were enrolled for an average of 3.3 years. (Figures 13A, 13B)
- Tuition and fees constitute 40% 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)


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Introduction

For the sixth year in a row, *Trends in College Pricing* reports average one-year tuition and fee increases below 4% in the public four-year and two-year sectors and at private nonprofit four-year colleges and universities, before adjusting for inflation.

Price changes over time are most meaningful when adjusted for inflation. Between 2008-09 and 2013-14, as higher education struggled along with the rest of the economy, published tuition and fees rose by 14% after adjusting for inflation at private nonprofit four-year institutions and by almost 30% in the public two-year and four-year sectors. Over the five years ending in 2018-19, the largest increase was 10% from \$32,500 (in 2018 dollars) in 2013-14 to \$35,830 in the private nonprofit sector. Between 2013-14 and 2018-19, average tuition and fees rose by 7%, from \$9,590 to \$10,230 at public four-year colleges and universities, and by 5%, from \$3,500 to \$3,660, at public two-year colleges.

As always, *Trends in College Pricing 2018* also reports on changes in net prices, combining the information on published prices with data on financial aid from *Trends in Student Aid 2018*. During the recession, when published prices were rising rapidly, dramatic increases in financial aid—particularly federal Pell Grants and tax credits—led to declines in the average prices students actually paid. But after increasing by more than 60% between 2007-08 and 2010-11, total grant aid for undergraduate students has grown slowly, rising by only 6% between 2010-11 and 2017-18. As a result, net prices have been rising, putting additional financial stress on students and families, among whom incomes continue to rise slowly.

In addition to information on tuition and fees and family incomes, *Trends in College Pricing 2018* provides detailed data about room and board and other nontuition expenses in student budgets, variation in prices and their rates of change across states and institution types, and the length of time students take to complete their degrees. Although the report does not include analysis of the causes of changes in tuition prices, it does include information that can provide insight into the forces underlying increases in the prices students pay for college. Relevant factors include changes in enrollments and state funding levels, 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.

An accurate picture of the financial investment needed for a college education requires a focus on the total price of earning a degree, not just the price of one year of college. Among students who began their studies full time at a four-year institution for the first time in 2010,

41% 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 2017*, Table 326.10). Relying on data from the National Student Clearinghouse, *Trends in College Pricing 2018* reports that students who completed bachelor's degrees in 2014-15 were enrolled for an average of 5.1 full-time academic years and those who completed associate degrees were enrolled for an average of 3.3 years. Whether pursuing two- or four-year degrees, students who attend multiple institutions before graduating take longer to complete their studies.

Taking more than two years to earn an associate degree or more than four years to earn a bachelor's degree has other financial implications beyond tuition and fee expenses. Forgone earnings from reduced participation in the labor force are 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 65% (\$18,630) higher than those with high school diplomas in 2017 (U.S. Census Bureau, 2017 Income Data, Table PINC-03).

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 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. 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.

The estimates of average net prices included in *Trends in College Pricing* include both tuition and fees as well as tuition and fees and room and board combined. On average, grant aid and tax benefits cover all of the tuition and fees for public two-year college students. Still, the average full-time student in this sector has to cover almost \$8,300 per year in nontuition expenses. That amount averages almost \$15,000 for public four-year college undergraduates and about \$27,300 for those enrolled in private nonprofit four-year colleges and universities.

There is considerable variation, not only in the published and net tuition and fee prices students face, but also in the nontuition components of student budgets. One-third of undergraduate students live on campus, 44% live in off-campus housing, and one quarter live with their parents. Moreover, there is considerable variation in nontuition

budgets even among students with the same living arrangement in the same postsecondary sector.

DISTRIBUTIONAL ISSUES

Because of the variation in tuition and fees and other budget components, it is difficult to predict the financial circumstances of individual students based on the data in the Trends reports. However, as data from the 2016 National Postsecondary Student Aid Study included in this report confirm, students from low-income families pay, on average, much lower net prices than those from more affluent families. Despite the fact that some student aid at the federal, state, and institutional levels is based on criteria other than financial circumstances, most of the dollars are distributed at least in part to meet financial need and provide greater support to students with more limited resources.

Focusing on the distribution of financial aid and the resulting net prices is critical for assessing barriers to college access and success. Rising college prices create large hurdles for some students, while others are able to finance their education without significant hardship.

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 2018* reports are not precise measures.

Trends in College Pricing 2018 presents detailed pricing data for public two-year and four-year colleges and private nonprofit four-year colleges and universities. We report average tuition and fees in the for-profit sector from federal data.

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 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 by Carnegie Classification, 2018-19

The average published tuition and fee price for full-time in-state students at public four-year colleges and universities is \$10,230 in 2018-19, \$250 (2.5% before adjusting for inflation) higher than it was in 2017-18.

TABLE 1 Average Published Charges (Enrollment-Weighted) for Full-Time Undergraduates, 2017-18 and 2018-19

	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											
2018-19	\$3,660	\$10,230	\$26,290	\$35,830	—	\$11,120	\$8,850	\$8,600	\$44,020	\$30,450	\$34,920
2017-18	\$3,560	\$9,980	\$25,670	\$34,700	\$14,000	\$10,860	\$8,620	\$8,280	\$42,390	\$29,590	\$33,840
\$ Change	\$100	\$250	\$620	\$1,130	—	\$260	\$230	\$320	\$1,630	\$860	\$1,080
% Change	2.8%	2.5%	2.4%	3.3%	—	2.4%	2.7%	3.9%	3.8%	2.9%	3.2%
Room and Board											
2018-19	\$8,660	\$11,140	\$11,140	\$12,680	—	\$11,630	\$10,230	\$10,480	\$14,430	\$11,930	\$11,760
2017-18	\$8,480	\$10,810	\$10,810	\$12,290	—	\$11,270	\$9,930	\$10,210	\$13,970	\$11,580	\$11,390
\$ Change	\$180	\$330	\$330	\$390	—	\$360	\$300	\$270	\$460	\$350	\$370
% Change	2.1%	3.1%	3.1%	3.2%	—	3.2%	3.0%	2.6%	3.3%	3.0%	3.2%
Tuition and Fees and Room and Board											
2018-19	\$12,320	\$21,370	\$37,430	\$48,510	—	\$22,750	\$19,080	\$19,080	\$58,450	\$42,380	\$46,680
2017-18	\$12,040	\$20,790	\$36,480	\$46,990	—	\$22,130	\$18,550	\$18,490	\$56,360	\$41,170	\$45,230
\$ Change	\$280	\$580	\$950	\$1,520	—	\$620	\$530	\$590	\$2,090	\$1,210	\$1,450
% Change	2.3%	2.8%	2.6%	3.2%	—	2.8%	2.9%	3.2%	3.7%	2.9%	3.2%

NOTES: Prices in Table 1 are not adjusted for inflation. Prices reported for 2017-18 have been revised to reflect the most recent information and may differ from those reported in *Trends in College Pricing 2017*. Public two-year room and board charges are based on commuter housing and food costs. Prices for the for-profit sector are from IPEDS and the latest available data are for 2017-18.

SOURCES: College Board, Annual Survey of Colleges; NCES, IPEDS Fall 2016 Enrollment data and IPEDS 2017 Institutional Characteristics data.

Enrollment-weighted tuition values represent the price charged by each institution weighted by the number of full-time undergraduate students enrolled in fall 2016. Public four-year in-state charges are weighted by total fall 2016 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 2018-19 increase in published tuition and fees was largest in the private nonprofit sector, where the average price increased by 3.3% (\$1,130) to \$35,830.
- Average public four-year tuition and fee prices range from \$8,600 at bachelor's colleges and \$8,850 at master's institutions to \$11,120 at doctoral universities. Average published prices for these types of institutions in the private nonprofit sector are \$34,920, \$30,450, and \$44,020, respectively.
- The \$14,000 average tuition and fee price for full-time students enrolled in for-profit institutions in 2017-18 was about four times as high as the average price at public two-year colleges and 1.4 times as high as the average in-state price at public four-year institutions that year.

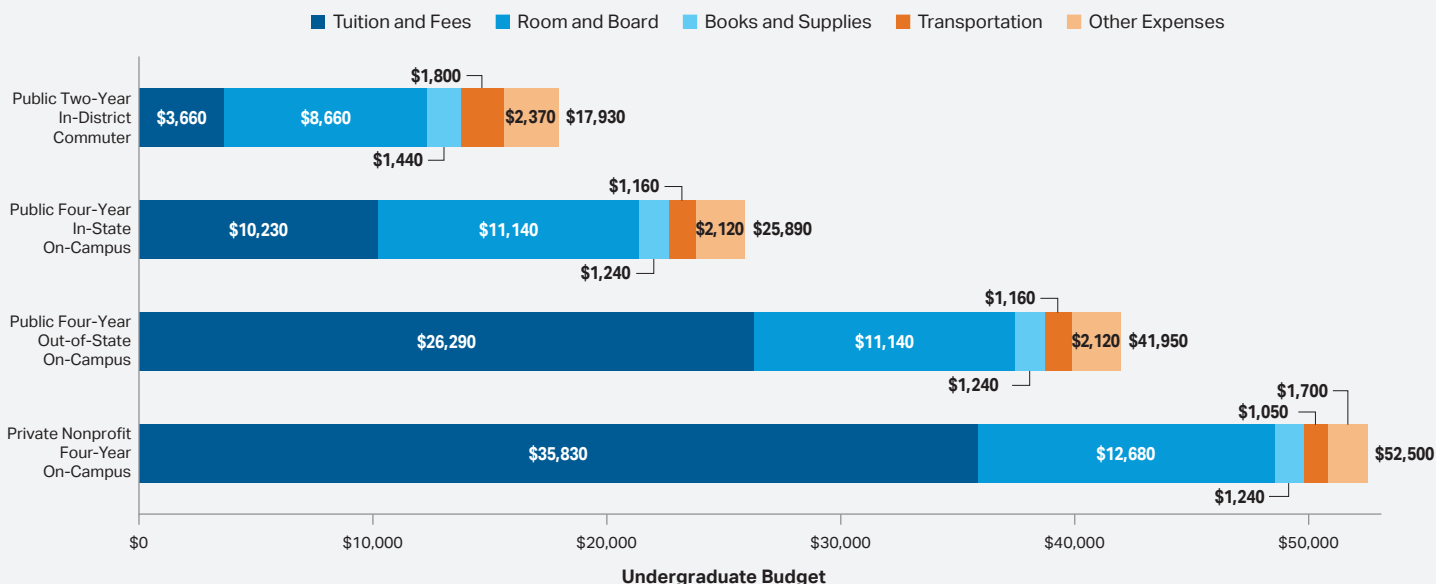
ALSO IMPORTANT:

- The prices shown in Table 1 are published or sticker prices. In 2015-16, about three-quarters of full-time undergraduate students received grants that reduced the actual price of college (NPSAS, 2016). 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 and more than two years earning an associate degree.
- The prices shown in Table 1 are for full-time students. Prices for part-time students are typically 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 \$3,660 to \$4,160.

Student Budgets, 2018-19

Tuition and fees constitute 40% 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, 2018-19



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 2016 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 69% as high (\$17,930 vs. \$25,890).
- 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 about half the size (\$25,890 vs. \$52,500).

ALSO IMPORTANT:

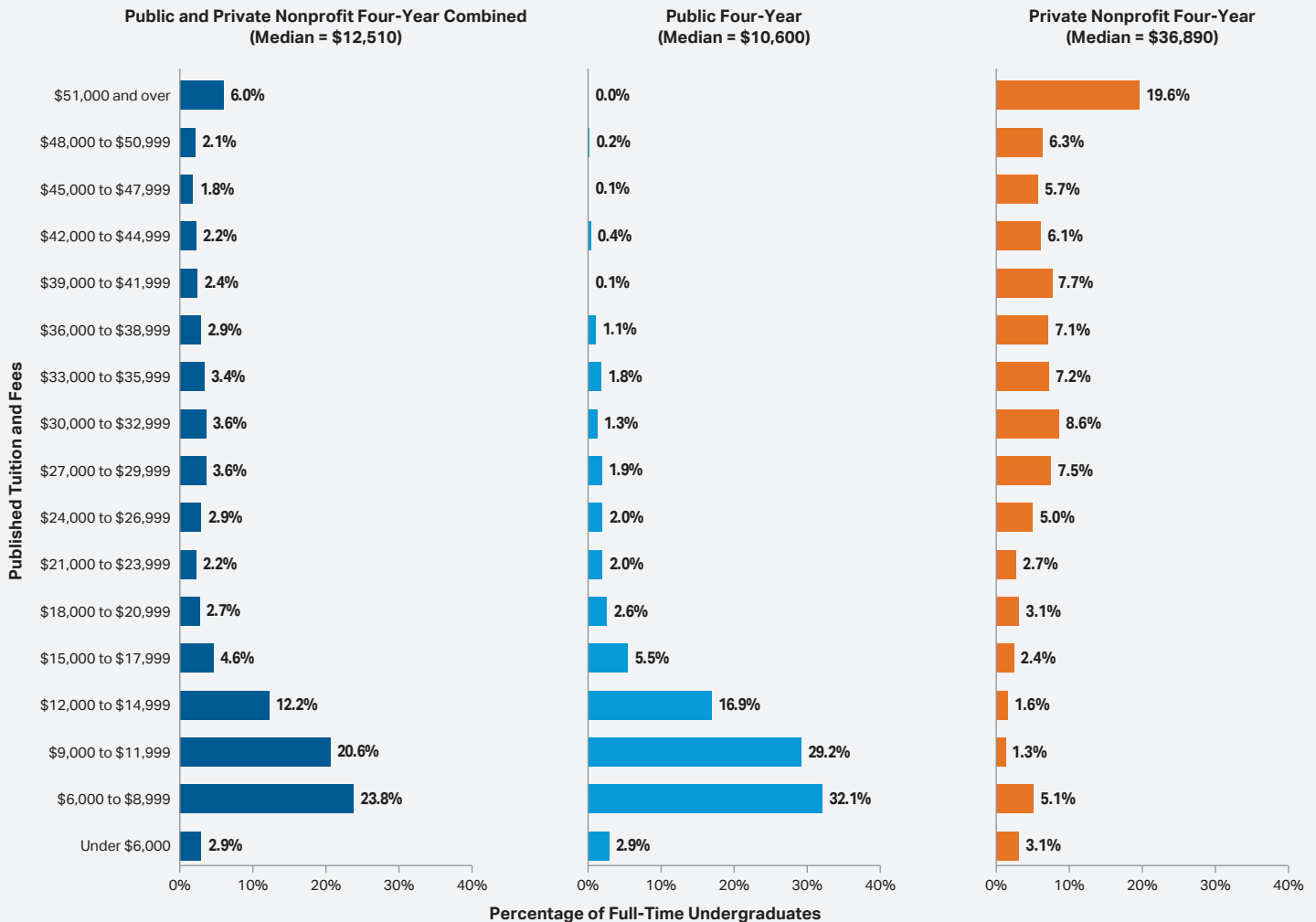
- In 2015-16, full-time undergraduate students spent an average of \$900 on course materials and supplies. (NPSAS, 2016)
- Most forms of financial aid, including federal and state grants and federal loans, can cover any expenses included in student budgets, not just tuition and fees. However, federal 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 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, 2018-19

While the median tuition and fee price for full-time students attending private nonprofit four-year institutions in 2018-19 is \$36,890, 11% of these students attend institutions with prices below \$15,000 and 20% attend institutions charging \$51,000 or more.

FIGURE 2 Distribution of Full-Time Undergraduates at Four-Year Institutions by Published Tuition and Fees, 2018-19



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 2016. Percentages may not sum to 100 because of rounding.

SOURCES: College Board, Annual Survey of Colleges; NCES, IPEDS Fall 2016 Enrollment data.

- In 2018-19, among all full-time public four-year undergraduates, including both in-state and out-of-state students, 32% are enrolled in institutions with published tuition and fee levels between \$6,000 and \$8,999, 3% are in institutions with lower prices, and 19% 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 2018-19 face published tuition and fee prices of \$12,510 or above.

