

Trends in Higher Education Series

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# Trends in College Pricing **2019**



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# Highlights

From 2001-02 through 2012-13, annual increases in published tuition and fees exceeding 5% (or exceeding the overall rate of inflation by more than 2 or 3 percentage points) were common. Beginning in 2013-14, however, the rate of increase in published prices slowed considerably at public two-year and four-year and private nonprofit four-year institutions.

At public four-year institutions, the smaller price increases combined with increases in institutional and state grant aid slowed the growth of the average net price students pay in recent years. In the private nonprofit four-year sector, where institutional grants are the dominant source of aid and price increases have been more consistent over the more recent decade, the average net price fell over the first half of the decade, but rose by about \$800 between 2014-15 and 2019-20.

## **PUBLISHED TUITION AND FEES AND ROOM AND BOARD**

**Average published in-state tuition and fees in the public four-year sector increased by \$230 (2.3% before adjusting for inflation), from \$10,210 in 2018-19 to \$10,440 in 2019-20. Average total tuition and fee and room and board charges in 2019-20 are \$21,950. (Table 1)**

- Average published out-of-state tuition and fees at public four-year institutions rose by \$620 (2.4%), from \$26,200 in 2018-19 to \$26,820 in 2019-20. Average total charges in 2019-20 are \$38,330. (Table 1)
- Average published tuition and fees at private nonprofit four-year institutions rose by \$1,200 (3.4%), from \$35,680 in 2018-19 to \$36,880 in 2019-20. Average total charges in 2019-20 are \$49,870. (Table 1)
- Average published in-district tuition and fees at public two-year colleges increased by \$100 (2.8%), from \$3,630 in 2018-19 to \$3,730 in 2019-20. (Table 1)
- Average tuition and fees for full-time students in the for-profit sector were \$14,600 in 2018-19. (Table 1)

## **GROWTH IN COLLEGE PRICES**

**Between 2009-10 and 2019-20, published in-state tuition and fees at public four-year institutions increased at an average rate of 2.2% per year beyond inflation, compared with 3.9% between 1989-90 and 1999-00 and 5.0% between 1999-00 and 2009-10. (Figure 4A)**

- The 2.2% average annual rate of increase in inflation-adjusted tuition and fees in the public four-year sector corresponds to an average annual increase of \$200 in 2019 dollars, compared with \$170 per year from 1989-90 to 1999-00 and \$330 per year from 1999-00 to 2009-10. (Figure 4A)
- In the public two-year and private nonprofit four-year sectors, published prices are more than twice as high in inflation-adjusted dollars in 2019-20 as they were in 1989-90. The average in-state public four-year tuition and fee price is about three times as high as it was in 1989-90. (Figure 4B)

## **VARIATION IN TUITION AND FEES**

**The median published tuition and fee price for full-time students attending public or private nonprofit four-year institutions in 2019-20 is \$12,710; 25% of these students attend institutions with prices below \$9,000 and 26% attend institutions charging \$30,000 or more. (Figure 2)**

- The average published tuition and fee price at public doctoral universities is 27% higher than that at public master's universities (\$11,380 vs. \$8,990). In the private nonprofit sector, this difference is 46% (\$45,380 vs. \$31,140). (Table 1)
- In 2019-20, average published tuition and fees for in-district students at public two-year colleges range from \$1,430 in California and \$1,860 in New Mexico to \$7,100 in New Hampshire and \$8,210 in Vermont. (Figure 5)
- In 2019-20, average published tuition and fees for in-state students at public four-year institutions range from \$5,580 in Wyoming and \$6,350 in Florida to \$16,920 in New Hampshire and \$17,470 in Vermont. (Figure 6)
- The out-of-state price is four and a half times as high as the in-state price at the flagship university in Florida and four times as high in North Carolina; it is less than 50% higher in North Dakota and South Dakota. (Figure 7)
- In five states, average published in-state tuition and fees at public four-year institutions fell between 2014-15 and 2019-20, after adjusting for inflation. In nine states, the price increased by 15% or more. (Figure 6)

## **WHAT STUDENTS ACTUALLY PAY**

**On average, full-time students at public two-year colleges receive more than enough aid in 2019-20 to cover tuition and fees, but the estimated \$400 they have available to put toward other expenses is a decline from almost \$1,000 in 2010-11. Out-of-pocket living expenses average \$8,600. (Figure 8)**

- Average published tuition and fees at public four-year institutions rose by \$590 from \$9,850 (in 2019 dollars) in 2014-15 to \$10,440 in 2019-20. Over these five years, average net tuition and fees rose about \$400. (Figure 9)
- In 2015-16, average net tuition and fees at public four-year colleges for full-time dependent students from the lowest-income families were \$2,340—compared with \$11,150 for those from the highest-income families; average other expenses after grant aid were \$12,210 and \$14,640, respectively. (Figure 11)
- The average net tuition and fees for full-time students at private nonprofit four-year institutions rose from \$13,400 (in 2019 dollars) in 2011-12 to \$14,400 in 2019-20; the net price remains below its level from 2001-02 through 2008-09. (Figure 10)
- Between 2003-04 and 2015-16, the average net price for dependent students from low-income families at for-profit institutions rose 36%, from \$8,830 (in 2015 dollars) to \$12,020; the average net price for low-income students in the private nonprofit sector fell by 2% to \$7,580. (Figure 12)

## PUBLIC FUNDING

State and local funding per student rose in 2017-18 (in inflation-adjusted dollars) for the sixth consecutive year, following four years of decline. Funding per student fell by 23% from \$8,610 (in 2017 dollars) in 2007-08 to \$6,590 in 2012-13, and then rose by 19% to \$7,850 in 2017-18. (Figure 15B)

- Between 2007-08 and 2012-13, the combination of a 15% decline in total funding and an 11% increase in enrollment led to a 23% decline in state and local funding per public sector student. By contrast, between 2012-13 and 2017-18, a 15% increase in total funding and a 3% decline in enrollment led to a 19% increase in funding per student. (Figure 15B)
- In 2017-18, state and local funding per student was 9% lower (after adjusting for inflation) than a decade earlier (\$7,850 vs. \$8,610) and 10% lower than in 1987-88 (down from \$8,700). (Figure 15B)
- In 2017-18, state and local funding for public higher education ranged from \$3,070 per full-time equivalent (FTE) student in New Hampshire and \$3,190 in Vermont to \$16,940 in Hawaii and \$17,700 in Alaska. (Figure 16)

## INSTITUTIONAL FINANCES

Between 2006-07 and 2016-17, educational expenditures per FTE student increased by 17% in inflation-adjusted dollars at public doctoral universities, 18% at master's universities, 9% at bachelor's colleges, and 12% at two-year colleges in the public sector. (Figure 18)

- Between 2006-07 and 2016-17, average educational expenditures per FTE student rose by 16% in inflation-adjusted dollars at private nonprofit doctoral universities, 13% at master's institutions, and 9% at bachelor's institutions in the sector. (Figure 18)
- In 2016-17, 46% of educational costs at private nonprofit doctoral universities and 40% at bachelor's colleges was subsidy to students not covered by net tuition revenue. The subsidy share was 15% at private nonprofit master's institutions. (Figure 18)
- The subsidy portion of educational expenditures declined from 61% to 40% at public doctoral universities, from 62% to 46% at master's institutions, from 66% to 56% at bachelor's colleges, and from 74% to 65% at two-year colleges in the sector between 2001-02 and 2016-17. (Figure 18)
- In 2016-17, per-student revenues from government sources and net tuition were \$27,670 at doctoral, \$15,830 at master's, \$14,180 at bachelor's, and \$11,700 at associate institutions in the public sector. (Figure 17)
- In 2016-17, the 10% of students enrolled in the private doctoral universities with the highest endowments per student benefited from endowments averaging \$1.22 million per FTE student. The median endowment per FTE student in this sector was \$63,500. (Figure 19)

## ENROLLMENT PATTERNS

Total postsecondary enrollment fell by 196,000 (1%) between fall 2015 and fall 2017. There were 118,000 (2%) more students at public four-year and 60,000 (2%) more at private nonprofit four-year institutions, but 127,000 (2%) fewer at public two-year colleges and 247,000 (18%) fewer in the for-profit sector. (Figure 21)







- Graduate students rose from 10% of all students in the for-profit sector in fall 2000 to 15% in 2010 and 23% in 2017. Despite the sharp decline in enrollment in the sector between 2010 and 2017, there were more than twice as many students enrolled in 2017 (1.1 million) as in 2000 (450,000). (Figure 21)
- Ten percent of black undergraduates attend for-profit institutions—more than twice the share of any other group enrolled in that sector. (Figure 23A)
- Total FTE enrollment in public institutions in the United States increased by 8% between 2007 and 2017—from 9.6 million to 10.4 million. Changes across states ranged from declines of 13% in Illinois and 10% in Alaska to increases of 24% in Utah and 26% in Texas. (Figure 22A)
- Overall, two-year colleges accounted for 42% of the public FTE undergraduate enrollment in 2017. In seven states, this share was 50% or more; in eight states, it was less than 25%. (Figure 22B)
- In 2015-16, 28% of full-time undergraduates lived on campus; a similar share lived with their parents and 44% lived off campus but not with parents. (Figure 14)