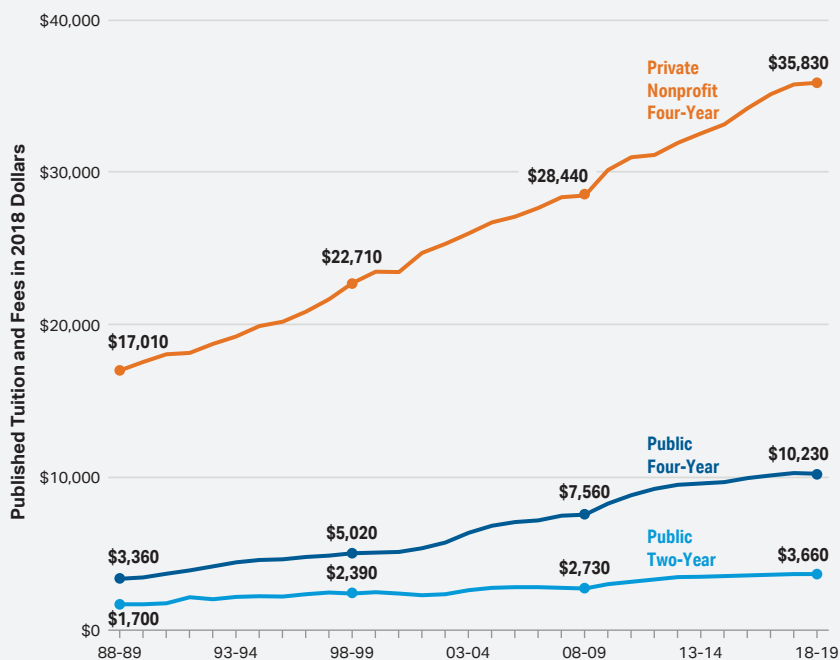
ALSO IMPORTANT:

- Figure 2 includes both in-state and out-of-state students attending public four-year institutions and the associated published prices. About 70% of those facing charges of \$15,000 or more are enrolled outside their states of residence.

Published Charges over Time

Between 2008-09 and 2018-19, average published tuition and fee prices rose by \$930 (in 2018 dollars) at public two-year colleges, by \$2,670 at public four-year institutions, and by \$7,390 at private nonprofit four-year colleges and universities.

FIGURE 3 Average Published Tuition and Fees in 2018 Dollars by Sector, 1988-89 to 2018-19



- The average published tuition and fee price at public two-year colleges was 51% of the average price at public four-year institutions in 1988-89 and 36% in 2008-09 and 2018-19.
- The average published tuition and fee price at private nonprofit four-year institutions was 5.1 times the average price at public four-year institutions in 1988-89 and 3.5 times that price in 2018-19.

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 estimated average net prices over time.
- The price increases reported in Table 1 are larger than those in Table 2 because they are not adjusted for inflation.

TABLE 2 Average Tuition and Fees and Room and Board in 2018 Dollars, 1988-89 to 2018-19, Selected Years

Academic Year	Tuition and Fees in 2018 Dollars						Tuition and Fees and Room and Board in 2018 Dollars			
	Private Nonprofit Four-Year	Ten-Year \$ Change	Public Four-Year	Ten-Year \$ Change	Public Two-Year	Ten-Year \$ Change	Private Nonprofit Four-Year	Ten-Year \$ Change	Public Four-Year	Ten-Year \$ Change
88-89	\$17,010		\$3,360		\$1,700		\$24,800		\$9,480	
98-99	\$22,710	\$5,700	\$5,020	\$1,660	\$2,390	\$690	\$31,590	\$6,790	\$12,000	\$2,520
08-09	\$28,440	\$5,730	\$7,560	\$2,540	\$2,730	\$340	\$38,720	\$7,130	\$16,460	\$4,460
18-19	\$35,830	\$7,390	\$10,230	\$2,670	\$3,660	\$930	\$48,510	\$9,790	\$21,370	\$4,910
Academic Year	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
08-09	\$28,440		\$7,560		\$2,730		\$38,720		\$16,460	
09-10	\$30,120	5.9%	\$8,270	9.4%	\$3,010	10.3%	\$41,040	6.0%	\$17,830	8.3%
10-11	\$30,940	2.7%	\$8,820	6.7%	\$3,170	5.3%	\$42,160	2.7%	\$18,700	4.9%
11-12	\$31,100	0.5%	\$9,240	4.8%	\$3,310	4.4%	\$42,350	0.5%	\$19,140	2.4%
12-13	\$31,890	2.5%	\$9,510	2.9%	\$3,460	4.5%	\$43,390	2.5%	\$19,600	2.4%
13-14	\$32,500	1.9%	\$9,590	0.8%	\$3,500	1.2%	\$44,190	1.8%	\$19,830	1.2%
14-15	\$33,090	1.8%	\$9,680	0.9%	\$3,530	0.9%	\$44,900	1.6%	\$20,020	1.0%
15-16	\$34,150	3.2%	\$9,960	2.9%	\$3,590	1.7%	\$46,330	3.2%	\$20,660	3.2%
16-17	\$35,080	2.7%	\$10,130	1.7%	\$3,620	0.8%	\$47,490	2.5%	\$21,100	2.1%
17-18	\$35,720	1.8%	\$10,270	1.4%	\$3,670	1.4%	\$48,380	1.9%	\$21,400	1.4%
18-19	\$35,830	0.3%	\$10,230	-0.4%	\$3,660	-0.3%	\$48,510	0.3%	\$21,370	-0.1%

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

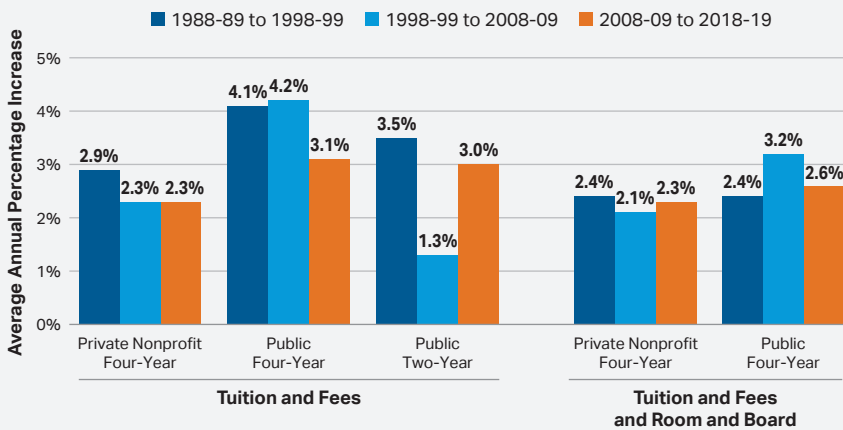
SOURCES: College Board, Annual Survey of Colleges; NCES, IPEDS Fall Enrollment data.



Published Charges over Time

Between 2008-09 and 2018-19, published in-state tuition and fees at public four-year institutions increased at an average rate of 3.1% per year beyond inflation, compared with average annual increases of 4.1% and 4.2% over the two prior decades.

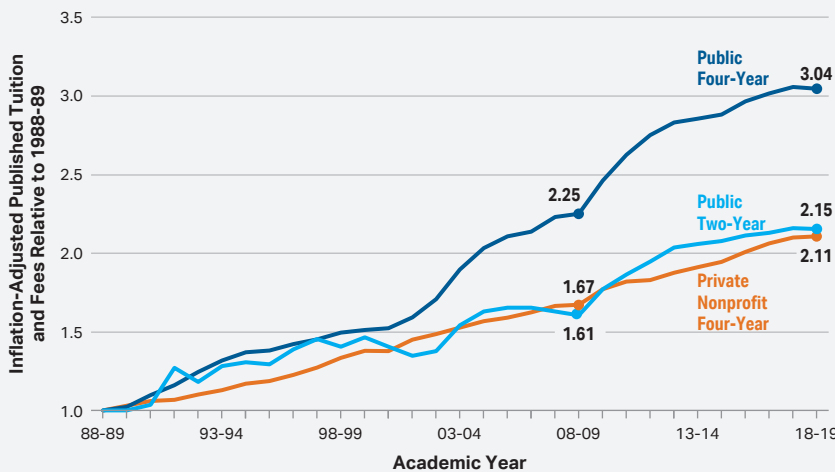
FIGURE 4A Average Annual Percentage Increase in Inflation-Adjusted Published Prices by Decade, 1988-89 to 2018-19



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 2008-09 to 2018-19, average published tuition and fees at private nonprofit four-year colleges increased by an average of 2.3% 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.

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

FIGURE 4B Inflation-Adjusted Published Tuition and Fees Relative to 1988-89, 1988-89 to 2018-19 (1988-89 = 1.0)



NOTES: Figure 4B shows published tuition and fees by sector, adjusted for inflation, relative to 1988-89 published prices. For example, a value of 3.04 indicates that the tuition and fee price in the public four-year sector in 2018-19 is 3.04 times as high as it was in 1988-89, 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.

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

- The 3.1% average annual rate of increase in published in-state tuition and fees in the public four-year sector between 2008-09 and 2018-19 corresponds to an average annual increase of \$270 in 2018 dollars, compared with \$170 per year between 1988-89 and 1998-99 and \$250 per year between 1998-99 and 2008-09. (Table 2)
- The average annual rate of increase in published tuition and fees at private nonprofit four-year institutions declined from 2.9% between 1988-89 and 1998-99 to 2.3% over the next two decades. The average dollar increases were \$570 per year over the first two decades and \$740 between 2008-09 and 2018-19. (Table 2)
- Room and board charges generally rise more slowly than tuition and fees, but between 2008-09 and 2018-19, the two prices rose at about the same rate in the private nonprofit four-year sector.
- In 2018-19, the average in-state tuition and fee price in the public four-year sector is about three times as high in inflation-adjusted dollars as it was in 1988-89. In the public two-year and private nonprofit four-year sectors, published prices are 2.15 and 2.11 times as high in 2018-19 as they were in 1988-89, respectively.
- Published tuition and fee prices moved at about the same rate in the public two-year and four-year sectors from 1988-89 through 1999-00, rising by about 50%. By 2009-10, however, the public four-year price had risen by another 63%, compared with just 21% at public two-year colleges. Since that time, the rate of price increase has been similar in the two sectors.

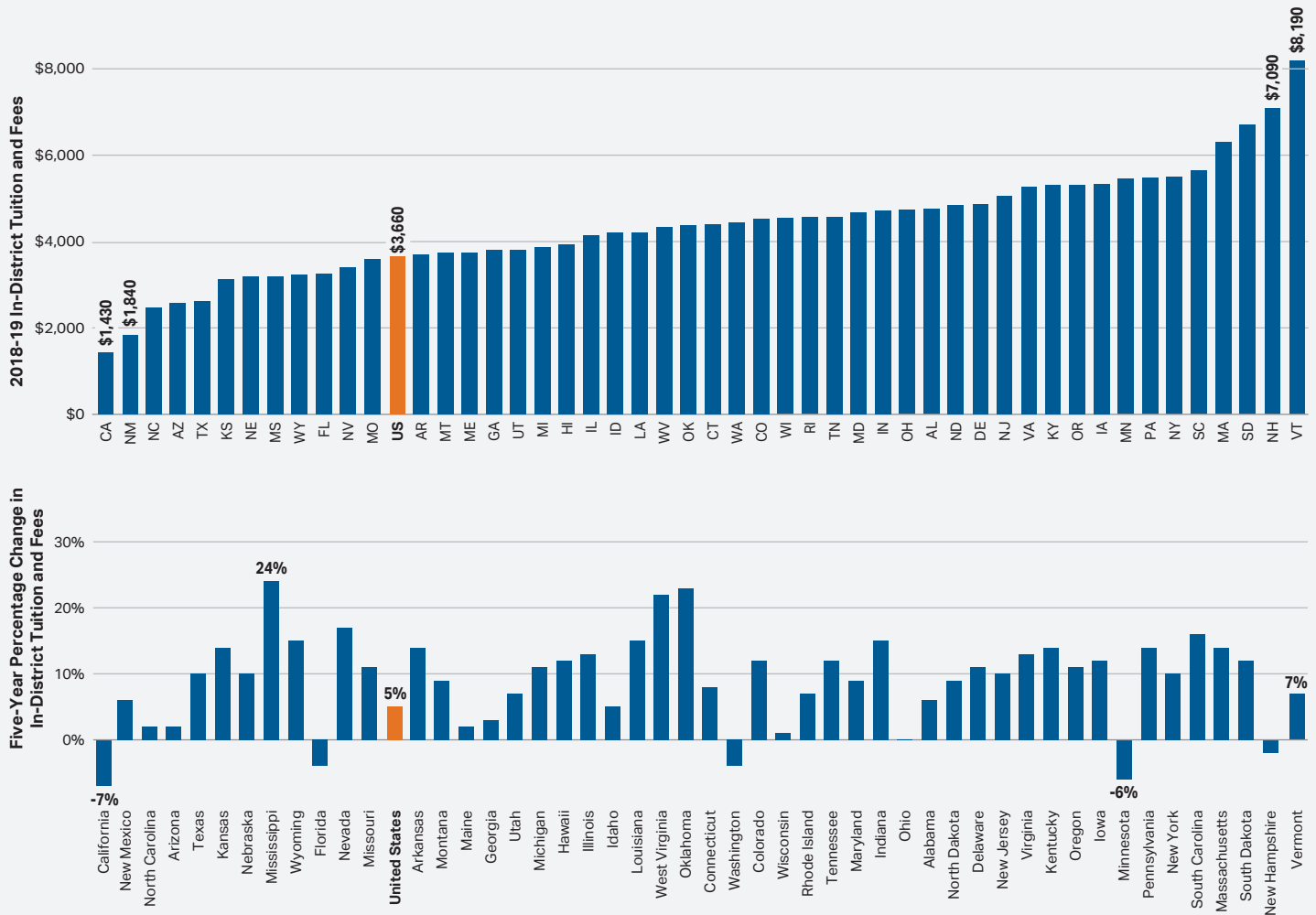
ALSO IMPORTANT:

- Median family income in the United States increased at an average rate of 0.9% per year between 1988 and 1998, 0.0% per year between 1998 and 2008, and 0.8% per year between 2008 and 2017 (after adjusting for inflation). Median family income was 18% higher in 2017 than in 1987. (U.S. Census Bureau, 2017 Income Data, Table F-7; calculations by the authors)

Tuition and Fees by State: Public Two-Year

In 2018-19, average published tuition and fees for in-district students at public two-year colleges range from \$1,430 in California and \$1,840 in New Mexico to \$7,090 in New Hampshire and \$8,190 in Vermont.

FIGURE 5 Average 2018-19 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 2016 Enrollment data.

- In five states, average tuition and fees at public two-year colleges fell in inflation-adjusted dollars between 2013-14 and 2018-19. In three of these states (Minnesota, New Hampshire, and Washington), the 2018-19 price remains above the national average.
- In three states, average tuition and fees at public two-year colleges increased by more than 20% in inflation-adjusted dollars between 2013-14 and 2018-19. In Mississippi, despite a 24% price increase (compared with the national average of 5%), the state's average 2018-19 price is \$470 below the national average.

ALSO IMPORTANT:

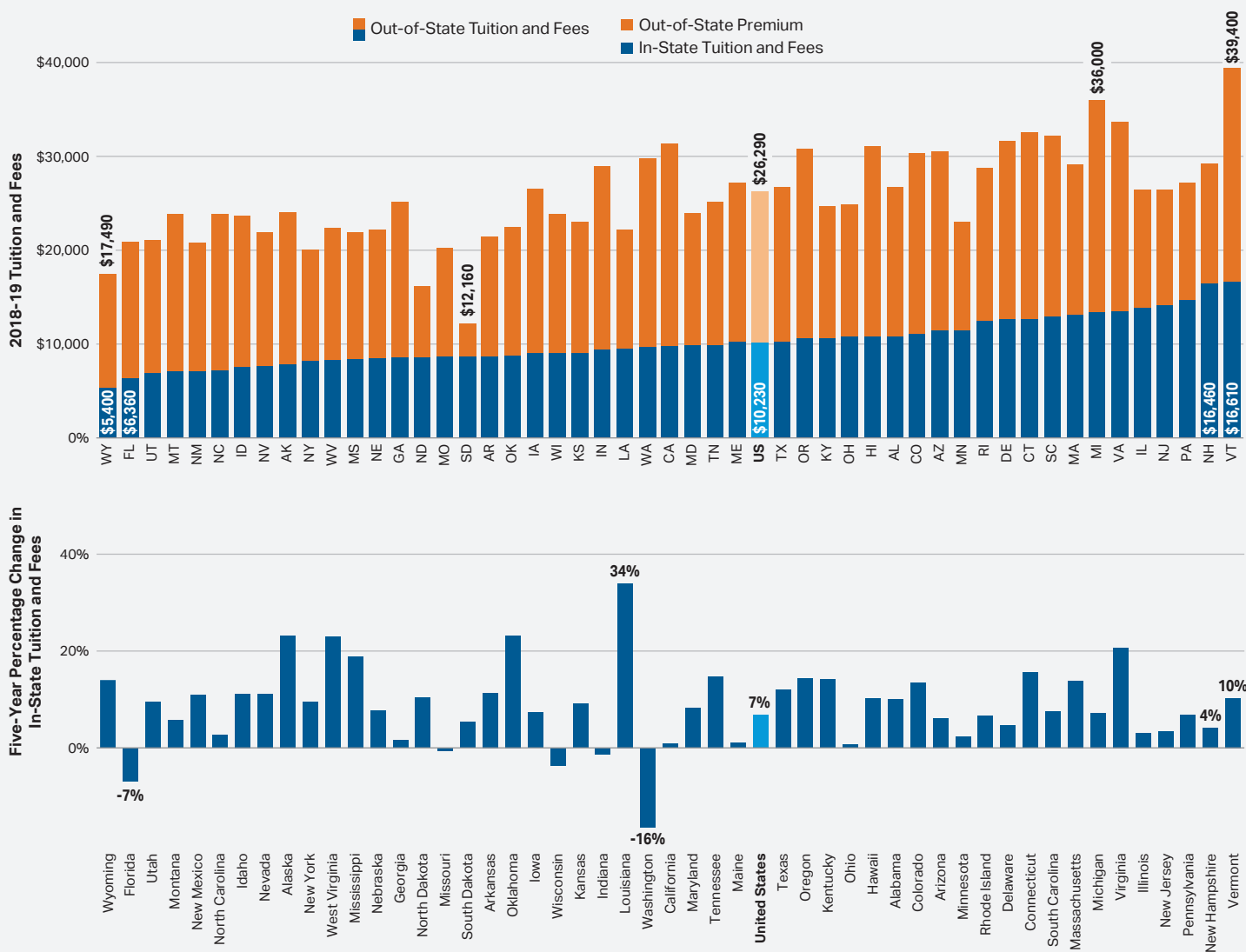
- California enrolled about 18% of the nation's full-time public two-year students in fall 2016.
- State initiatives to make community college tuition free for some students are not evident in the data reported in Figure 5. For example, the Tennessee Promise program fills the gap between community college 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 2018-19, average published tuition and fee prices for in-state students at public four-year institutions range from \$5,400 in Wyoming and \$6,360 in Florida to \$16,460 in New Hampshire and \$16,610 in Vermont.

FIGURE 6 Average 2018-19 Tuition and Fees at Public Four-Year Institutions and Five-Year Percentage Change in Inflation-Adjusted In-State Tuition and Fees, by State



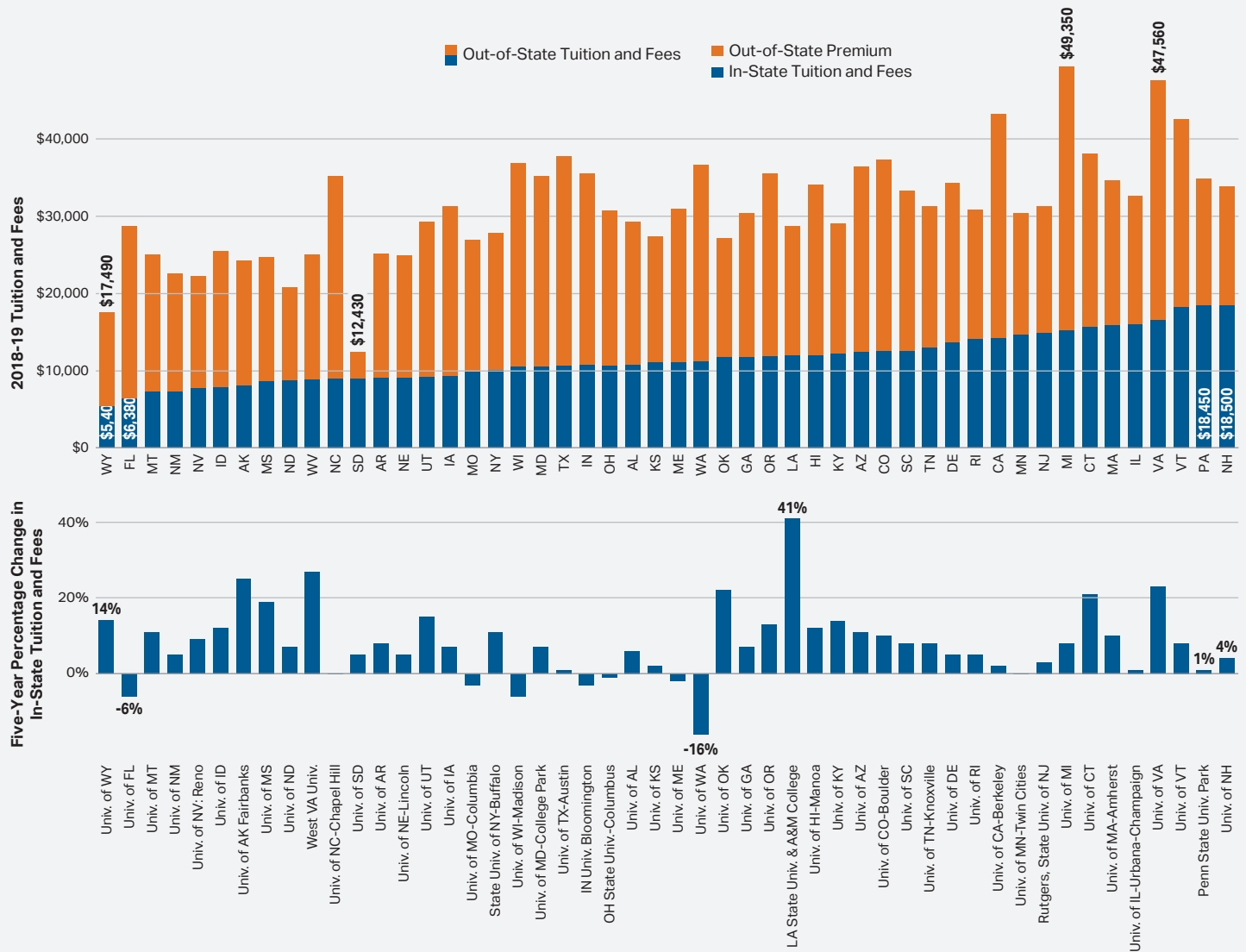
SOURCES: College Board, Annual Survey of Colleges; NCES, IPEDS Fall 2016 Enrollment data.

- In five states, average published in-state tuition and fees at public four-year institutions fell between 2013-14 and 2018-19, after adjusting for inflation. In another nine states, the five-year increase was below 5%.
 - In five states, average in-state tuition and fees at public four-year institutions increased by 20% or more between 2013-14 and 2018-19. The tuition and fee price is above the national average in only one of those states (Virginia).
 - In 10 states, the average out-of-state tuition and fee prices are more than three times the in-state prices. In seven states, the out-of-state prices are less than twice the in-state prices.
- ALSO IMPORTANT:**
- In six states, the out-of-state premium fell or remained the same from 2017-18 to 2018-19. In four of these states, the total average 2018-19 out-of-state tuition and fee charges were the same as or lower than the 2017-18 charges.

Tuition and Fees by State: Flagship Universities

In 2018-19, published tuition and fees for full-time in-state students at flagship universities range from \$5,400 at the University of Wyoming and \$6,380 at the University of Florida to \$18,450 at Penn State, University Park and \$18,500 at the University of New Hampshire.

FIGURE 7 2018-19 Tuition and Fees at Flagship Universities and Five-Year Percentage Change in Inflation-Adjusted In-State Tuition and Fees



SOURCE: College Board, Annual Survey of Colleges.

- Public flagship universities in seven states had lower tuition and fees (after adjusting for inflation) in 2018-19 than in 2013-14.
- In 2018-19, published tuition and fees for out-of-state students at flagship universities range from \$12,430 in South Dakota and \$17,490 in Wyoming to \$47,560 in Virginia and \$49,350 in Michigan.
- In Florida, 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 New Hampshire, Pennsylvania, and South Dakota, the published 2018-19 out-of-state price is less than twice the in-state price.

- The largest dollar difference between the in-state and out-of-state prices is \$34,090 in Michigan; the smallest difference is \$3,370 in South Dakota.

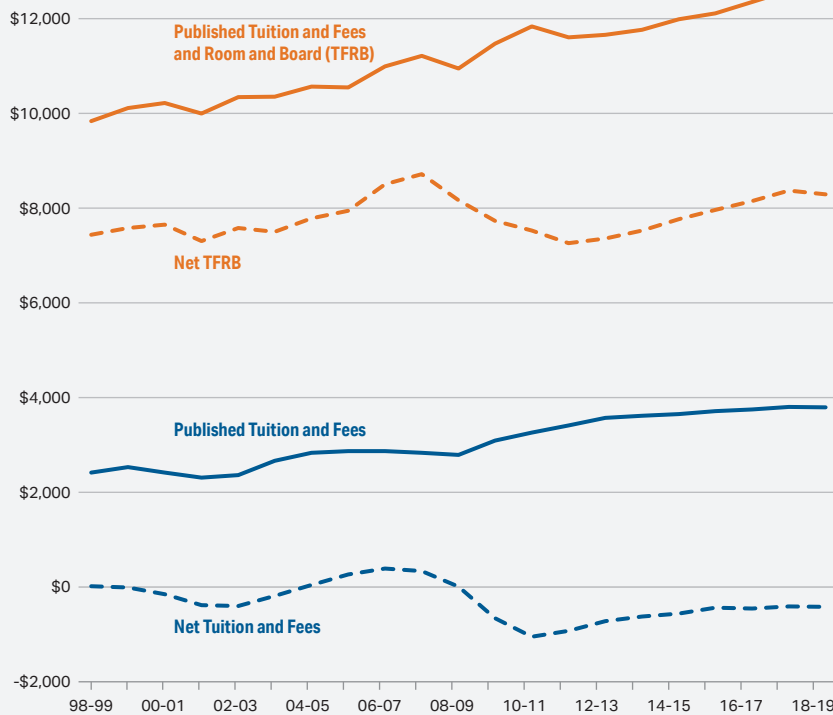
ALSO IMPORTANT:

- The flagship universities in Alabama, Florida, and North Carolina did not raise their in-state tuition in 2018-19. Price increases exceeded the 2.9% increase in the Consumer Price Index in 18 states.

Average Net Price: Public Two-Year

From 2015-16 through 2018-19, full-time students at public two-year colleges received, on average, enough grant aid and tax benefits to cover their tuition and fees and have about \$400 to help with other expenses—less than they had from 2009-10 through 2014-15.

FIGURE 8 Average Published and Net Prices in 2018 Dollars, Full-Time In-District Undergraduate Students at Public Two-Year Institutions, 1998-99 to 2018-19



- In 2018-19, full-time students at public two-year colleges must cover about \$8,300 in room and board on average after grant aid and tax benefits, in addition to paying for books and supplies and other living expenses.
- After declining (in 2018 dollars) from about \$0 in 1998-99 to -\$400 in 2002-03, average net tuition and fees at public two-year colleges rose to about \$400 in 2006-07. With the increases in federal aid, it declined to a low of about -\$1,000 in 2010-11, but has risen to an estimated -\$400 in 2018-19.
- Between 2008-09 and 2018-19, the average published tuition and fees at public two-year colleges increased by \$930 (34%) after adjusting for inflation. Average combined grant aid and tax benefits increased by over \$1,300 (almost 50%) over the decade.

ALSO IMPORTANT:

- California, which has the lowest public two-year tuition and fees in the nation, enrolls about 18% of the sector's full-time students. Excluding California would raise both the average published prices and the average estimated net prices.
- The estimated average Pell Grant funding per full-time public two-year college student was about \$350 lower (in 2018 dollars) in 2018-19 than in 2010-11.

Average Published and Net Prices and Average Grant Aid and Tax Benefits per Student in 2018 Dollars, Full-Time In-District Undergraduate Students at Public Two-Year Institutions, 1998-99 to 2018-19, Selected Years

	98-99	03-04	08-09	13-14	14-15	15-16	16-17	17-18	18-19
Published Tuition and Fees	\$2,390	\$2,620	\$2,730	\$3,500	\$3,530	\$3,590	\$3,620	\$3,670	\$3,660
Published Tuition and Fees and Room and Board (TFRB)	\$9,850	\$10,330	\$10,880	\$11,640	\$11,840	\$11,960	\$12,180	\$12,400	\$12,320
Net Tuition and Fees	\$20	-\$170	\$10	-\$580	-\$520	-\$400	-\$420	-\$380	-\$390
Net TFRB	\$7,480	\$7,540	\$8,160	\$7,560	\$7,790	\$7,970	\$8,140	\$8,350	\$8,270
Grant Aid and Tax Benefits per Student	\$2,370	\$2,790	\$2,720	\$4,080	\$4,050	\$3,990	\$4,040	\$4,050	\$4,050

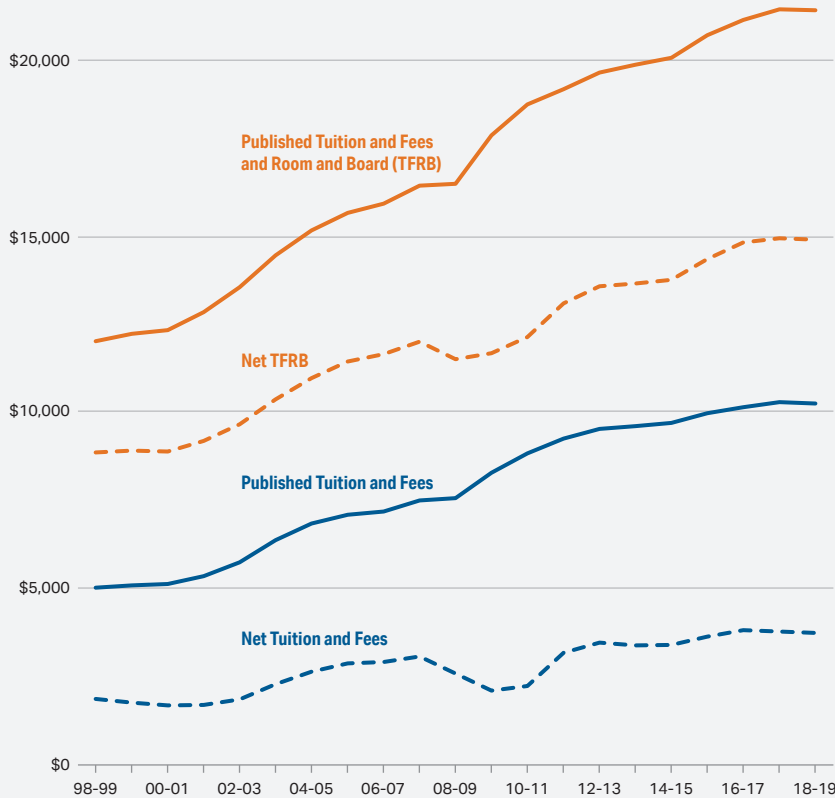
NOTES: Estimates of net price exclude military/veterans aid, which awards relatively large amounts to a small number of students. Because information on grant aid and education tax benefits for 2018-19 is not yet available, the net price for 2018-19 is estimated based on 2017-18 financial aid data. Room and board expense 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 2018*; NCES, IPEDS Fall Enrollment and Student Financial Aid data.