## COLLEGE AFFORDABILITY

Average published tuition and fees for in-state students attending public four-year colleges rose by \$6,850 (in 2018 dollars) between 1988 and 2018—53% of the increase in income (\$13,000) of the middle 20% of families and 8% of the increase in income (\$87,930) of the 20% of families with the highest incomes. (Page 29)

- In 2018, the average income of the highest 20% of families was 3.3 times that of the middle 20% (\$261,760 vs. \$78,970 in 2018 dollars). It was 2.6 times as high in 1988. (Figure 20A)
- In 2018, the \$121,060 median income of families headed by a four-year college graduate was more than twice the median for families headed by a high school graduate. (Figure 20B)
- Tuition and fees constitute 39% of the total budget for in-state students living on campus at public four-year institutions and 20% of the budget for public two-year college students who pay for off-campus housing. (Figure 1).
- Taking longer to earn a degree increases the price of college. Of 2015-16 bachelor's degree recipients, 41% completed their degrees within four years of first enrolling in college; 59% finished within five years. (Figure 13)


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# Introduction

After rising at an average rate of 5.0% beyond inflation between 1999-00 and 2009-10 and 3.2% per year between 2009-10 and 2014-15, average published tuition and fees at public four-year colleges and universities rose 1.2% per year between 2014-15 and 2019-20. In 2019-20, the increase was 0.5% (2.3% before adjusting for inflation). Although this news is encouraging, prices have risen rapidly for many years at the same time that household incomes have grown slowly, inequality has increased, and too many students are struggling with repaying student loans.

To understand what tuition increases mean for college affordability, it is important to focus on net prices after grant aid, in addition to household incomes and the earnings payoff to college degrees. Despite the slower growth in published prices, the average net price paid by full-time public four-year college students rose more between 2009-10 and 2019-20 than over the preceding decade. Both Pell Grants and federal tax benefits per student declined after rapid growth in 2009-10, and the increase in institutional grant aid was not large enough to compensate. But most of this increase in net price was in the early part of the decade. Over the most recent five years, increases in grant aid covered about 30% of the relatively small increase in tuition and fees.

At public two-year colleges, where about a quarter of full-time undergraduates are enrolled, more than half of the grant aid comes from the Pell Grant program. Declines in that aid combined with price increases have led to the average student having about \$400 in grant aid available for books, supplies, and living expenses after covering tuition and fees in 2019-20—a decline from almost \$1,000 in 2010-11. In the private nonprofit four-year sector, where price increases have been much steadier over the decade, average net price was lower in 2014-15 than in 2009-10 but has risen since.

As this report documents, income inequality has been increasing for decades. The dollar increase in the average income of the top 5% of families between 1988 and 2018 was more than twice as large as the average income for the middle quintile of families and nine times as large as the average income of the lowest fifth of families in 2018. Given this reality, understanding how families pay for college requires separate analyses for families in different financial circumstances.

In addition to information on tuition and fees and family incomes, *Trends in College Pricing 2019* 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. Potentially relevant factors include changes in enrollments and state funding levels, the composition of institutional revenues and expenditures, 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.

Understanding 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 2018*, Table 326.10). Similarly, as *Trends in College Pricing 2019* documents, 41% of 2015-16 bachelor's degree recipients completed their degrees within four years of first enrolling. For 16%, more than 10 years elapsed before they completed their studies. Although most of these students were not enrolled continuously for so many years, they generally paid more tuition, borrowed more, and often sacrificed more labor market earnings than those who graduated "on time." 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 ages 25 to 34 had median earnings 63% (\$19,550) higher than those in the same age range with high school diplomas in 2018 (U.S. Census Bureau, 2018 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. *Trends in College Pricing 2019* also includes information on the living arrangements of college students. In 2015-16, 28% of full-time undergraduates taking courses in classroom settings lived on campus; a similar share lived with their parents and 44% lived off campus but not with parents. 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. Books and supplies are clearly added costs associated with being a student, but many of the other non-tuition expenses are similar to those people face when they are not in school.

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. Although most students work at least part time while they are enrolled, forgone wages are the biggest cost for many. Because of the difficulty of measuring this cost, we make no attempt to do so in this report. Since 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.

As is the case each year, *Trends in College Pricing 2019* includes estimates of both the average net tuition and fees and the average net tuition and fees and room and board full-time students pay in the public and private nonprofit sectors after taking grant aid and tax benefits into consideration. 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 about \$8,600 per year in nontuition expense—an amount that has increased by about \$1,100 since 2011-12. These net expenses average more than \$15,000 for public four-year college undergraduates and more than \$27,000 for those enrolled in private nonprofit four-year colleges and universities.

The report also includes information on net prices over time for students with different family incomes and dependency status at public, private nonprofit, and for-profit institutions. These estimates, based on data from the National Postsecondary Student Aid Study (NPSAS), use a different methodology and are not precisely comparable to the average net prices reported every year in *Trends*.

## DISTRIBUTIONAL ISSUES

Because of the variation in tuition and fees and other budget components, the data in the *Trends* reports cannot accurately predict the financial circumstances of individual students. Both average published and net prices by sector and by type of institution, state, or income level conceal considerable variation across students. For example, in some states, some public four-year institutions charge much more than others. Some institutions offer more grant aid than others. The nontuition components of student budgets also differ from student to student, depending partially on their living arrangements.

However, as data from the 2016 NPSAS 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—and despite the growing share of federal student aid that is not based on financial circumstances—most aid 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 for different students 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.

Each year, *Trends in College Pricing* includes information on the changing distribution of family incomes. This year we note that in 2018, median incomes for black and Hispanic families were 59% and 62%, respectively, of the median for white families and the 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. Average published tuition and fees for in-state students attending public four-year colleges rose by \$6,850 (in 2018 dollars) between 1988 and 2018—53% of the increase in income (\$13,000) of the

middle 20% of families and 8% of the increase in income (\$87,930) of the 20% of families with the highest incomes. These facts highlight the reality that family background has a significant impact on the challenges students face financing a college education.

## 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 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. Some states, including Georgia and Wisconsin, have merged some of their two-year institutions with four-year institutions. Changes like these can have a measurable impact on the average prices we report by sector, particularly at the state level. For these reasons, the average published prices for each sector that *Trends in College Pricing 2019* reports are not precise measures.

*Trends in College Pricing 2019* 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. More information about this sector is critical to understanding the circumstances of students enrolled there, who face particular challenges with college completion and student debt.

### *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 [research.collegeboard.org/trends](http://research.collegeboard.org/trends). 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, 2019-20

The average published tuition and fee price for full-time in-state students at public four-year colleges and universities is \$10,440 in 2019-20, \$230 (2.3% before adjusting for inflation) higher than it was in 2018-19.

**TABLE 1** Average Published Charges (Enrollment-Weighted) for Full-Time Undergraduates, 2018-19 and 2019-20

	Sector					Carnegie Classification					
	Public Two-Year In-District	Public Four-Year In-State	Public Four-Year Out-of-State	Private Nonprofit Four-Year	For-Profit	Public Four-Year			Private Nonprofit Four-Year		
						Doctoral	Master's	Bachelor's	Doctoral	Master's	Bachelor's
<b>Tuition and Fees</b>											
2019-20	\$3,730	\$10,440	\$26,820	\$36,880	—	\$11,380	\$8,990	\$8,730	\$45,380	\$31,140	\$36,360
2018-19	\$3,630	\$10,210	\$26,200	\$35,680	\$14,600	\$11,140	\$8,760	\$8,530	\$43,820	\$30,070	\$35,350
\$ Change	\$100	\$230	\$620	\$1,200	—	\$240	\$230	\$200	\$1,560	\$1,070	\$1,010
% Change	2.8%	2.3%	2.4%	3.4%	—	2.2%	2.6%	2.3%	3.6%	3.6%	2.9%
<b>Room and Board</b>											
2019-20	\$8,990	\$11,510	\$11,510	\$12,990	—	\$11,990	\$10,580	\$10,730	\$14,780	\$12,240	\$12,020
2018-19	\$8,720	\$11,190	\$11,190	\$12,610	—	\$11,650	\$10,290	\$10,370	\$14,320	\$11,920	\$11,640
\$ Change	\$270	\$320	\$320	\$380	—	\$340	\$290	\$360	\$460	\$320	\$380
% Change	3.1%	2.9%	2.9%	3.0%	—	2.9%	2.8%	3.5%	3.2%	2.7%	3.3%
<b>Tuition and Fees and Room and Board</b>											
2019-20	\$12,720	\$21,950	\$38,330	\$49,870	—	\$23,370	\$19,570	\$19,460	\$60,160	\$43,380	\$48,380
2018-19	\$12,350	\$21,400	\$37,390	\$48,290	—	\$22,790	\$19,050	\$18,900	\$58,140	\$41,990	\$46,990
\$ Change	\$370	\$550	\$940	\$1,580	—	\$580	\$520	\$560	\$2,020	\$1,390	\$1,390
% Change	3.0%	2.6%	2.5%	3.3%	—	2.5%	2.7%	3.0%	3.5%	3.3%	3.0%

**NOTES:** Prices in Table 1 are not adjusted for inflation. Prices reported for 2018-19 have been revised to reflect the most recent information and may differ from those reported in *Trends in College Pricing 2018*. Public two-year room and board charges are estimated based on commuter housing and food costs. Prices for the for-profit sector are from IPEDS and the latest available data are for 2018-19.