Average Net Price: Public Four-Year

After declining from about \$3,100 (in 2018 dollars) in 2007-08 to \$2,100 in 2009-10, the average net price paid by full-time in-state students enrolled in public four-year institutions increased to between \$3,700 and \$3,800 from 2016-17 through 2018-19.

FIGURE 9 Average Published and Net Prices in 2018 Dollars, Full-Time In-State Undergraduate Students at Public Four-Year Institutions, 1998-99 to 2018-19



- In 2018-19, full-time in-state students at public four-year colleges must cover an average of about \$14,900 in tuition and fees and room and board after grant aid and tax benefits, in addition to paying for books and supplies and other living expenses.
- Between 2008-09 and 2018-19, the average published tuition and fees at public four-year colleges and universities increased by \$2,670 (35%) in 2018 dollars. Average combined grant aid and tax benefits increased by about \$1,500 (about 30%) over the decade.
- The average published tuition and fee price for in-state students at public four-year institutions rose by \$2,030 (27%) between 2008-09 and 2013-14. Average grant aid and tax benefits per full-time student in the sector rose by about \$1,200 (25%). Over the next five years, tuition and fees rose by \$640 (7%) and aid rose by about \$300 (5%).

ALSO IMPORTANT:

- In 2015-16, 13% of full-time students at public four-year institutions were residents of other states. As reported in Table 1, out-of-state students face much higher tuition prices than in-state students. In 2015-16, full-time out-of-state students received \$1,500 more grant aid per student than in-state students. (NPSAS, 2016)
- About 45% of the increase in grant aid per student at public four-year colleges and universities between 2008-09 and 2018-19 came from increases in institutional grant aid.

Average Published and Net Prices and Average Grant Aid and Tax Benefits per Student in 2018 Dollars, Full-Time In-District Undergraduate Students at Public Four-Year Institutions, 1998-99 to 2018-19, Selected Years

	98-99	03-04	08-09	13-14	14-15	15-16	16-17	17-18	18-19
Published Tuition and Fees	\$5,020	\$6,370	\$7,560	\$9,590	\$9,680	\$9,960	\$10,130	\$10,270	\$10,230
Published Tuition and Fees and Room and Board (TFRB)	\$12,000	\$14,430	\$16,460	\$19,830	\$20,020	\$20,660	\$21,100	\$21,400	\$21,370
Net Tuition and Fees	\$1,870	\$2,290	\$2,590	\$3,390	\$3,400	\$3,630	\$3,820	\$3,780	\$3,740
Net TFRB	\$8,850	\$10,350	\$11,490	\$13,630	\$13,740	\$14,330	\$14,790	\$14,910	\$14,880
Grant Aid and Tax Benefits per Student	\$3,150	\$4,080	\$4,970	\$6,200	\$6,280	\$6,330	\$6,310	\$6,490	\$6,490

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 2018-19 is not yet available, the net price for 2018-19 is estimated based on 2017-18 financial aid data.

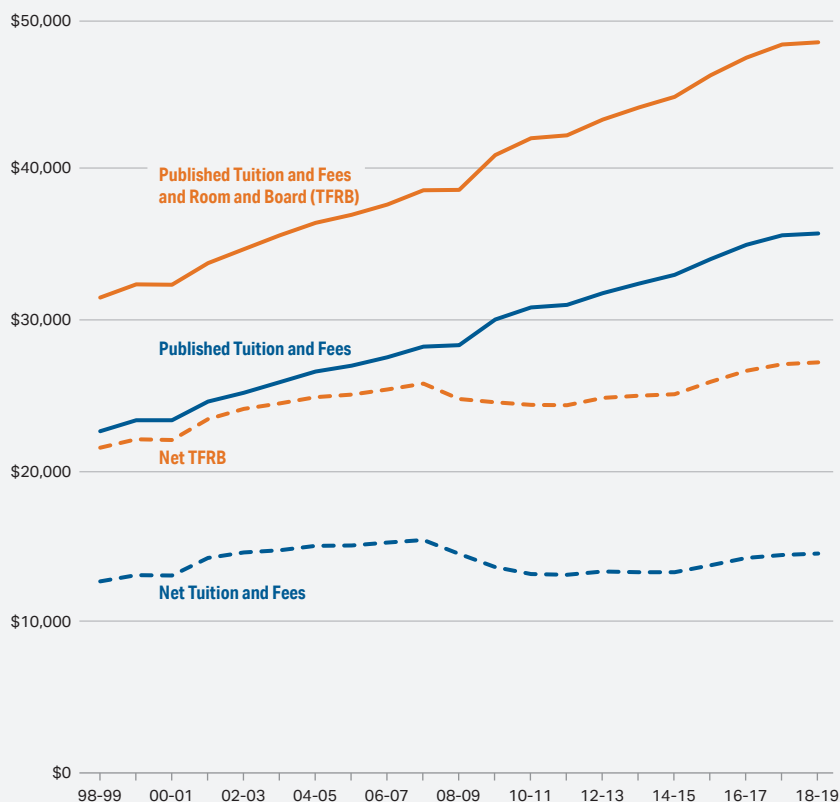
SOURCES: College Board, Annual Survey of Colleges; *Trends in Student Aid 2018*; NCES, IPEDS Fall Enrollment data.



Average Net Price: Private Nonprofit Four-Year

After declining from about \$15,500 (in 2018 dollars) in 2007-08 to \$13,200 in 2011-12, the average net tuition and fee price paid by full-time students enrolled in private nonprofit four-year institutions increased to an estimated \$14,600 in 2018-19.

FIGURE 10 Average Published and Net Prices in 2018 Dollars, Full-Time Undergraduate Students at Private Nonprofit Four-Year Institutions, 1998-99 to 2018-19



- In 2018-19, full-time students at private nonprofit four-year colleges must cover an average of about \$27,300 in tuition and fees and room and board after grant aid and tax benefits, in addition to paying for books and supplies and other living expenses.
- Between 2008-09 and 2018-19, both the average published tuition and fees at private nonprofit four-year colleges and universities and the average grant aid and tax benefits per student increased by about \$7,400 in 2018 dollars. The average net tuition and fee price declined through 2011-12 and then rose to about the same level as at the beginning of the decade.
- Average grant aid from all sources and federal education tax benefits covered 42% to 45% of published tuition and fees at private nonprofit four-year institutions from 1998-99 through 2007-08, compared with between 57% and 60% since 2010-11.

ALSO IMPORTANT:

- In 2018-19, almost 70% of the \$21,200 in aid per student that lowers net prices for full-time students in the private nonprofit four-year sector comes from colleges and universities in the form of discounts from their published prices.
- In 2015-16, 75% of full-time students at private nonprofit four-year institutions received grant aid from their institutions. Thirty-six percent received federal grant aid and 22% received state grant aid. (NPSAS, 2016)

Average Published and Net Prices and Average Grant Aid and Tax Benefits per Student in 2018 Dollars, Full-Time Undergraduate Students at Private Nonprofit Four-Year Institutions, 1998-99 to 2018-19, Selected Years

	98-99	03-04	08-09	13-14	14-15	15-16	16-17	17-18	18-19
Published Tuition and Fees	\$22,710	\$25,970	\$28,440	\$32,500	\$33,090	\$34,150	\$35,080	\$35,720	\$35,830
Published Tuition and Fees and Room and Board (TFRB)	\$31,590	\$35,710	\$38,720	\$44,190	\$44,900	\$46,330	\$47,490	\$48,380	\$48,510
Net Tuition and Fees	\$12,750	\$14,830	\$14,580	\$13,380	\$13,360	\$13,820	\$14,320	\$14,500	\$14,610
Net TFRB	\$21,630	\$24,570	\$24,860	\$25,070	\$25,170	\$26,000	\$26,730	\$27,160	\$27,290
Grant Aid and Tax Benefits per Student	\$9,960	\$11,140	\$13,860	\$19,120	\$19,730	\$20,330	\$20,760	\$21,220	\$21,220

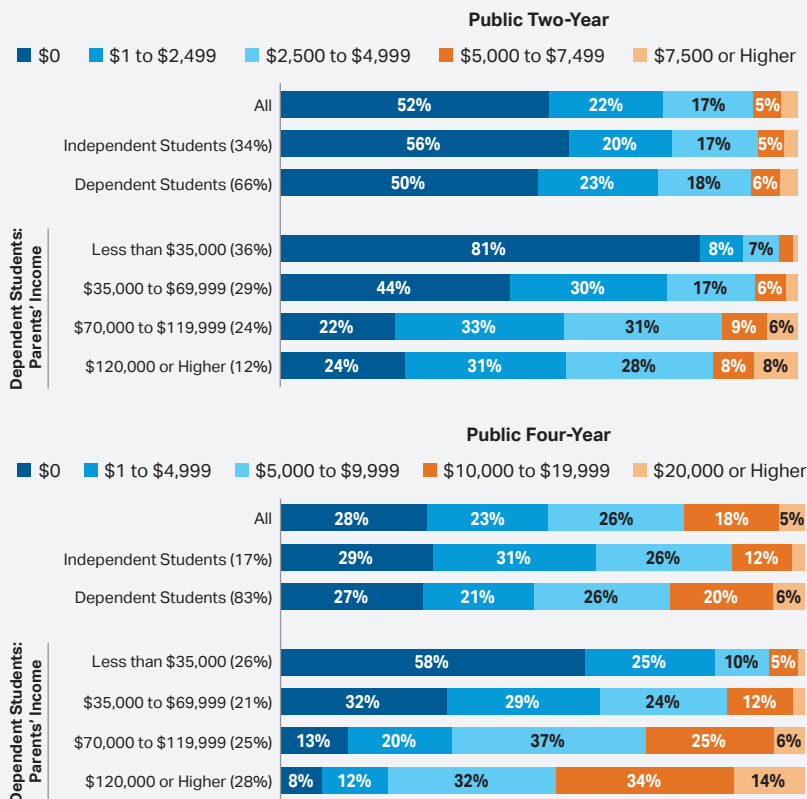
NOTES: Estimates of net price exclude military/veterans aid, which awards relatively large amounts to a small number of students. Because information on grant aid and education tax benefits for 2018-19 is not yet available, the net price for 2018-19 is estimated based on 2017-18 financial aid data.

SOURCES: College Board, Annual Survey of Colleges; *Trends in Student Aid 2018*; NCES, IPEDS Fall Enrollment and Student Financial Aid data.

Net Price by Income: Public Institutions

In 2015-16, more than half of full-time students at public two-year colleges received enough grant aid to cover tuition and fees.

FIGURE 11 Distribution of Full-Time Undergraduate Students at Public Institutions by Net Tuition and Fees, 2015-16



NOTES: Total grant aid excludes veterans benefits. Includes full-time undergraduate students who were U.S. citizens or permanent residents. Percentages may not sum to 100 because of rounding.

SOURCES: NCES, National Postsecondary Student Aid Study (NPSAS), 2016; calculations by the authors.

Average Net Tuition and Fees and Net Budget, 2015-16

	Public Two-Year		Public Four-Year	
	Net Tuition and Fees	Net Total Budget	Net Tuition and Fees	Net Total Budget
All	-\$250	\$12,180	\$4,910	\$20,090
Independent Students	-\$450	\$13,780	\$3,420	\$19,260
Dependent Students	-\$150	\$11,370	\$5,220	\$20,260
Parents' Income of Dependent Students				
Less than \$35,000	-\$2,620	\$9,330	-\$1,030	\$14,550
\$35,000 to \$69,999	\$180	\$11,520	\$3,200	\$18,100
\$70,000 to \$119,999	\$2,060	\$13,070	\$7,440	\$21,860
\$120,000 or Higher	\$2,060	\$13,740	\$10,590	\$25,800

NOTES: Average net prices are calculated by subtracting average grant aid from average tuition and fees and average budget. Imposing a lower limit of \$0 on each student's net tuition price would yield higher average net price estimates.

- Fifty-six percent of independent students and 50% of dependent students at public two-year colleges did not pay any part of their tuition and fees. Among the 12% of dependent students from families with incomes of \$120,000 or higher, 44% paid \$2,500 or more in net tuition and fees.
- Almost 60% of full-time dependent students from families with incomes below \$35,000 at public four-year colleges received enough grant aid in 2015-16 to cover their tuition and fees. By contrast, only 8% of full-time dependent students from families with incomes \$120,000 or higher at public four-year colleges received enough grant aid to cover tuition and fees.
- Even students with enough grant aid to cover tuition and fees have additional expenses such as living expenses, transportation, books, and supplies. For example, dependent students from families with incomes below \$35,000 at public two-year colleges received an average of \$2,620 in grant aid to help them cover other expenses in 2015-16, but they had to cover an average of \$9,330 from other funding sources.
- In 2015-16, the average net tuition and fees paid by students from families with incomes between \$35,000 and \$70,000 at public four-year institutions was about 30% of the average price paid by those from families with incomes of \$120,000 or more (\$3,200 vs. \$10,590). However, the total expenses remaining to cover from family, loans, or work were about 70% as large (\$18,100 vs. \$25,800).

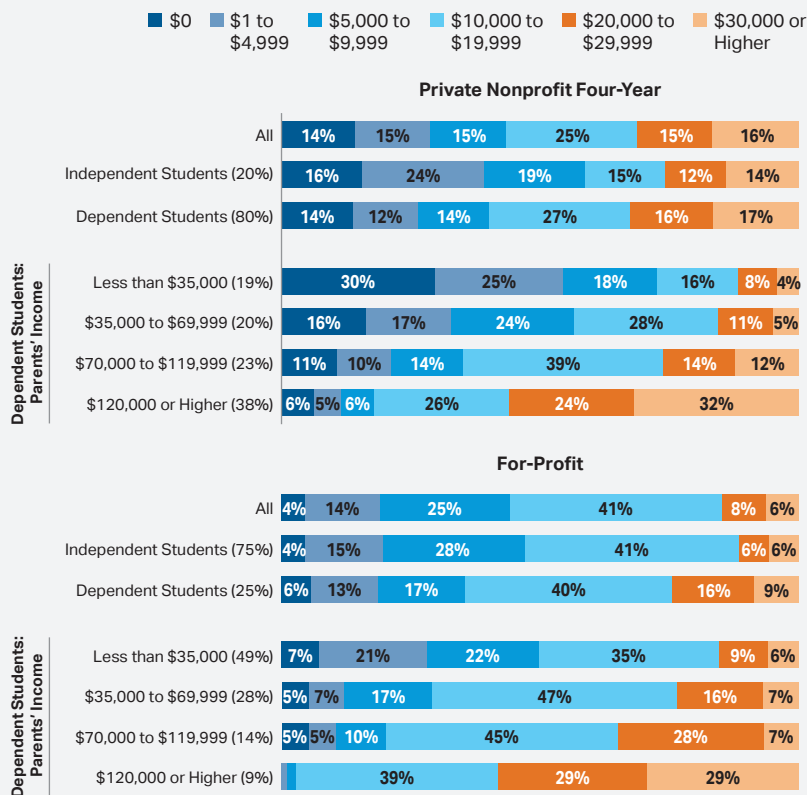
ALSO IMPORTANT:

- In 2015-16, average student budgets include a wide range of living expenses depending on whether students live on campus, in off-campus housing, or with parents. At public four-year institutions in 2015-16, 36% of full-time students lived on campus, 46% lived in off-campus housing, and 17% lived with parents. At public two-year colleges, these figures were 5%, 44%, and 51%, respectively. (Figure 14A)

Net Price by Income: Private Institutions

At all income levels, larger shares of full-time students at private nonprofit colleges and universities than at for-profit institutions paid net tuition and fees less than \$5,000 in 2015-16.

FIGURE 12 Distribution of Full-Time Undergraduate Students at Private Institutions by Net Tuition and Fees, 2015-16



NOTES: Total grant aid excludes veterans benefits. Includes full-time undergraduate students who were U.S. citizens or permanent residents. Percentages may not sum to 100 because of rounding.

SOURCES: NCES, NPSAS, 2016; calculations by the authors.

Average Net Tuition and Fees and Net Budget, 2015-16

	Private Nonprofit Four-Year		For-Profit	
	Net Tuition and Fees	Net Total Budget	Net Tuition and Fees	Net Total Budget
All	\$14,470	\$29,640	\$12,620	\$28,380
Independent Students	\$12,430	\$27,500	\$11,960	\$27,700
Dependent Students	\$14,960	\$30,160	\$14,570	\$30,340
Parents' Income of Dependent Students				
Less than \$35,000	\$4,800	\$19,960	\$11,740	\$27,860
\$35,000 to \$69,999	\$9,500	\$24,360	\$15,150	\$31,100
\$70,000 to \$119,999	\$14,280	\$29,190	\$16,880	\$31,260
\$120,000 or Higher	\$23,460	\$39,040	\$24,220	\$39,760

NOTES: Average net prices are calculated by subtracting average grant aid from average tuition and fees and average budget. Imposing a lower limit of \$0 on each student's net tuition price would yield higher average net price estimates.

- In 2015-16, more than half of dependent students from families with incomes below \$35,000 at private nonprofit institutions paid less than \$5,000 in tuition and fees after grant aid, while 12% paid net tuition and fees of \$20,000 or more. Among students from families with incomes of \$120,000 or higher, 11% paid net tuition and fees less than \$5,000 and 56% paid \$20,000 or more after grant aid.
- At for-profit institutions, 28% of full-time dependent students from families with incomes below \$35,000 paid less than \$5,000 in tuition and fees after grant aid in 2015-16, while 15% paid net tuition and fees of \$20,000 or more. Among students from families with incomes of \$120,000 or more, 1% paid less than \$5,000 and 58% paid \$20,000 or more after grant aid.
- Forty percent of independent students at private nonprofit institutions and 19% at for-profit institutions paid net tuition and fees below \$5,000 in 2015-16; 26% in the private nonprofit sector and 12% in the for-profit sector paid tuition and fees of \$20,000 or more after grant aid.
- Average net tuition and fees and average net total budgets are similar in the private nonprofit and private for-profit sectors for both independent students and dependent students. However, in the for-profit sector, where a much larger share of dependent students are from low-income families, low- and moderate-income students face much higher out-of-pocket expenses than those enrolled in private nonprofit colleges and universities. In 2015-16, average net budgets after grant aid for students from families with incomes below \$35,000 were \$27,860 in the for-profit sector and \$19,960 at private nonprofit four-year institutions.

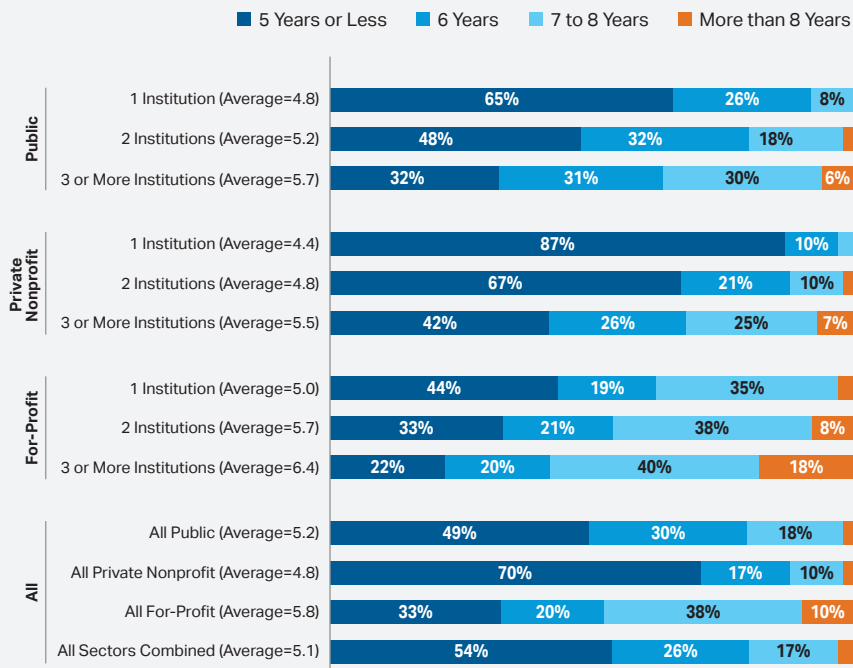
ALSO IMPORTANT:

- Average student budgets include a wide range of living expenses depending on whether students live on campus, in off-campus housing, or with parents. At private nonprofit four-year institutions in 2015-16, 58% of full-time students lived on campus, 29% lived in off-campus housing, and 13% lived with parents. At for-profit colleges, only 3% of students lived on campus, 73% lived in off-campus housing, and 24% lived with parents. (Figure 14A)

Time to Degree

Based on a definition of 30 weeks as one year, students who completed bachelor's degrees in 2014-15 were enrolled for an average of 5.1 full-time academic years. Those who completed associate degrees were enrolled for an average of 3.3 years.

FIGURE 13A Total Number of Academic Years Enrolled by Sector and Number of Institutions Attended: 2014-15 Bachelor's Degree Recipients

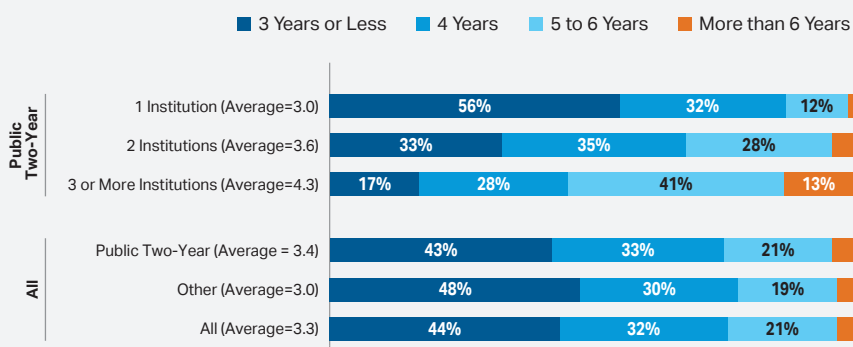


- The average enrollment period for earning a bachelor's degree was 4.8 years at private nonprofit institutions, 5.2 years at public institutions, and 5.8 years at for-profit institutions.
- Average enrollment time for associate degree recipients was 3.4 years at public two-year institutions and 3.0 years at other institutions.
- Among both bachelor's and associate degree recipients in all sectors, students who graduate from their starting institution spend less time enrolled than those who transfer to other institutions. For example, 65% of 2014-15 public four-year bachelor's degree recipients who attended only one institution were enrolled for five years or less, compared with 48% of those who attended two institutions and 32% of those who attended three or more institutions. The shares of those enrolled for 7 or more years were 8%, 20%, and 36% for students who attended one, two, or three institutions, respectively.

ALSO IMPORTANT:

- The National Student Clearinghouse (NSC) time to degree estimates differ from the Department of Education's (ED) in two ways. First, NSC's 30-week definition of a full academic year means that NSC counts some students as enrolled for more than one full year in situations that ED would not. For example, if a student completes two 16-week semesters or takes a summer course in addition to a regular course load, NSC would count that student as enrolled for more than one academic year. Second, the NSC data include all undergraduate students in participating institutions, while ED's definitions include only first-time full-time degree- or certificate-seeking students who start and complete at the same institution.
- The time elapsed between first enrollment and degree completion differs from time enrolled because it includes periods when students have stopped out of school. Time enrolled is a better measure for estimating both tuition paid and the cost of time out of the labor market.
- Factors that could contribute to longer enrollment time include remedial coursework, dropped classes, loss of credit through transfer, inability to access required classes, and taking less than 15 credit hours per semester. Graduating on time requires an average of 15 credits per semester.

FIGURE 13B Total Number of Academic Years Enrolled by Number of Institutions Attended: 2014-15 Associate Degree Recipients



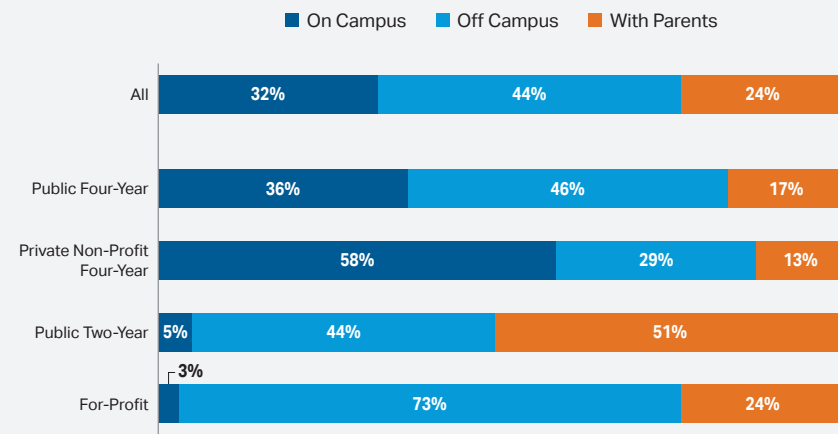
NOTES: One year of enrollment is defined as one academic year (30 weeks) of active, full-time enrollment. Half-time enrollment for two academic years counts as one year of full-time enrollment. The "Other" category in Figure 13B includes associate degree recipients at public four-year, private nonprofit, and for-profit institutions.

SOURCES: D. Shapiro, A. Dundar, P.K. Wakhungu, X. Yuan, A. Nathan, and Y. Hwang. (2016, September). Time to Degree: A National View of the Time Enrolled and Elapsed for Associate and Bachelor's Degree Earners (Signature Report No. 11). Herndon, VA: National Student Clearinghouse Research Center.

Living Arrangements: Undergraduate Students

One-third of full-time undergraduate students live on campus. One quarter—including half of all public two-year college students—live with their parents.

FIGURE 14A Living Arrangements of Full-Time Undergraduate Students by Sector, 2015-16

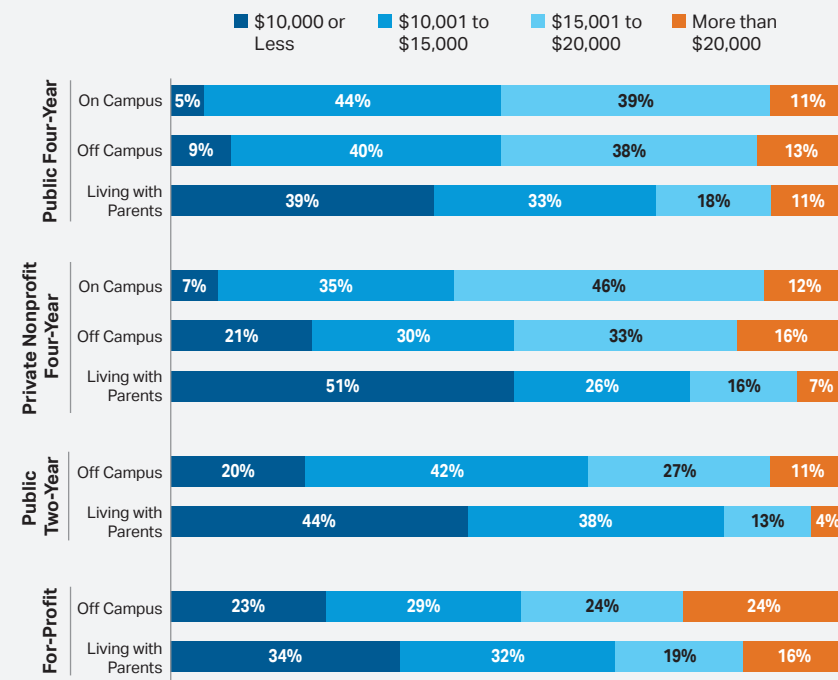


- In 2015-16, 58% of undergraduates enrolled at private nonprofit four-year institutions and 36% of those at public four-year institutions lived in campus housing. Five percent or less of those attending public two-year and for-profit institutions lived on campus.

- Nontuition student budgets, which include housing, food, transportation, miscellaneous living expenses, and books and supplies, differ depending on living arrangements. In 2015-16, about half of all full-time undergraduates living either on campus or off campus at public four-year institutions had nontuition budgets exceeding \$15,000, while 29% of those living with parents had budgets this high.

- Nontuition budgets are based on institutional estimates of students' expenses. There is considerable variation in these budgets, even within sectors among students with the same living arrangements. For example, budgets were \$10,000 or less for 44% of public two-year college students living with parents, while 17% had budgets over \$15,000.

FIGURE 14B Distribution of Nontuition Expense Budgets for Full-Time Undergraduate Students by Sector and Living Arrangement, 2015-16



ALSO IMPORTANT:

- In 2015-16, the median nontuition expense budget for full-time undergraduates at private nonprofit four-year colleges and universities ranged from \$13,600 at institutions with published tuition and fees below \$25,000 to \$16,800 at institutions with tuition and fees of \$45,000 or higher.

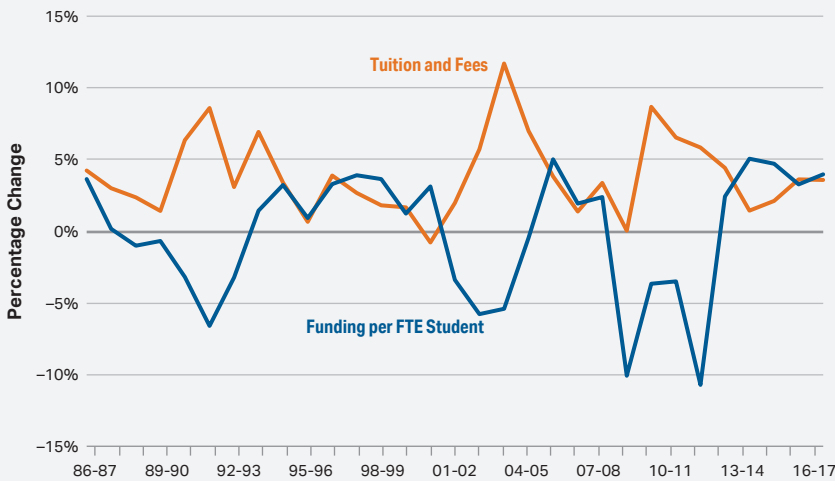
NOTES: Includes full-time undergraduate students who attended one institution in 2015-16. Percentages may not sum to 100 because of rounding.

SOURCES: NCES, NPSAS 2016; calculations by the authors.

Institutional Revenues: State and Local Funding

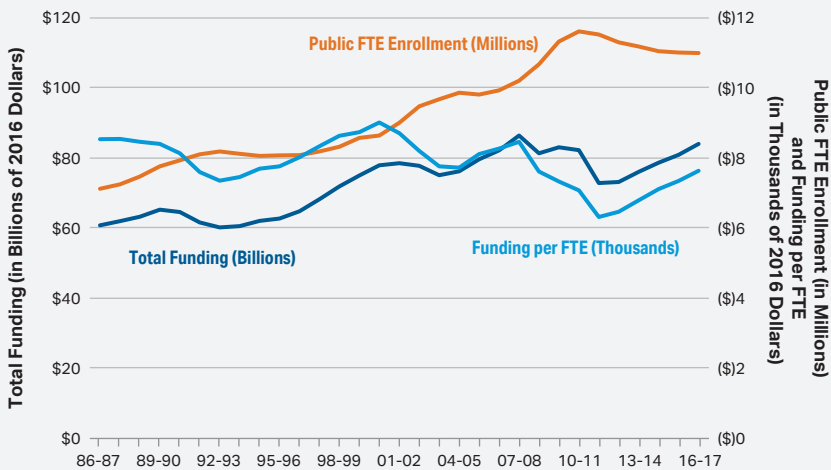
Rapid increases in public sector tuition prices during the most recent recession, followed by smaller increases as state and local appropriations per student recovered from a large decline, were consistent with historical patterns.