**SOURCES:** College Board, Annual Survey of Colleges; NCES, IPEDS Fall 2017 Enrollment data and IPEDS 2018 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 2017. Public four-year in-state charges are weighted by total fall 2017 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 2019-20 increase in published tuition and fees was largest in the private nonprofit sector, where the average price increased by 3.4% (\$1,200) to \$36,880.
- The average published tuition and fee price at public doctoral universities is 27% higher than that at public master's universities (\$11,380 vs. \$8,990). In the private nonprofit sector, this difference is 46% (\$45,380 vs. \$31,140).
- The \$14,600 average tuition and fee price for full-time students enrolled in for-profit institutions in 2018-19 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.

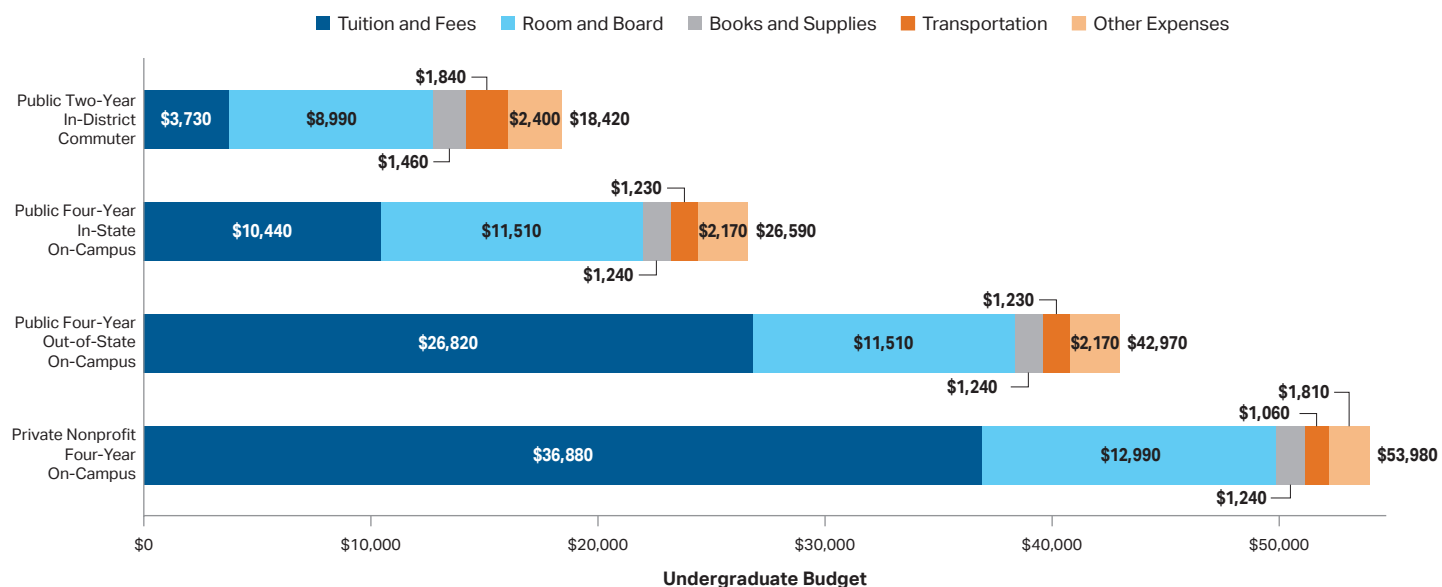
## ALSO IMPORTANT:

- 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—frequently more than four years for a bachelor's degree and more than two years for 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 19% 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 \$3,730 to \$4,260.

# Student Budgets, 2019-20

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

**FIGURE 1** Average Estimated Full-Time Undergraduate Budgets (Enrollment-Weighted) by Sector, 2019-20



**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. Books and supplies may include the cost of a personal computer used for study. 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 2017 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 64% lower than the price at public four-year colleges, the total student budget is just 31% lower (\$18,420 vs. \$26,590).
- The average in-state published tuition and fee price at public four-year institutions is 72% lower than the average price at private nonprofit four-year institutions, but the average student budget is about half the size (\$26,590 vs. \$53,980).

## ALSO IMPORTANT:

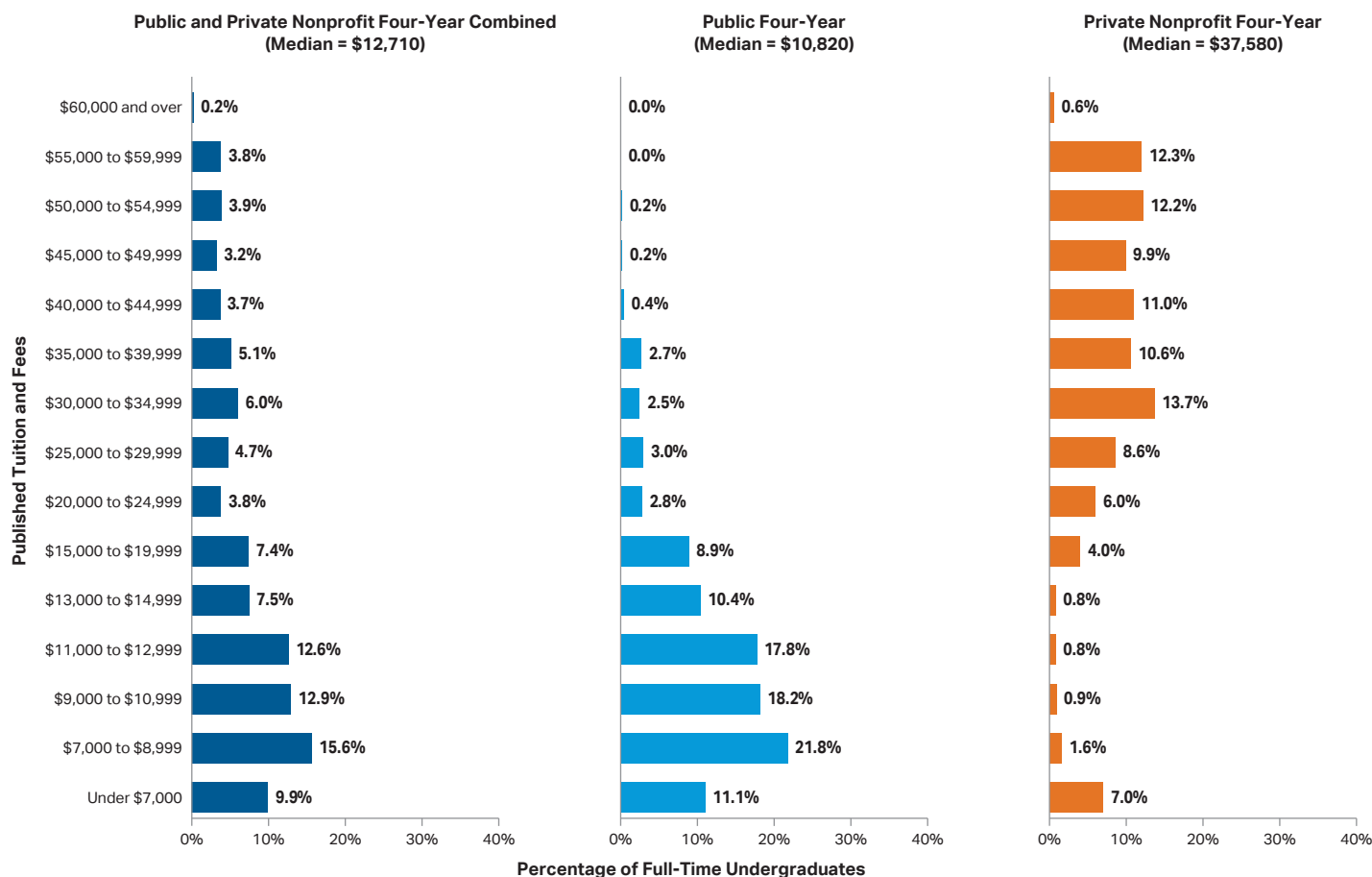
- Between 2014-15 and 2019-20, tuition and fees rose more than other items in student budgets at private nonprofit four-year institutions; at public two-year and four-year institutions, room and board rose most.
- People pay for housing, food, and other living expenses whether or not they are in college. However, a 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.
- According to the National Association of College Stores, in 2018-19, students spent an average of \$415 on course materials, \$419 on technology, and \$108 on supplies. (Student Watch: 2019 Report)



# Variation in Tuition and Fees, 2019-20

The median published tuition and fee price for full-time students attending public or private nonprofit four-year institutions in 2019-20 is \$12,710; 25% of these students attend institutions with prices below \$9,000 and 26% attend institutions charging \$30,000 or more.

**FIGURE 2** Distribution of Full-Time Undergraduates at Four-Year Institutions by Published Tuition and Fees, 2019-20



**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 2017. Percentages may not sum to 100 because of rounding.

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

- In 2019-20, about one-third of all full-time public four-year undergraduates, including both in-state and out-of-state students, are enrolled in institutions with published tuition and fee levels below \$9,000, just over one-third are in institutions with prices between \$9,000 and \$13,000, and just under one-third face prices of \$13,000 or more.
- Half of the full-time students enrolled at private nonprofit four-year colleges and universities in 2019-20 face published tuition and fee prices of \$37,580 or less and half are at institutions with higher published prices. For 21% of these students, the price is less than \$25,000; for 25%, it is \$50,000 or more.

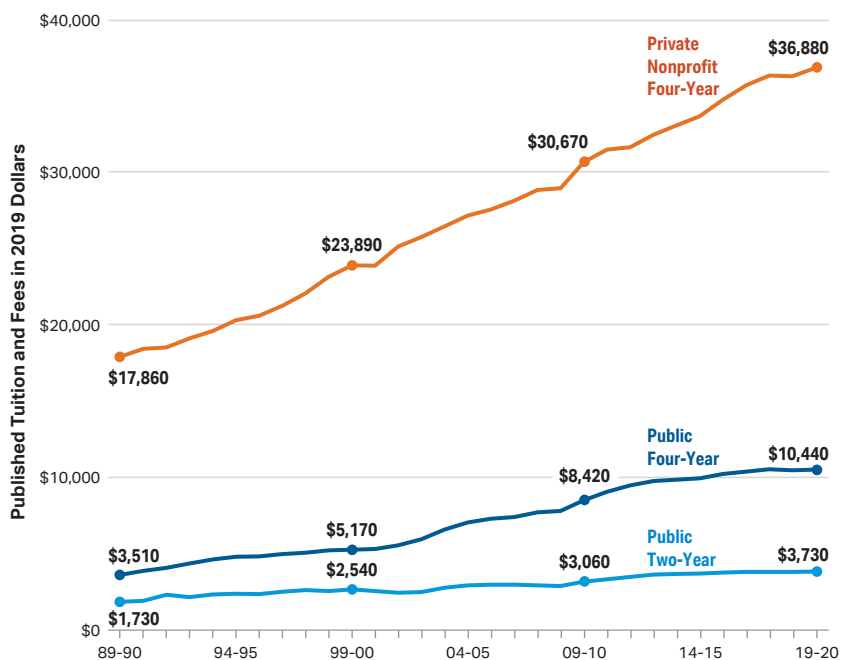
## ALSO IMPORTANT:

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

# Published Charges over Time

Between 2009-10 and 2019-20, average published tuition and fee prices rose by \$670 (in 2019 dollars) at public two-year colleges, by \$2,020 at public four-year institutions, and by \$6,210 at private nonprofit four-year colleges and universities.

**FIGURE 3** Average Published Tuition and Fees in 2019 Dollars by Sector, 1989-90 to 2019-20



- The average published tuition and fee price at public two-year colleges was 49% of the average price at public four-year institutions in 1989-90 and 1999-00; it was 36% of the public four-year price in 2009-10 and 2019-20.
- 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 1989-90 and 3.5 times that price in 2019-20.

## 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 2 are adjusted for inflation and are smaller than the unadjusted figures in Table 1.

**TABLE 2** Average Tuition and Fees and Room and Board in 2019 Dollars, 1989-90 to 2019-20, Selected Years

Academic Year	Tuition and Fees in 2019 Dollars						Tuition and Fees and Room and Board in 2019 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
89-90	\$17,860		\$3,510		\$1,730		\$25,900		\$9,730	
99-00	\$23,890	\$6,030	\$5,170	\$1,660	\$2,540	\$810	\$33,060	\$7,160	\$12,440	\$2,710
09-10	\$30,670	\$6,780	\$8,420	\$3,250	\$3,060	\$520	\$41,780	\$8,720	\$18,160	\$5,720
19-20	\$36,880	\$6,210	\$10,440	\$2,020	\$3,730	\$670	\$49,870	\$8,090	\$21,950	\$3,790
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
09-10	\$30,670		\$8,420		\$3,060		\$41,780		\$18,160	
10-11	\$31,500	2.7%	\$8,980	6.7%	\$3,220	5.2%	\$42,920	2.7%	\$19,040	4.8%
11-12	\$31,660	0.5%	\$9,400	4.7%	\$3,370	4.7%	\$43,120	0.5%	\$19,490	2.4%
12-13	\$32,470	2.6%	\$9,690	3.1%	\$3,530	4.7%	\$44,180	2.5%	\$19,960	2.4%
13-14	\$33,090	1.9%	\$9,760	0.7%	\$3,560	0.8%	\$44,990	1.8%	\$20,190	1.2%
14-15	\$33,690	1.8%	\$9,850	0.9%	\$3,600	1.1%	\$45,710	1.6%	\$20,390	1.0%
15-16	\$34,770	3.2%	\$10,140	2.9%	\$3,660	1.7%	\$47,170	3.2%	\$21,040	3.2%
16-17	\$35,720	2.7%	\$10,310	1.7%	\$3,690	0.8%	\$48,350	2.5%	\$21,480	2.1%
17-18	\$36,380	1.8%	\$10,460	1.5%	\$3,710	0.5%	\$49,260	1.9%	\$21,790	1.4%
18-19	\$36,330	-0.1%	\$10,390	-0.7%	\$3,700	-0.3%	\$49,160	-0.2%	\$21,790	0.0%
19-20	\$36,880	1.5%	\$10,440	0.5%	\$3,730	0.8%	\$49,870	1.4%	\$21,950	0.7%

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

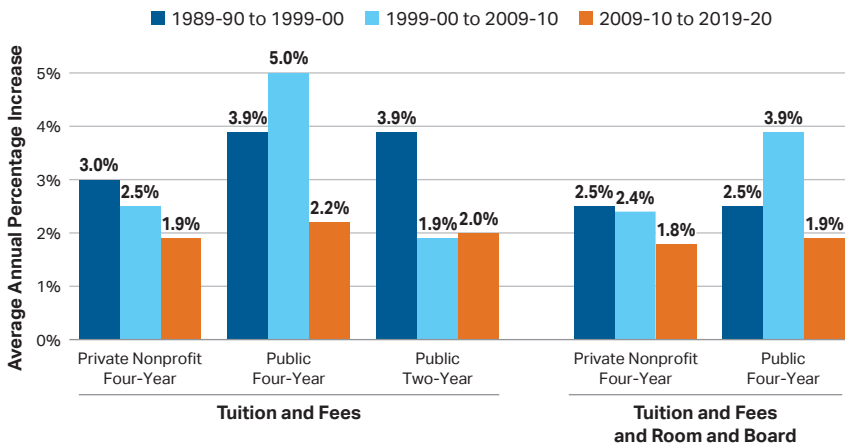
**SOURCES:** College Board, Annual Survey of Colleges; NCES, IPEDS Fall Enrollment data.



# Published Charges over Time

Between 2009-10 and 2019-20, published in-state tuition and fees at public four-year institutions increased at an average rate of 2.2% per year beyond inflation, compared with average annual increases of 3.9% and 5.0% over the two prior decades.

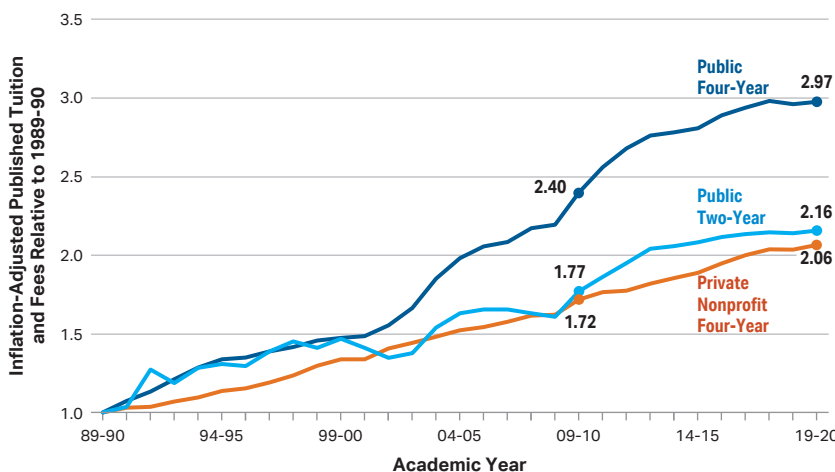
**FIGURE 4A** Average Annual Percentage Increase in Inflation-Adjusted Published Prices by Decade, 1989-90 to 2019-20



**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 2009-10 to 2019-20, average published tuition and fees at private nonprofit four-year colleges increased by an average of 1.9% 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 1989-90, 1989-90 to 2019-20 (1989-90 = 1.0)



**NOTES:** Figure 4B shows published tuition and fees by sector, adjusted for inflation, relative to 1989-90 published prices. For example, a value of 2.97 indicates that the tuition and fee price in the public four-year sector in 2019-20 is 2.97 times as high as it was in 1989-90, 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.