FIGURE 15A Annual Percentage Change in Inflation-Adjusted Per-Student State and Local Funding for Higher Education and in Tuition and Fees at Public Institutions, 1986-87 to 2016-17



- Funding per student rose in 2016-17 (in inflation-adjusted dollars) for the fifth consecutive year, following four years of decline.
- State and local funding per student fell by 24% from \$8,270 (in 2016 dollars) in 2006-07 to \$6,320 in 2011-12, and then rose by 21% to \$7,640 in 2016-17.
- Between 2006-07 and 2011-12, the combination of an 11% decline in total funding and a 16% increase in enrollment led to a 24% decline in state and local funding per public college student.
- Between 2011-12 and 2016-17, the combination of a 15% increase in total funding and a 5% decline in enrollment led to a 21% increase in funding per student.
- In 2016-17, total appropriations were 2% higher (after adjusting for inflation) than a decade earlier (\$84.1 billion vs. \$82.2 billion), but appropriations per student were 8% lower (\$7,640 vs. \$8,270). Total appropriations were 38% higher than 30 years earlier (up from \$60.8 billion), but appropriations per student were 11% lower (down from \$8,540).

FIGURE 15B Total and Per-Student State and Local Funding for Higher Education in 2016 Dollars and Public FTE Enrollment, 1986-87 to 2016-17



ALSO IMPORTANT:

- In 2016-17, local funding represented 13% of total educational appropriations for higher education. Local funding was less than 1% of the total in 24 states, but it was more than half of the total in Arizona and more than 20% of the total in Kansas, Michigan, Nebraska, Oregon, and Texas.

NOTES: 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 the public sector prices reported in Table 2. 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.

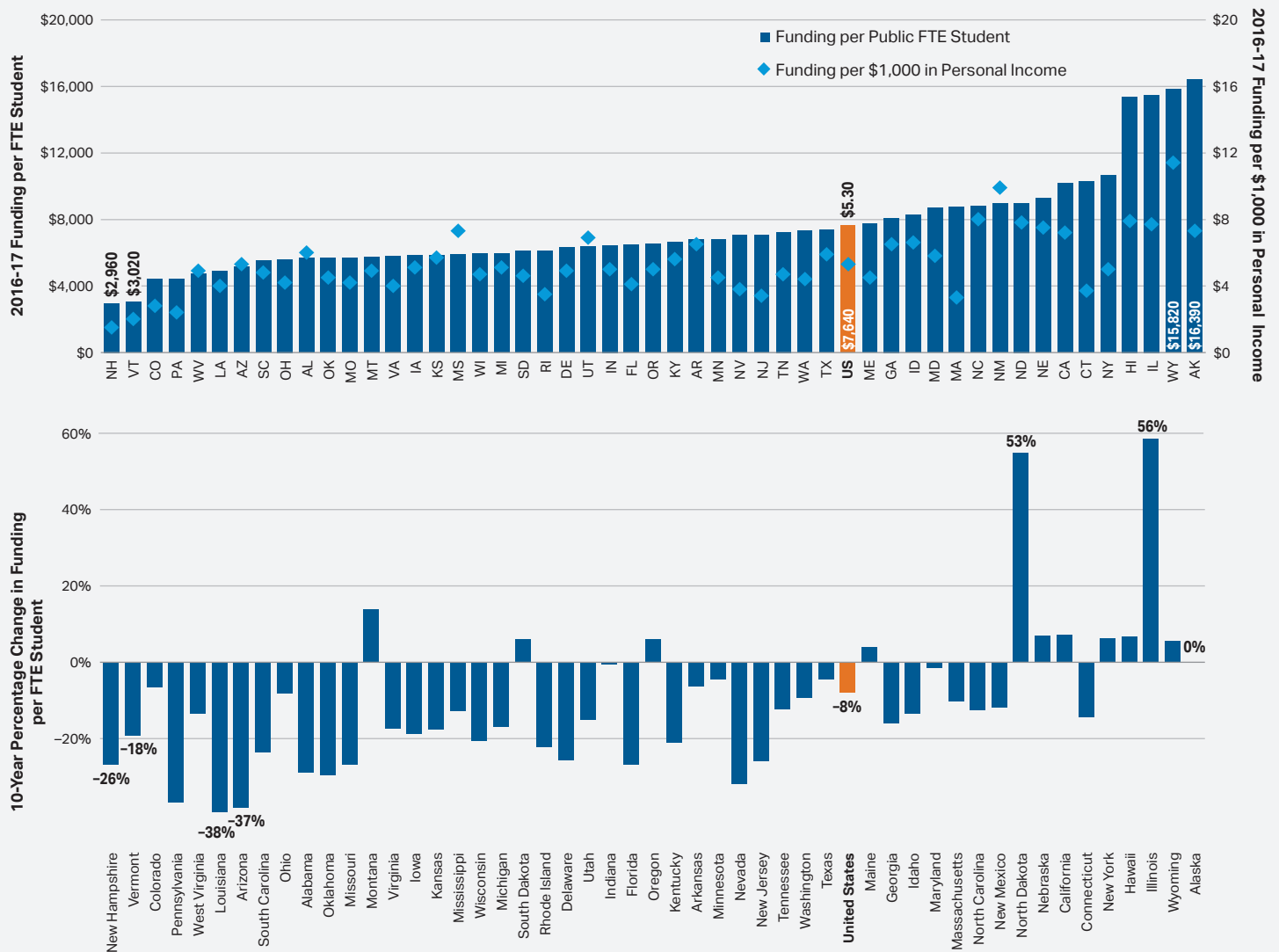
SOURCES: College Board, Annual Survey of Colleges; NCES, *Digest of Education Statistics 2017*, Table 307.10; State Higher Education Executive Offices Association (SHEEO), State Higher Education Finance (SHEF) reports; calculations by the authors.



Institutional Revenues: State and Local Funding

In 2016-17, state and local funding for public higher education averaged \$7,640 per full-time equivalent (FTE) student in the United States; it ranged from \$2,960 in New Hampshire and \$3,020 in Vermont to \$15,820 in Wyoming and \$16,390 in Alaska.

FIGURE 16 2016-17 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



SOURCES: SHEEO, SHEF reports; Bureau of the Economic Analysis, Annual State Personal Income 2016; 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). In 2016-17, both West Virginia and New York provided about \$5 per \$1,000 in personal income, but West Virginia's \$4,740 in fiscal support per FTE student was less than half of New York's \$10,640.
- Between 2006-07 and 2016-17, total inflation-adjusted per-student state and local funding for higher education declined by 38% in Louisiana, by 37% in Arizona, and by 25% or more in another seven states; it increased by 53% in North Dakota, by 56% in Illinois (where

much of the funding went to under-funded pensions), and by smaller amounts in nine other states.

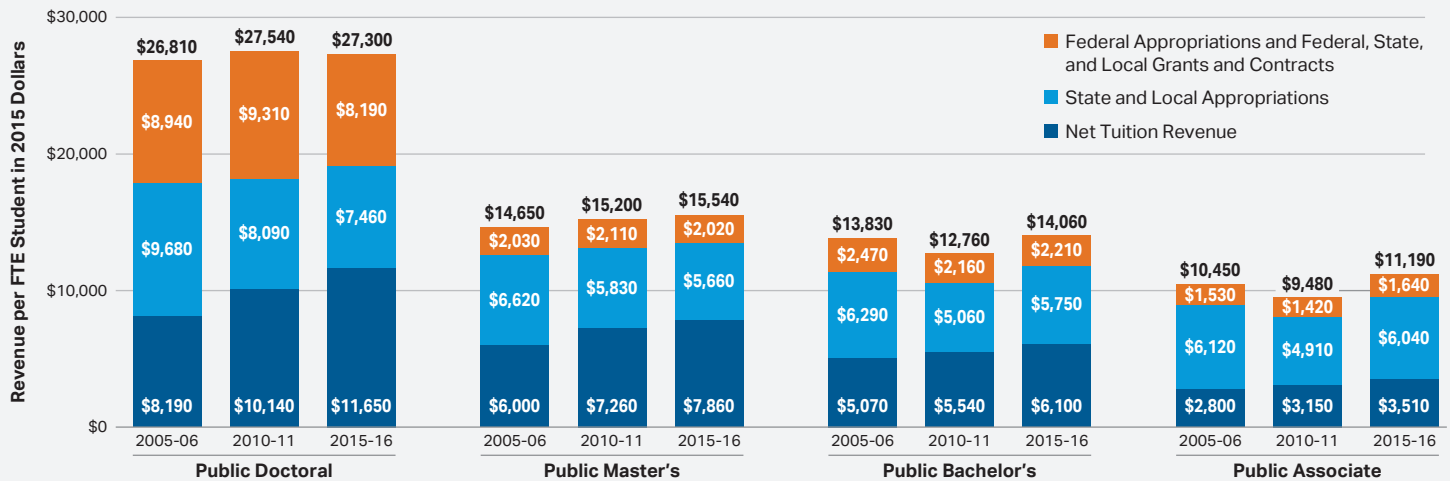
ALSO IMPORTANT:

- 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 and Louisiana, the funding declines occurred even with small enrollment changes. (Figure 22B)

Institutional Revenues

Between 2005-06 and 2015-16, net tuition revenue per student at public doctoral universities increased by \$3,460 (in 2015 dollars). Because of declines in government support, total revenue per student increased by just \$490.

FIGURE 17 Institutional Revenues per Full-Time Equivalent (FTE) Student in 2015 Dollars at Public Institutions, 2005-06, 2010-11, and 2015-16



Percentage of Institutional Revenues from Various Sources

	Net Tuition Revenue	State and Local Appropriations	Federal Appropriations and Federal, State, and Local Grants and Contracts
Public Doctoral			
2005-06	31%	36%	33%
2010-11	37%	29%	34%
2015-16	43%	27%	30%
Public Master's			
2005-06	41%	45%	14%
2010-11	48%	38%	14%
2015-16	51%	36%	13%
Public Bachelor's			
2005-06	37%	45%	18%
2010-11	43%	40%	17%
2015-16	43%	41%	16%
Public Associate			
2005-06	27%	59%	15%
2010-11	33%	52%	15%
2015-16	31%	54%	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, 2006, 2011, and 2016; calculations by the authors.

- In 2015-16, per-student revenues from federal, state, and local governments and net tuition revenue at public doctoral universities were almost two and a half times as large as the revenues from these sources at public two-year colleges. These per-student revenues were \$27,300 at doctoral universities, \$15,540 at master's universities, \$14,060 at bachelor's colleges, and \$11,190 at associate institutions in the public sector.
- Over the decade, at public two-year colleges, total revenue per student from federal, state, and local governments and net tuition revenue increased by \$740 (7%) in 2015 dollars. Nearly all of this increase is attributable to the growth of \$710 in net tuition revenue.
- State and local appropriations make up a larger share of revenues at public two-year colleges than at public four-year institutions. These revenues fell from 59% of the total at public two-year colleges in 2005-06 to 52% in 2010-11 and were 54% in 2015-16.
- State and local appropriations declined as a share of total revenues over the past decade at all types of public four-year institutions, falling from 36% to 27% at doctoral universities, from 45% to 36% at master's universities, and from 45% to 41% at bachelor's colleges.

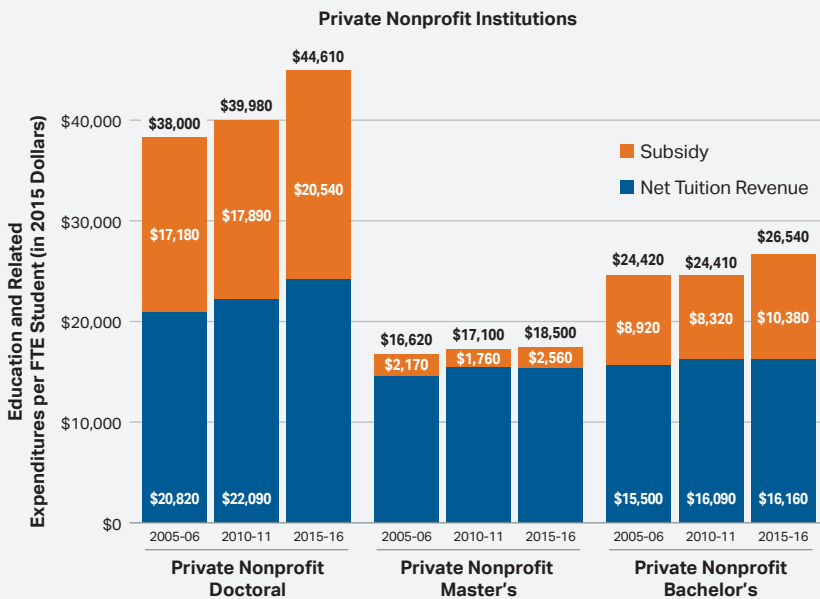
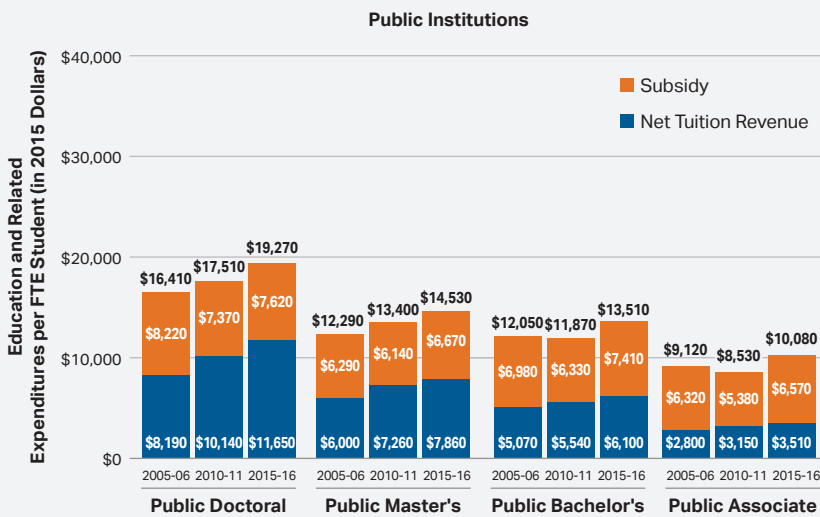
ALSO IMPORTANT:

- Revenues from auxiliary enterprises such as residence and dining facilities, hospitals, and independent operations, not included in Figure 17, are usually dedicated to running those operations.

Institutional Revenues and Expenditures

Between 2005-06 and 2015-16, subsidy amounts increased in all sectors except public doctoral institutions. However, as a share of per-student education expenses, subsidies declined in all public sectors.

FIGURE 18 Net Tuition Revenues, Subsidies, and Education and Related Expenditures per Full-Time Equivalent (FTE) Student in 2015 Dollars, 2005-06, 2010-11, and 2015-16



Subsidy as a Percentage of Education and Related Expenditures

	Public				Private Nonprofit		
	Doctoral	Master's	Bachelor's	Associate	Doctoral	Master's	Bachelor's
2005-06	50%	51%	58%	69%	45%	13%	37%
2010-11	42%	46%	53%	63%	45%	10%	34%
2015-16	40%	46%	55%	65%	46%	14%	39%

- The average subsidy per full-time equivalent (FTE) student at public two-year colleges declined by \$940 (15%) in 2015 dollars between 2005-06 and 2010-11; it increased by \$1,190 (22%) between 2010-11 and 2015-16, as enrollment in the sector declined.
- Between 2005-06 and 2015-16, educational expenditures per FTE student increased by 17% in inflation-adjusted dollars at public doctoral universities, 18% at public master's universities, 12% at public bachelor's colleges, and 11% in the public two-year sector.
- In 2015-16, the subsidy portion of education and related costs at private nonprofit institutions ranged from 14% at master's universities to 46% at doctoral universities.
- Between 2005-06 and 2015-16, average educational expenditures per FTE student at private nonprofit institutions increased by 17% at doctoral universities, 11% at master's universities, and 9% at bachelor's colleges, after adjusting for inflation.

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 those 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.