- Between 2009-10 and 2019-20, published in-state tuition and fees in the public four-year sector increased by an average of \$200 per year in 2019 dollars, compared with \$170 per year between 1989-90 and 1999-00 and \$330 per year between 1999-00 and 2009-10. (Table 2)
- The average annual rate of increase in published tuition and fees at private nonprofit four-year institutions declined from 3.0% between 1989-90 and 1999-00 to 2.5% over the next decade and to 1.9% between 2009-10 and 2019-20. The average dollar increases were \$600, \$680, and \$620, per year, respectively, over the three decades. (Table 2)
- Between 2009-10 and 2019-20, total tuition, fees, room, and board rose at average rates of 1.9% per year at public four-year and 1.8% per year at private nonprofit four-year institutions.
- In 2019-20, 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 1989-90. Published prices are 2.16 as high in the public two-year sector and 2.06 times as high in the private nonprofit four-year sector in 2019-20 as they were in 1989-90.
- Published tuition and fee prices rose by about 50% in both the public four-year and public two-year sectors from 1989-90 through 1999-00. By 2009-10 the public four-year price had risen by another 63%, compared with 20% at public two-year colleges. Since then, the rate of price increase has been similar in the two sectors.

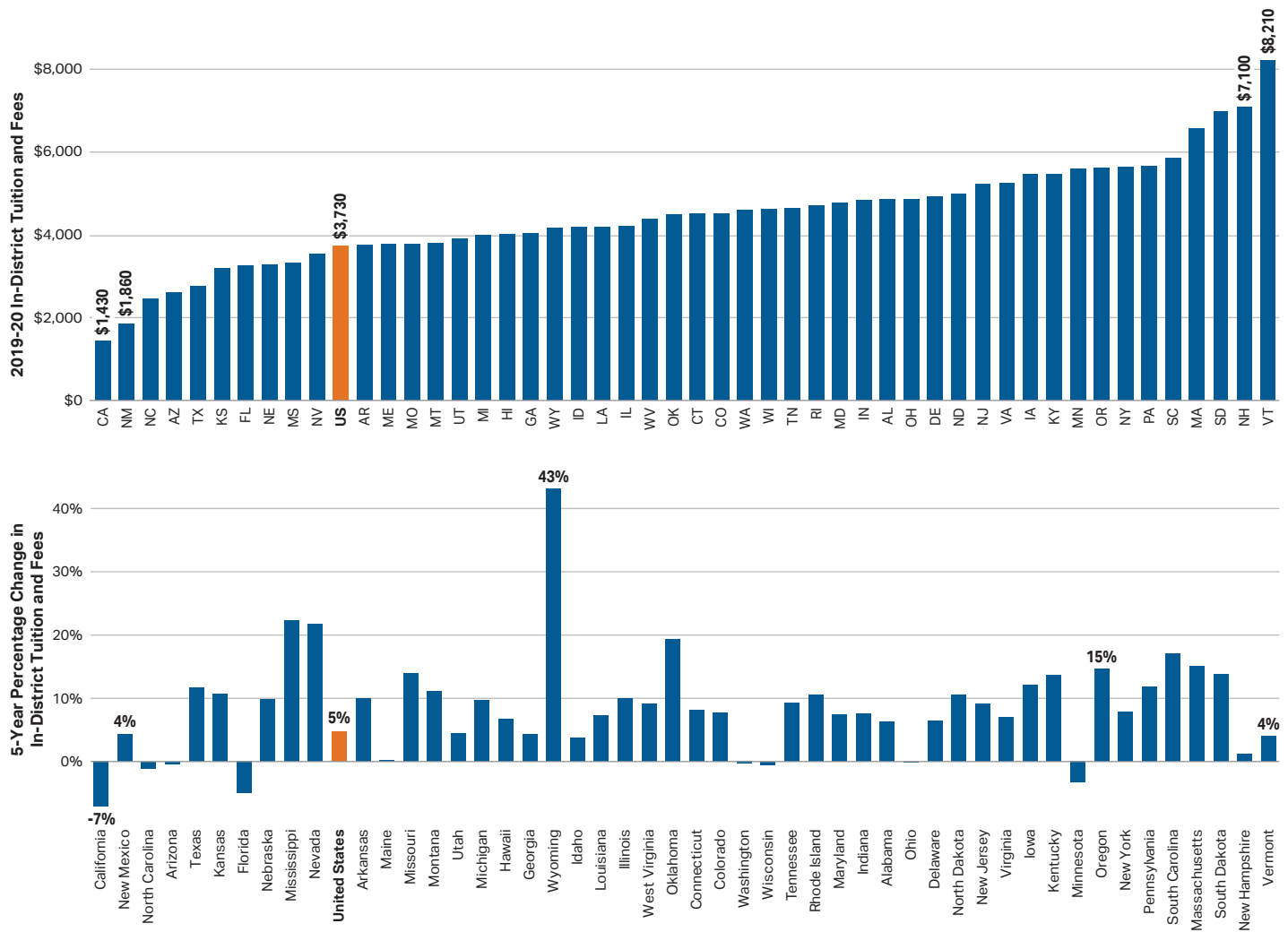
## ALSO IMPORTANT:

- Median family income in the United States increased at an average rate of 1.0% per year between 1989 and 1999, fell by 0.5% per year between 1999 and 2009, and rose by 1.2% per year between 2009 and 2018 (after adjusting for inflation). It was 19% higher in 2018 than in 1988. (U.S. Census Bureau, 2018 Income Data, Table F-7; calculations by the authors)
- The largest inflation-adjusted annual increases in tuition and fees between 1989-90 and 2019-20 were: public four-year—11.1% (2003-04) and 9.4% (2009-10); private nonprofit four-year—5.3% (2001-02) and 5.9% (2009-10); public two-year—22.9% (1991-92) and 11.8% (2003-04). The published price increase was smaller than the rise in the Consumer Price Index in all three sectors in 2018-19 and in one additional year in the private nonprofit four-year sector and seven additional years in the public two-year sector.

# Tuition and Fees by State: Public Two-Year

In 2019-20, average published tuition and fees for in-district students at public two-year colleges range from \$1,430 in California and \$1,860 in New Mexico to \$7,100 in New Hampshire and \$8,210 in Vermont.

**FIGURE 5** Average 2019-20 In-District Tuition and Fees at Public Two-Year Institutions and Five-Year Percentage Changes 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 2017 Enrollment data.

- In eight states, average tuition and fees at public two-year colleges fell in inflation-adjusted dollars between 2014-15 and 2019-20. In four of these states (Minnesota, Ohio, Washington, and Wisconsin), the 2019-20 price remains above the national average.
- In six states, average tuition and fees at public two-year colleges increased by 15% or more in inflation-adjusted dollars between 2014-15 and 2019-20. In Mississippi and Nevada, despite 22% price increases (compared with the national average of 5%), the average 2019-20 price is below the national average.

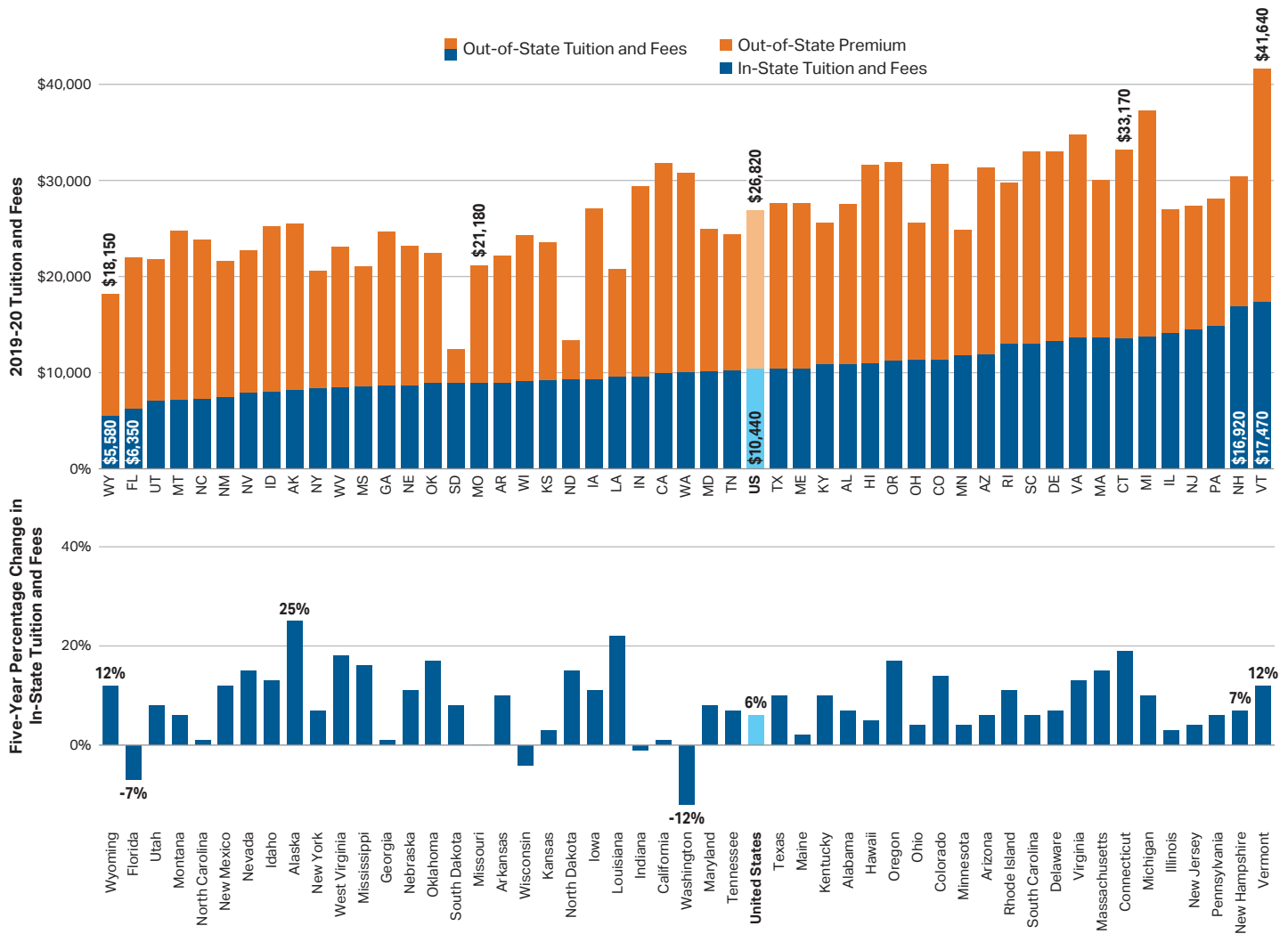
## ALSO IMPORTANT:

- California enrolled 19% of the nation's full-time public two-year students in fall 2017.
- In 2019-20, average public two-year tuition and fees did not increase in nine states; the price rose by more than \$200 in six states.
- Figure 5 does not reflect "free" community college programs, which generally provide aid to students, rather than eliminating the tuition price.

# Tuition and Fees by State: Public Four-Year

In 2019-20, average published tuition and fee prices for in-state students at public four-year institutions range from \$5,580 in Wyoming and \$6,350 in Florida to \$16,920 in New Hampshire and \$17,470 in Vermont.

**FIGURE 6** Average 2019-20 Tuition and Fees at Public Four-Year Institutions and Five-Year Percentage Changes in Inflation-Adjusted In-State Tuition and Fees, by State



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

- In five states, average published in-state tuition and fees at public four-year institutions fell between 2014-15 and 2019-20, after adjusting for inflation. In another nine states, the five-year increase was below 5%.
- In nine states, average in-state tuition and fees at public four-year institutions increased by 15% or more between 2014-15 and 2019-20. In five of these states, the average published price remains more than \$1,500 below the national average.
- In 10 states, the average published out-of-state tuition and fee price is more than three times the in-state price. In six states, the out-of-state price is less than twice the in-state price.

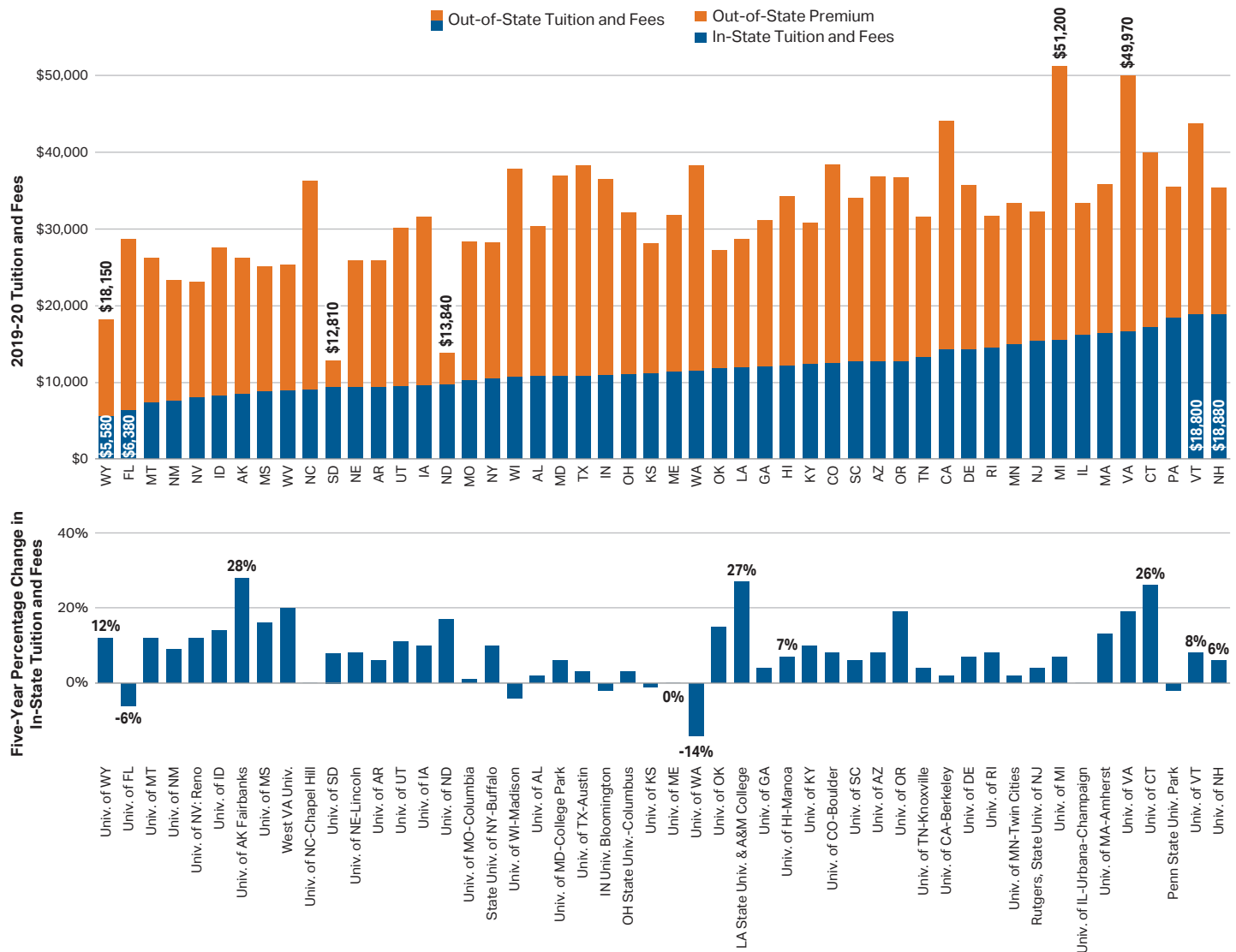
## ALSO IMPORTANT:

- The out-of-state premium was lower in 2019-20 than in 2018-19 in three states.
- The average published tuition and fee price at public four-year institutions in Florida was the same in 2019-20 as in 2018-19. In four other states, the increase was less than 1% (before adjusting for inflation); in 21 states, the increase was less than \$200 and in five states it was more than \$500.

# Tuition and Fees by State: Flagship Universities

In 2019-20, published tuition and fees for full-time in-state students at flagship universities range from \$5,580 at the University of Wyoming and \$6,380 at the University of Florida to \$18,800 at the University of Vermont and \$18,880 at the University of New Hampshire.

**FIGURE 7** 2019-20 Tuition and Fees at Flagship Universities and Five-Year Percentage Changes in Inflation-Adjusted In-State Tuition and Fees



SOURCE: College Board, Annual Survey of Colleges.

- Public flagship universities in six states—including Florida, with the second lowest tuition and fees, and Pennsylvania, with the third highest—had lower in-state tuition and fees (after adjusting for inflation) in 2019-20 than in 2014-15.
- In 2019-20, the published prices for out-of-state students at flagship universities range from \$12,810 in South Dakota and \$13,840 in North Dakota to \$49,970 in Virginia and \$51,200 in Michigan.
- The out-of-state price is four and a half times as high as the in-state price in Florida and four times as high in North Carolina; it is less than 50% higher in North Dakota and South Dakota.

## ALSO IMPORTANT:

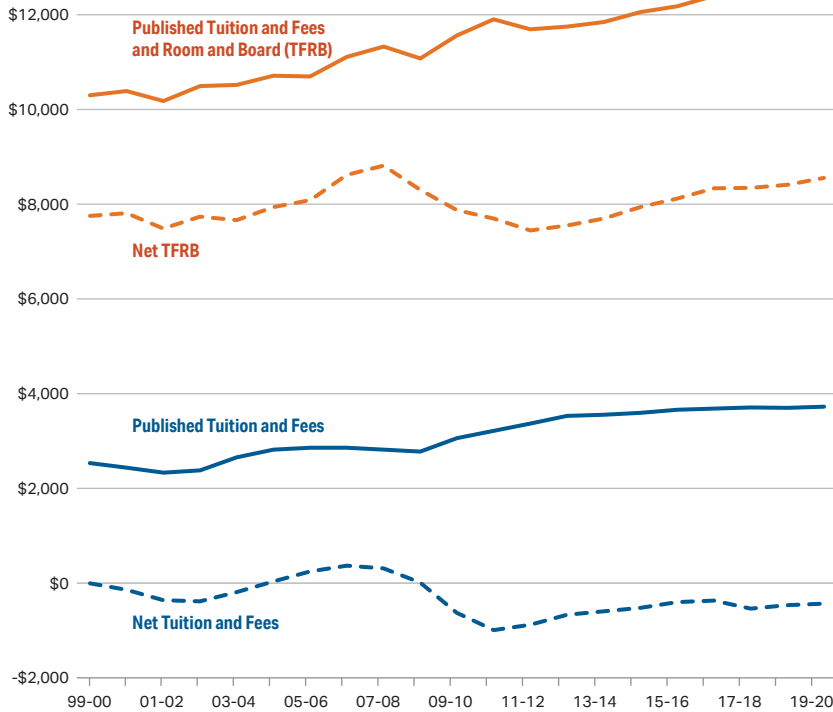
- The flagship universities in Alabama, Florida, North Carolina and Oklahoma did not raise their in-state tuition in 2019-20; price increases exceeded the 1.8% increase in the Consumer Price Index in 31 states.
- Twenty-nine states' flagships raised their published out-of-state tuition and fees more rapidly than their in-state price between 2014-15 and 2019-20; in 21 states the reverse was true.