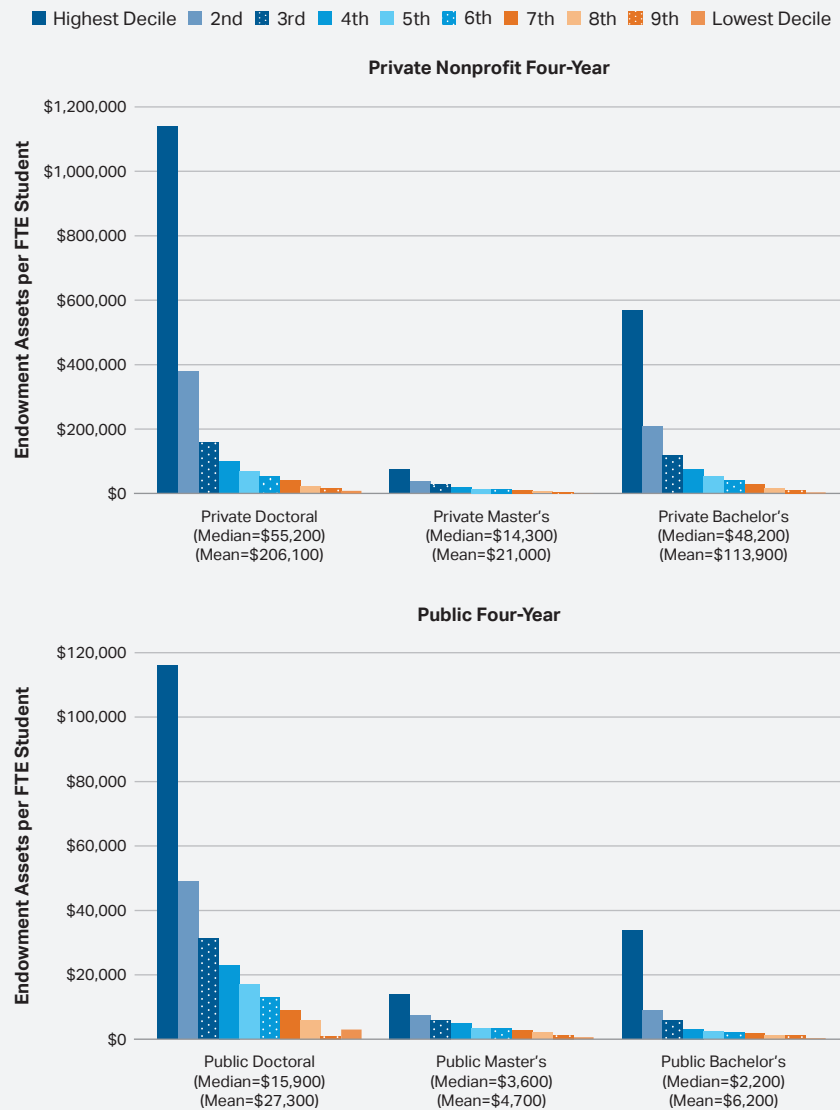
NOTES: Net tuition revenue is the amount of revenue an institution takes in from tuition and fees, net of all institutional grant aid provided to students. Some of this revenue comes in the form of Pell Grants and other financial aid from federal and state governments and other sources. Subsidies are 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, 2006, 2011, and 2016; calculations by the authors.

Endowments

In 2015-16, the 10% of students enrolled in the private doctoral universities with the highest endowments per student benefited from endowments averaging \$1.15 million per full-time equivalent (FTE) student. The median endowment per FTE student in this sector was \$55,200.

FIGURE 19 Endowment Assets per Full-Time Equivalent (FTE) Student at Four-Year Colleges and Universities by Decile, 2015-16



NOTES: Endowment values are as of the end of FY16 based on data for 100 private nonprofit doctoral, 375 private nonprofit master's, 400 private nonprofit bachelor's, 187 public doctoral, 254 public master's, and 97 public bachelor's 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 2016 Finance data; calculations by the authors.

- In 2015-16, endowment per FTE student at the 10 private nonprofit doctoral universities in the top decile ranged from \$475,000 to \$2.63 million. Assuming a 4.5% annual spending rate, this yields annual budget supplements ranging from about \$21,000 to \$118,000 per FTE student.
- In 2015-16, the 10% of students at the wealthiest private nonprofit bachelor's colleges benefited from endowments averaging \$575,400 per FTE student. Median endowment per student in this sector was \$48,200.
- Average endowment per FTE student for the private nonprofit bachelor's colleges in which the second 10% of students were enrolled was \$218,200, yielding about \$9,800 in budget supplement per student per year assuming a 4.5% annual spending rate.
- In 2015-16, the 10% of students at the wealthiest public research universities attended institutions with average endowment assets of \$116,530 per FTE student. The average for the second 10% of students was \$49,510.

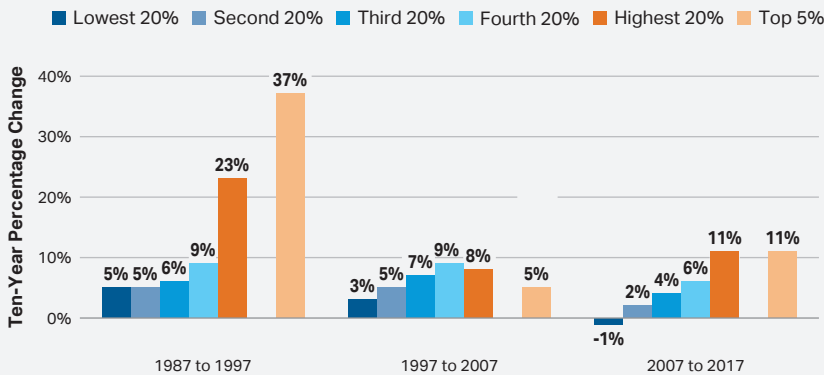
ALSO IMPORTANT:

- The 2017 Tax Cuts and Jobs Act imposed a new tax on the endowment income of private nonprofit institutions with endowment assets exceeding \$500,000 per student and enrolling at least 500 students. About nine research universities and 15 bachelor's colleges are likely to be subject to the tax in its first year.
- Average expenditures are higher for graduate students than for undergraduates, so endowment differences between doctoral universities and bachelor's colleges overstate the differences in the subsidies available to undergraduate students from endowment income.
- By law, the principal of some endowment funds must be preserved in perpetuity and 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.
- The percentage of their endowment values that institutions spend each year declined from 5.0% in 2001-02 to 4.3% in 2007-08. After increasing slightly during the Great Recession, the average spending rate held steady between 4.2% and 4.4% from 2011-12 through 2016-17.

Family Income

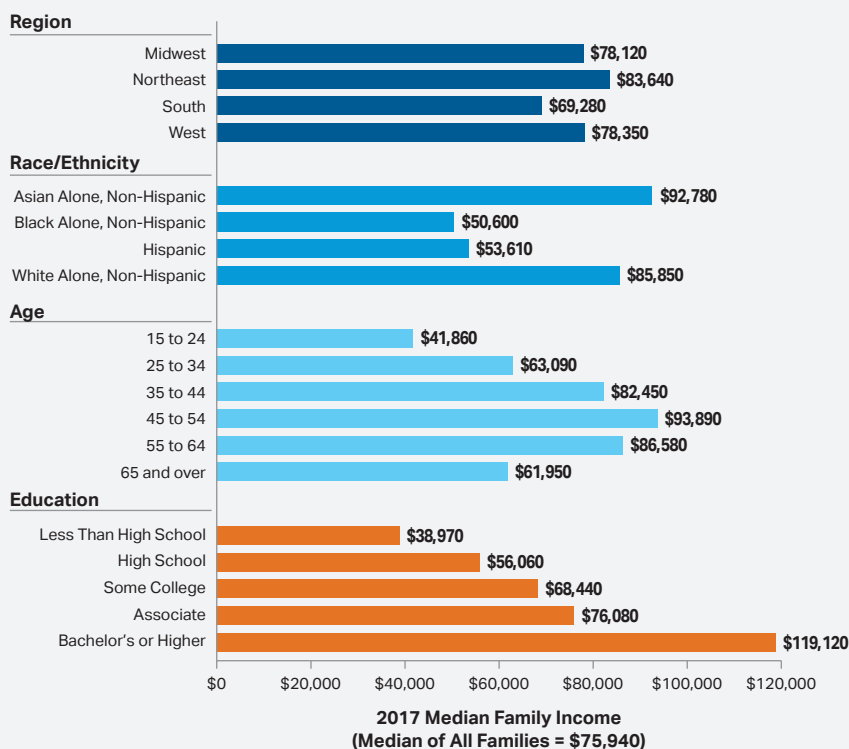
Inequality in family incomes increased in each of the three decades from 1987 to 2017 as income grew fastest for those with higher incomes.

FIGURE 20A Percentage Change in Inflation-Adjusted Mean Family Income by Quintile, 1987 to 1997, 1997 to 2007, and 2007 to 2017



	Lowest 20%	Second 20%	Third 20%	Fourth 20%	Highest 20%	Top 5%
\$ Change from 1987 to 2017	\$1,330	\$5,130	\$11,840	\$24,240	\$77,650	\$154,600
% Change from 1987 to 2017	8%	12%	19%	26%	46%	59%
2017 Income Bracket	\$33,551 or less	\$33,552 to \$60,032	\$60,033 to \$92,358	\$92,359 to \$145,380	\$145,381 or higher	\$261,508 or higher
2017 Mean Income	\$18,940	\$46,350	\$75,840	\$115,830	\$245,040	\$416,640

FIGURE 20B Median Family Income by Selected Characteristics, 2017



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.

- In 2017, the average income for the highest 20% of families was 3.2 times as high as that for the middle 20% (\$245,040 vs. \$75,840 in 2017 dollars). It was just 2.6 times as high in 1987 (\$167,390 vs. \$64,000).
- The average income for the middle 20% of families was 4.0 times as high as that for the lowest 20% (\$75,840 vs. \$18,940) in 2017. It was 3.6 times as high in 1987 (\$64,000 vs. \$17,610).
- 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 2007 counterparts, although they have recovered some of the income lost during the recession.
- In 2017, 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 (\$93,890 compared with \$75,940).
- In 2017, median incomes for black and Hispanic families were 59% and 62%, respectively, of the median for white families. Median income for Asian families was 8% higher than the median for white families.
- In 2017, the \$119,120 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.

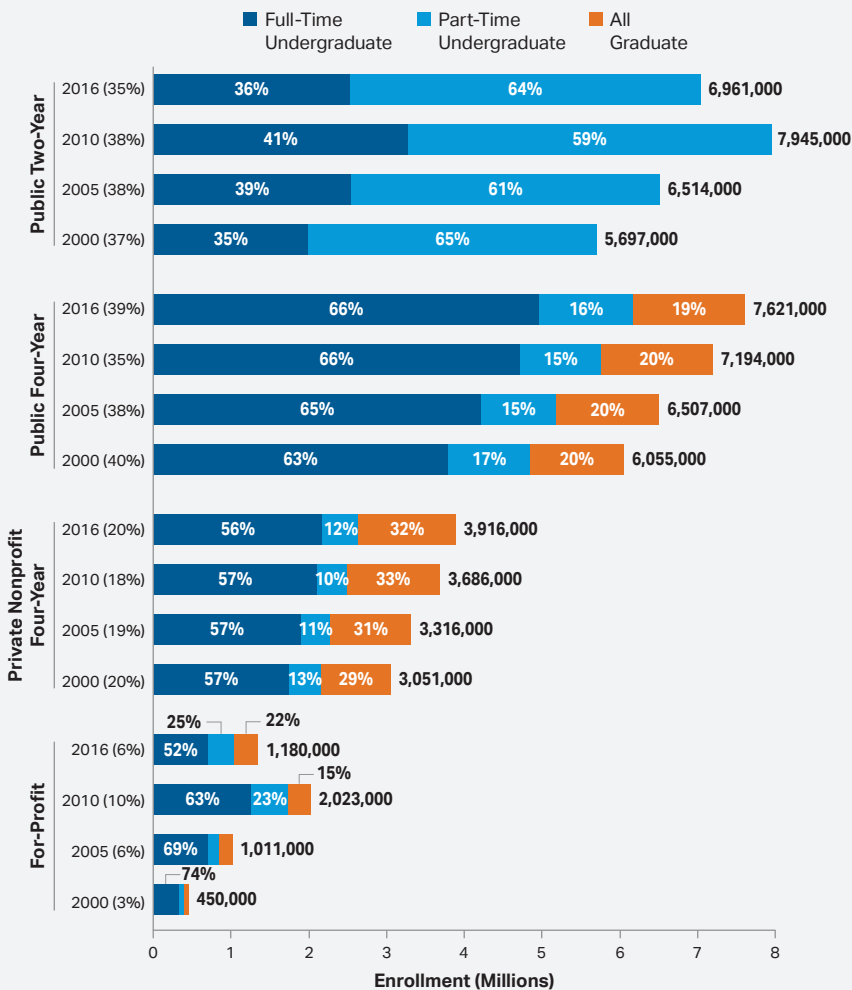
ALSO IMPORTANT:

- Average incomes for all quintiles fell between 2007 and 2010. Average incomes began to recover in 2011 for the top 5% and top 20% of families and later for the other 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 4.6% in 1987 to 4.2% in 1997, to 4.1% in 2007, and to 3.8% in 2017. The share of income going to the top 5% of families rose from 17.2% in 1987 to 20.7% in 1997. It was 20.1% in 2007 and 20.7% in 2017. (U.S. Census Bureau, Table F-2)
- Average published tuition and fees for in-state students attending public four-year colleges rose by \$6,770 (in 2017 dollars) over this 30-year period—57% of the increase in income (\$11,840) of the middle 20% of families and 9% of the increase in income (\$77,650) of the 20% of families in the highest income bracket. (Online Table 2; calculations by the authors)

Enrollment Patterns over Time

Public two-year colleges enrolled about 1 million fewer students in fall 2016 than in fall 2010 (a decline of 12%), and for-profit institutions enrolled about 840,000 fewer students (a decline of 42%) over this period. But both sectors enrolled more students in 2016 than they did in 2005.

FIGURE 21 Postsecondary Fall Enrollment by Attendance Status and Level of Enrollment (with Percentage of All Students Enrolled in Each Sector), 2000 to 2016, Selected Years



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

SOURCES: NCES, IPEDS Fall Enrollment data, 2000, 2005, 2010, and 2016; calculations by the authors.

- Even after the dramatic enrollment declines in for-profit institutions, this sector enrolled about 1.2 million students in fall 2016, compared with 450,000 in fall 2000.
- The enrollment decline in the for-profit sector was primarily among full-time undergraduate students. In 2016, these students made up 52% of for-profit enrollment—a decline from 63% in 2010.
- Enrollment continued to increase in both the public and private nonprofit four-year sectors between 2010 and 2016. In fall 2016, these sectors enrolled 39% and 20%, respectively, of all postsecondary students.

ALSO IMPORTANT:

- All of the students reported in Figure 21 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 and 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 21, 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 21, four-year colleges are defined as institutions where bachelor's degrees comprise more than half of all degrees awarded. Reclassifying colleges that offer any bachelor's degrees as four-year institutions would increase the percentage of total postsecondary enrollments in public four-year colleges from the 39% reported here to 44%.

Total Postsecondary Enrollment (in Millions)

Year	Enrollment (in Millions)
2000	15.3
2005	17.3
2010	20.8
2016	19.7

Public Enrollment by State

Total full-time equivalent (FTE) enrollment in public colleges and universities in the United States increased by 11% between 2006 and 2016—from 9.4 million to 10.4 million. However, changes across states ranged from declines of 10% in Illinois and 5% in Alaska to increases of 24% in Oregon and 25% in Texas.