# Average Net Price: Public Two-Year

On average, full-time students at public two-year colleges receive enough grant aid and tax benefits to cover their tuition and fees, but the estimated \$400 they have available to put toward other expenses in 2019-20 is a decline from almost \$1,000 in 2010-11.

**FIGURE 8** Average Published and Net Prices in 2019 Dollars, Full-Time In-District Undergraduate Students at Public Two-Year Institutions, 1999-00 to 2019-20



- In 2019-20, full-time students at public two-year colleges must cover an average of about \$8,600 in room and board after grant aid and tax benefits, in addition to paying for books and supplies and other living expenses.
- Between 1999-00 and 2009-10, average grant aid and tax benefits to public two-year college students rose about \$600 more than tuition and fees, reducing net prices.
- Between 2009-10 and 2019-20, the average published tuition and fees at public two-year colleges increased by \$670 in 2019 dollars. Average estimated grant aid and tax benefits increased by less than \$500 over the decade.

### ALSO IMPORTANT:

- California, which has the lowest public two-year tuition and fees in the nation, enrolls about 19% 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 \$390 lower (in 2019 dollars) in 2019-20 than in 2010-11.

Average Published and Net Prices and Average Grant Aid and Tax Benefits per Student in 2019 Dollars, Full-Time In-District Undergraduate Students at Public Two-Year Institutions, 1999-00 to 2019-20, Selected Years

	99-00	04-05	09-10	14-15	15-16	16-17	17-18	18-19	19-20 (preliminary)
Published Tuition and Fees	\$2,540	\$2,820	\$3,060	\$3,600	\$3,660	\$3,690	\$3,710	\$3,700	\$3,730
Published Tuition and Fees and Room and Board (TFRB)	\$10,300	\$10,720	\$11,570	\$12,060	\$12,180	\$12,400	\$12,600	\$12,570	\$12,720
Net Tuition and Fees	\$0	\$40	-\$630	-\$520	-\$400	-\$350	-\$530	-\$460	-\$430
Net TFRB	\$7,760	\$7,940	\$7,880	\$7,940	\$8,120	\$8,360	\$8,360	\$8,410	\$8,560
Grant Aid and Tax Benefits per Student	\$2,540	\$2,780	\$3,690	\$4,120	\$4,060	\$4,040	\$4,240	\$4,160	\$4,160

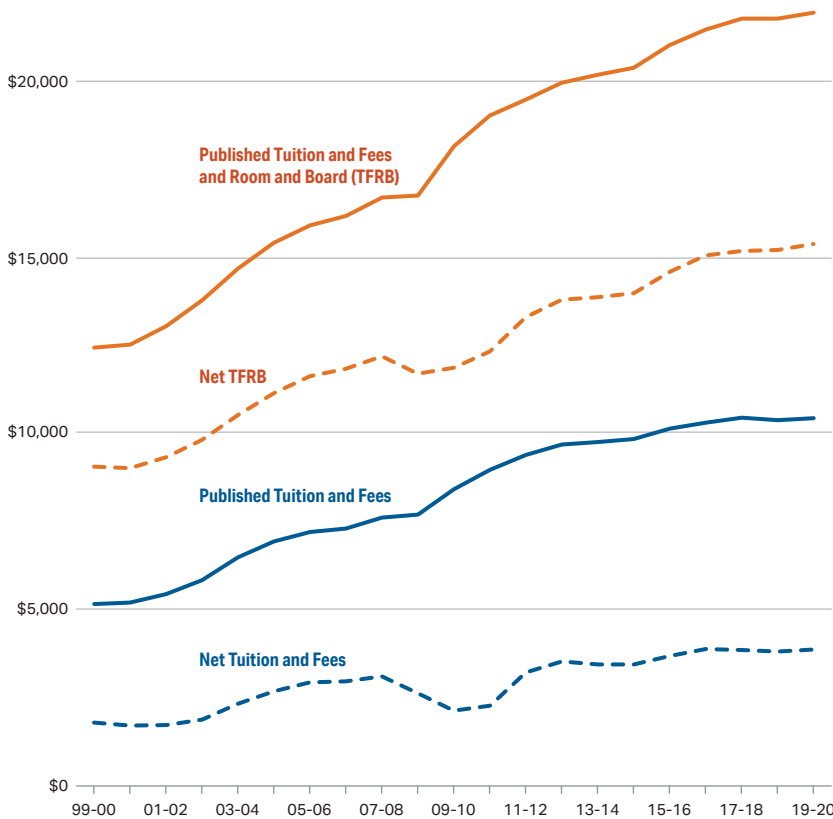
**NOTES:** Estimates of net price exclude military/veterans' aid, which awards relatively large amounts to a small number of students. Because information on grant aid and education tax benefits for 2019-20 is not yet available, the net price for 2019-20 is estimated based on 2018-19 financial aid data. Room and board expenses are estimated based on housing and food costs for commuter students.

**SOURCES:** College Board, Annual Survey of Colleges; *Trends in Student Aid 2019*; NCES, IPEDS Fall Enrollment and Student Financial Aid data.

# Average Net Price: Public Four-Year

Between 2009-10 and 2019-20, the increase in average grant aid and tax benefits covered only about \$300 (15%) of the \$2,000 increase in published tuition and fees for full-time in-state students at public four-year colleges and universities.

**FIGURE 9** Average Published and Net Prices in 2019 Dollars, Full-Time In-State Undergraduate Students at Public Four-Year Institutions, 1999-00 to 2019-20



- Between 1999-00 and 2009-10, the increase in average grant aid and tax benefits covered about \$2,900 (90%) of the \$3,300 tuition and fee increase.
- Financial aid grew slightly more while tuition grew much more slowly between 2014-15 and 2019-20 than over the previous five years. As a result, average net price at public four-year institutions rose by about \$400 (in 2019 dollars) between 2014-15 and 2019-20, compared with about \$1,300 over the first half of the decade.
- In 2019-20, full-time in-state students at public four-year colleges must cover an average of about \$15,400 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.

### 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 on average \$1,500 more grant aid per student than in-state students. (NPSAS, 2016)
- About 85% of the increase in grant aid per student at public four-year colleges and universities between 2009-10 and 2019-20 came from increases in institutional grant aid.

Average Published and Net Prices and Average Grant Aid and Tax Benefits per Student in 2019 Dollars, Full-Time In-State Undergraduate Students at Public Four-Year Institutions, 1999-00 to 2019-20, Selected Years

	99-00	04-05	09-10	14-15	15-16	16-17	17-18	18-19	19-20 (preliminary)
Published Tuition and Fees	\$5,170	\$6,950	\$8,420	\$9,850	\$10,140	\$10,310	\$10,460	\$10,390	\$10,440
Published Tuition and Fees and Room and Board (TFRB)	\$12,440	\$15,420	\$18,160	\$20,390	\$21,040	\$21,480	\$21,790	\$21,790	\$21,950
Net Tuition and Fees	\$1,800	\$2,690	\$2,140	\$3,450	\$3,690	\$3,950	\$3,880	\$3,820	\$3,870
Net TFRB	\$9,070	\$11,160	\$11,880	\$13,990	\$14,590	\$15,120	\$15,210	\$15,220	\$15,380
Grant Aid and Tax Benefits per Student	\$3,370	\$4,260	\$6,280	\$6,400	\$6,450	\$6,360	\$6,580	\$6,570	\$6,570

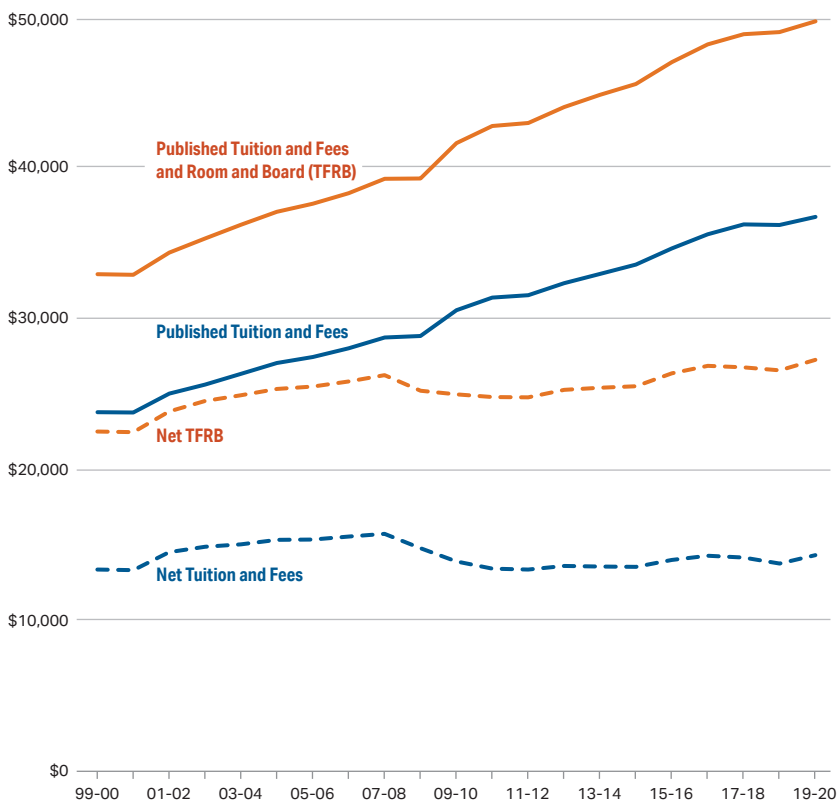
**NOTES:** Estimates of net price exclude military/veterans' aid, which awards relatively large amounts to a small number of students. Because information on grant aid and education tax benefits for 2019-20 is not yet available, the net price for 2019-20 is estimated based on 2018-19 financial aid data.