FIGURE 22A Percentage Change in Full-Time Equivalent (FTE) Enrollment in Public Institutions by State, Fall 2006 to Fall 2016

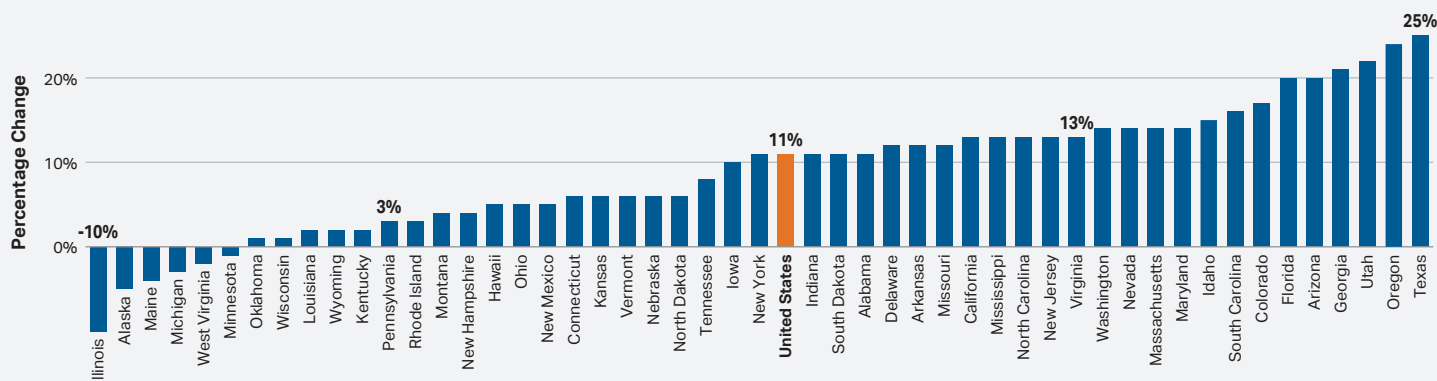
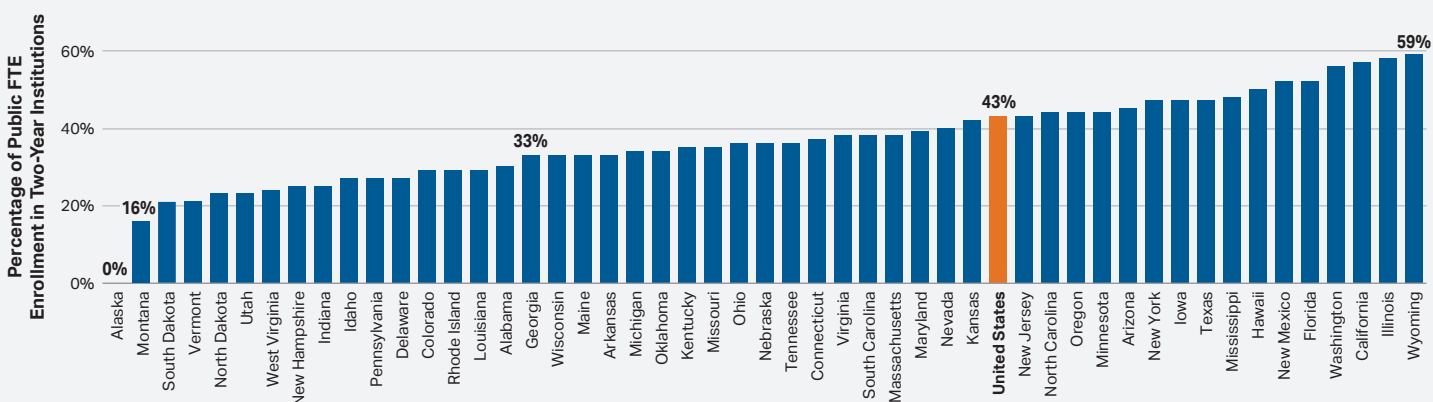


FIGURE 22B Percentage of All Public Full-Time Equivalent (FTE) Undergraduate Enrollment in Two-Year Institutions by State, Fall 2016



NOTES: Two-year institutions are defined as institutions where more than 50% of degrees/certificates awarded are associate degrees or certificates, even if they award some bachelor's degrees. Students who are not included in the percentages reported in Figure 22B are enrolled in public four-year colleges and universities.

SOURCES: NCES, IPEDS Fall Enrollment data, 2006 and 2016; calculations by the authors.

- Between 2006 and 2016, enrollment increased by 20% or more in six states and declined in six 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 2016. In seven states, this share was 50% or more; in another seven states, it was less than 25%.

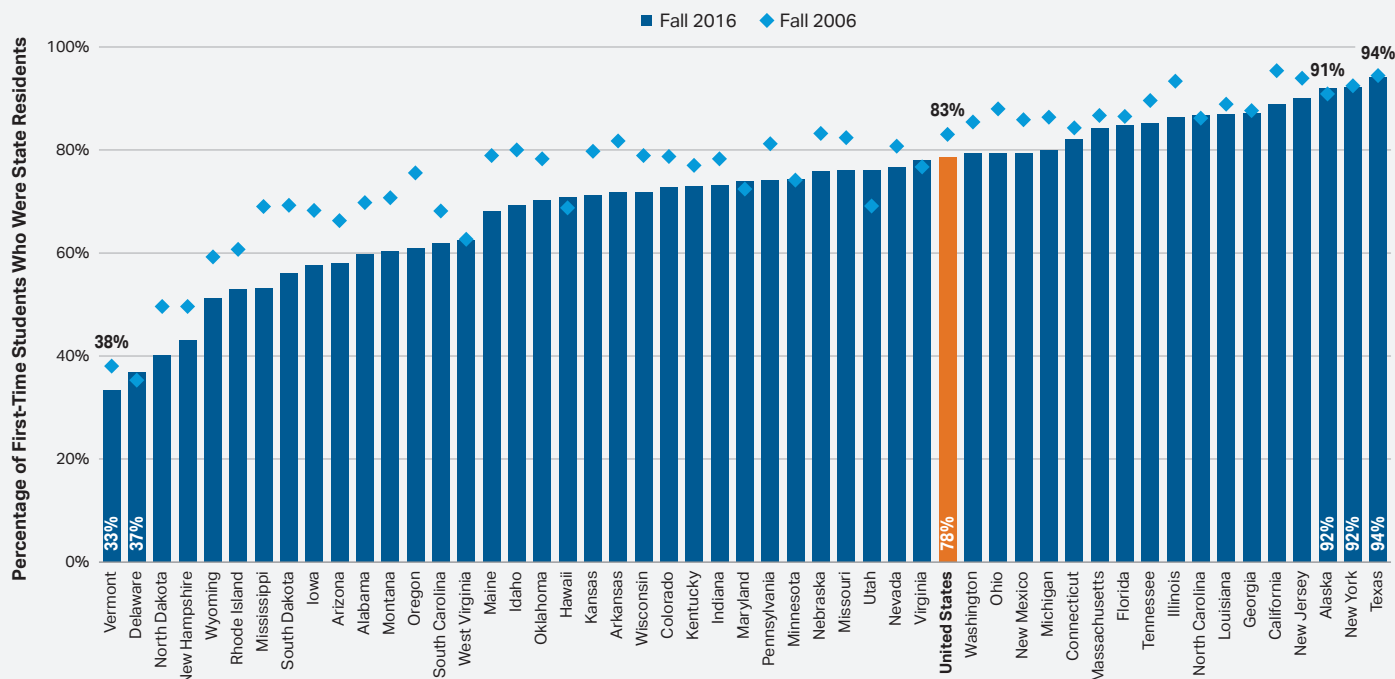
ALSO IMPORTANT:

- California and Texas, which together enrolled 23% of the nation's public college and university students in 2016, accounted for 35% of the overall increase in FTE enrollment over the decade.
- Between 2006 and 2016, graduate enrollment increased by 14%, compared with 11% for undergraduates, but 90% of the FTE students enrolled in public colleges and universities were undergraduates and 10% were graduate students in both 2006 and 2016.

Migration

The percentage of first-time public four-year college students who were residents of the states in which they were enrolled declined from 83% in fall 2006 to 78% in fall 2016.

FIGURE 23 Percentage of First-Time Students at Public Four-Year Institutions Who Were State Residents, Fall 2006 and Fall 2016



NOTE: Four-year institutions include only those institutions where more than 50% of degrees/certificates awarded are bachelor's degrees or higher.

SOURCES: NCES, IPEDS Fall Enrollment data, 2006 and 2016; calculations by the authors.

- In fall 2016, the percentage of first-time students at public four-year institutions who were state residents ranged from 33% in Vermont and 37% in Delaware to 92% in Alaska and New York and 94% in Texas.
- Between 2006 and 2016, the percentage of students who were state residents declined the most in Mississippi (from 69% to 53%) and in Oregon (from 75% to 61%).
- In seven states, the percentage of first-time students at public four-year institutions who were state residents increased between fall 2006 and fall 2016. The largest increases were 7 percentage points (from 69% to 76%) in Utah and 2 percentage points (from 69% to 71%) in Hawaii.

ALSO IMPORTANT:

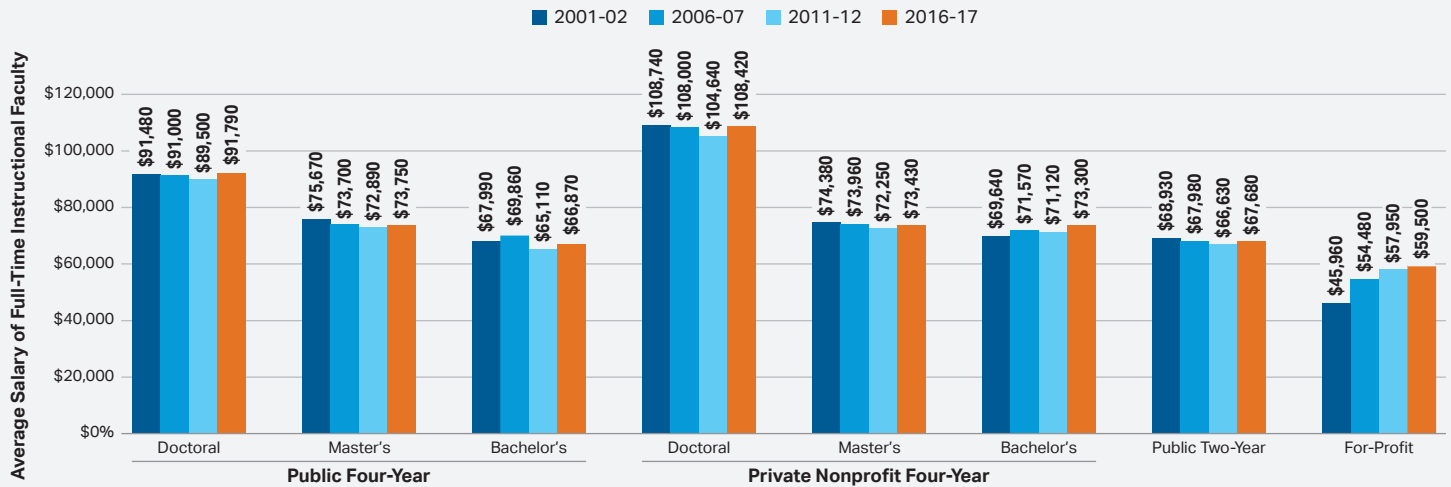
- Figure 23 shows the percentage of all first-time students enrolled in public four-year institutions in the state who were state residents. An alternative measure is the percentage of students from the state enrolling in four-year colleges anywhere who attend in-state public institutions. In 2016, when 90% of first-year students at the New Jersey public four-year colleges were residents, only 34% of state residents who enrolled in a four-year college chose an in-state public four-year institution.
- In 2016, although only 40% of first-year students at North Dakota's public four-year institutions were state residents, 63% of state residents who enrolled in a four-year college chose an in-state public four-year institution—higher than the national average of 55%.
- Because nonresidents pay higher tuition than in-state students, public institutions can increase their tuition revenues by enrolling more out-of-state students.



Faculty and Staff

Between 2001-02 and 2016-17, average faculty salaries increased by less than 1% (after adjusting for inflation) at public doctoral universities, by 5% at private nonprofit bachelor's colleges, and by 29% at for-profit institutions. Average faculty salaries did not keep up with inflation in other sectors.

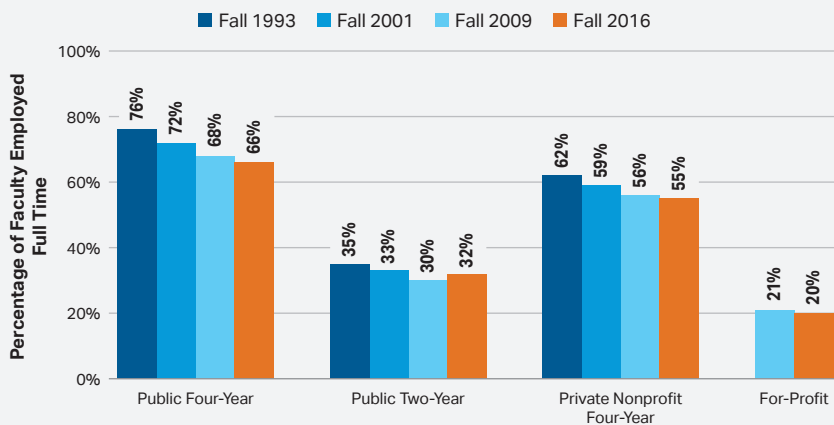
FIGURE 24A Average Salary of Full-Time Instructional Faculty, 2001-02 to 2016-17, Selected Years



NOTE: Includes instructional faculty on nine-month contracts in degree-granting institutions and excludes instructional faculty at medical schools.

SOURCE: NCES, *Digest of Education Statistics*, 2007, Table 248; 2013, Table 316.20; 2017, Table 316.20.

FIGURE 24B Percentage of Faculty in Degree-Granting Postsecondary Institutions Employed Full Time, Fall 1993 to Fall 2016, Selected Years



SOURCE: NCES, *Digest of Education Statistics*, 1994, Table 223; 2002, Table 227; 2010, Table 259; 2017, Table 314.30.

- In fall 2016, only 20% of faculty in the for-profit sector were employed full time and their average salary was \$59,500, lower than in any other sector.
- In 2016-17, the average salary for full-time faculty at public doctoral universities was about 15% lower than the average salary at private nonprofit doctoral universities. Average salaries are similar at public and private nonprofit master's universities.
- The share of faculty employed full time fell rapidly in the public four-year, public two-year, and private nonprofit four-year sectors from fall 1993 to fall 2009, but stabilized over the next seven years.

ALSO IMPORTANT:

- Average fringe benefits (including health, retirement, and other benefits) increased from 25% of faculty salaries in 2001-02 to 29% in 2011-12 and 35% in 2017-18. (AAUP, *The Annual Report on the Economic Status of the Profession*, 2001-02, 2011-12, and 2017-18)
- In 2017-18, average retirement benefits ranged from 7% of salaries at private nonprofit four-year institutions without religious affiliation to 14% at public two-year colleges. Average expenditures on medical benefits ranged from \$6,390 at private nonprofit religiously affiliated four-year institutions to \$8,770 at public two-year colleges. (AAUP, *The Annual Report on the Economic Status of the Profession*, 2017-18, Tables B and C)

Notes and Sources

THE ANNUAL SURVEY OF COLLEGES

Prices for the public two-year, public four-year, and private nonprofit four-year sectors in this report are based on data reported to the College Board in its Annual Survey of Colleges. Data for 2018-19 are from an online questionnaire distributed in October 2017, with data collected and reviewed through August 2018. 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 2017-18 used in this analysis differ somewhat from the 2017-18 averages reported last year because of revised price data and updated enrollment weighting. Prices for all years through 2016-17 are weighted by same-year full-time enrollments. 2017-18 and 2018-19 prices are weighted by fall 2016 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 2018* 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, 2012, and 2016 National Postsecondary Student Aid Study (NPSAS) data and IPEDS Student Financial Aid data. Because financial aid data for 2018-19 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 2017 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."

Trends in College Pricing was authored by Jennifer Ma, senior policy research scientist at the College Board; Sandy Baum, nonresident fellow at the Urban Institute; Matea Pender, policy research scientist at the College Board; and CJ Libassi, senior policy research analyst at the College Board.

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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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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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