**SOURCES:** College Board, Annual Survey of Colleges; *Trends in Student Aid 2019*; NCES, IPEDS Fall Enrollment and Student Financial Aid data.

# Average Net Price: Private Nonprofit Four-Year

The average net tuition and fee price paid by full-time students enrolled in private nonprofit four-year institutions increased from about \$13,400 (in 2019 dollars) in 2011-12 to an estimated \$14,400 in 2019-20; this net price remains below its level from 2001-02 through 2008-09.

**FIGURE 10** Average Published and Net Prices in 2019 Dollars, Full-Time Undergraduate Students at Private Nonprofit Four-Year Institutions, 1999-00 to 2019-20



- In 2019-20, full-time students at private nonprofit four-year colleges must cover an average of about \$27,400 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 2009-10 and 2019-20, the average published tuition and fees at private nonprofit four-year colleges and universities increased by \$6,200 in 2019 dollars; average grant aid and tax benefits per student increased by about \$5,800. The average net tuition and fee price declined from about \$14,000 in 2009-10 to \$13,600 in 2014-15 before rising to an estimated \$14,400 in 2019-20.
- The share of tuition and fees covered by average grant aid from all sources and federal education tax benefits rose from 44% in 1999-00 to 54% in 2009-10 and to 61% in 2019-20.

## ALSO IMPORTANT:

- In 2019-20, about 70% of the \$22,500 in grant aid and tax benefits 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 2019 Dollars, Full-Time Undergraduate Students at Private Nonprofit Four-Year Institutions, 1999-00 to 2019-20, Selected Years

	99-00	04-05	09-10	14-15	15-16	16-17	17-18	18-19	19-20 (preliminary)
Published Tuition and Fees	\$23,890	\$27,160	\$30,670	\$33,690	\$34,770	\$35,720	\$36,380	\$36,330	\$36,880
Published Tuition and Fees and Room and Board (TFRB)	\$33,060	\$37,210	\$41,780	\$45,710	\$47,170	\$48,350	\$49,020	\$49,160	\$49,870
Net Tuition and Fees	\$13,430	\$15,390	\$13,960	\$13,600	\$14,070	\$14,400	\$14,250	\$13,830	\$14,380
Net TFRB	\$22,600	\$25,440	\$25,070	\$25,620	\$26,470	\$27,030	\$26,890	\$26,660	\$27,370
Grant Aid and Tax Benefits per Student	\$10,460	\$11,770	\$16,710	\$20,090	\$20,700	\$21,320	\$22,130	\$22,500	\$22,500

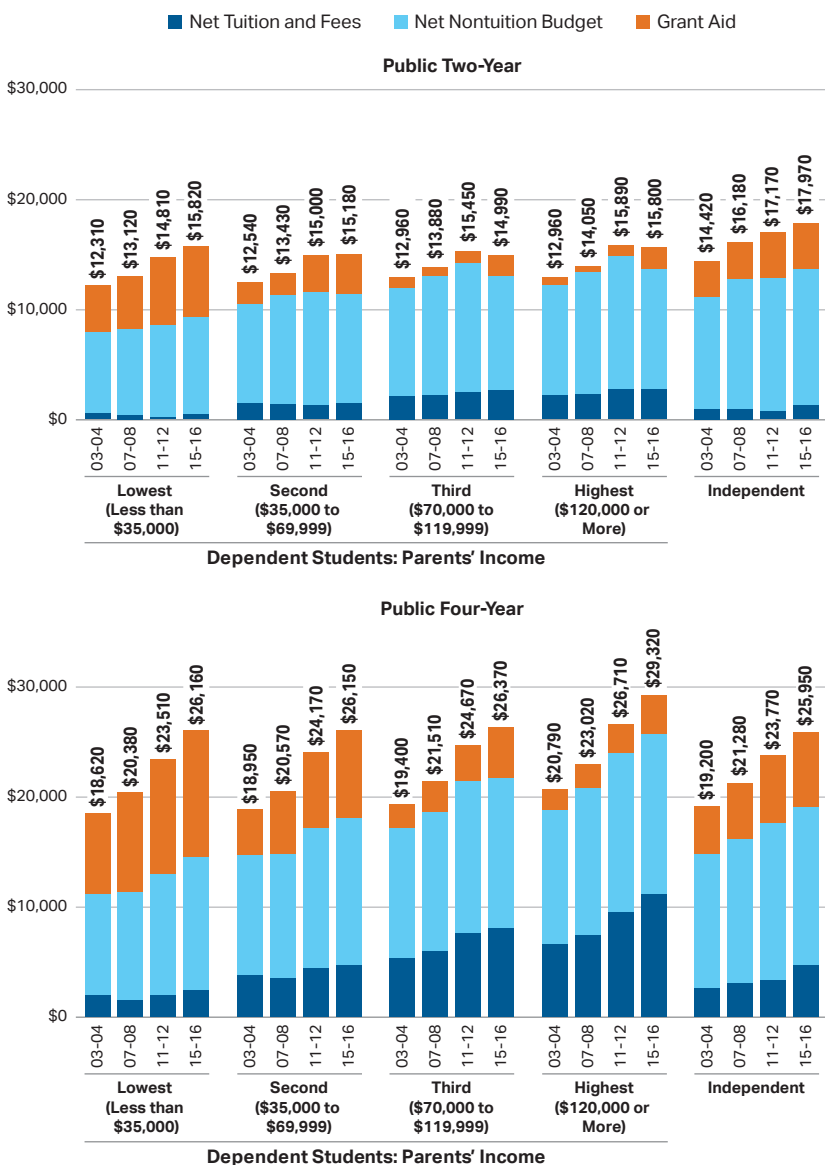
**NOTES:** Estimates of net price exclude military/veterans' aid, which awards relatively large amounts to a small number of students. Because information on grant aid and education tax benefits for 2019-20 is not yet available, the net price for 2019-20 is estimated based on 2018-19 financial aid data.

**SOURCES:** College Board, Annual Survey of Colleges; *Trends in Student Aid 2019*; NCES, IPEDS Fall Enrollment and Student Financial Aid data.

# Net Price by Income: Public Institutions

In 2015-16, full-time public two-year dependent college students from the lowest-income families (less than \$35,000 per year) paid about 20% of the net tuition and fees paid by the highest-income students (\$120,000 or more). However, their net total budgets are about two-thirds as high as those for higher-income students.

**FIGURE 11** Average Net Tuition and Fees, Net Other Expenses, and Grant Aid in 2015 Dollars by Income and Dependency Status, Public Institutions, 2003-04, 2007-08, 2011-12 and 2015-16



**NOTES:** Grant aid includes grants from all sources but not federal tax credits and deductions. It excludes military and veterans' benefits. Figure 11 is based on the NPSAS calculation of net tuition and fees, which applies any grant aid individual students receive in excess of the tuition and fee price to the other expenses in their budgets, including books and supplies, housing, food, and transportation. Figures 8, 9 and 10 estimate average net tuition and fees by subtracting average grant aid from average tuition and fees, which can yield negative net tuition and fee prices. Income is for the year preceding the academic year; income cutoffs are in 2014 dollars.

**SOURCES:** NCES, National Postsecondary Student Aid Study (NPSAS), 2004, 2008, 2012, 2016; calculations by the authors.

- Between 2007-08 and 2011-12 and again between 2011-12 and 2015-16, grant aid at public two-year colleges grew most rapidly for dependent students from families with incomes of \$70,000 or higher. For the lowest-income students, average total grant aid rose from \$4,880 (in 2015 dollars) in 2007-08 to \$6,490 in 2015-16; for the highest-income students, average grant aid rose from \$520 to \$2,060 over these years.
- In 2015-16, the average net tuition and fee price for full-time public four-year college students from the lowest-income families was \$2,340—compared with \$11,150 for those from the highest-income families; average other expenses after grant aid were \$12,210 and \$14,640, respectively.
- For dependent students at all income levels in the public four-year sector, average net tuition and fees rose more slowly between 2011-12 and 2015-16 than over the previous four years; however, this was not the case for independent students.

## ALSO IMPORTANT:

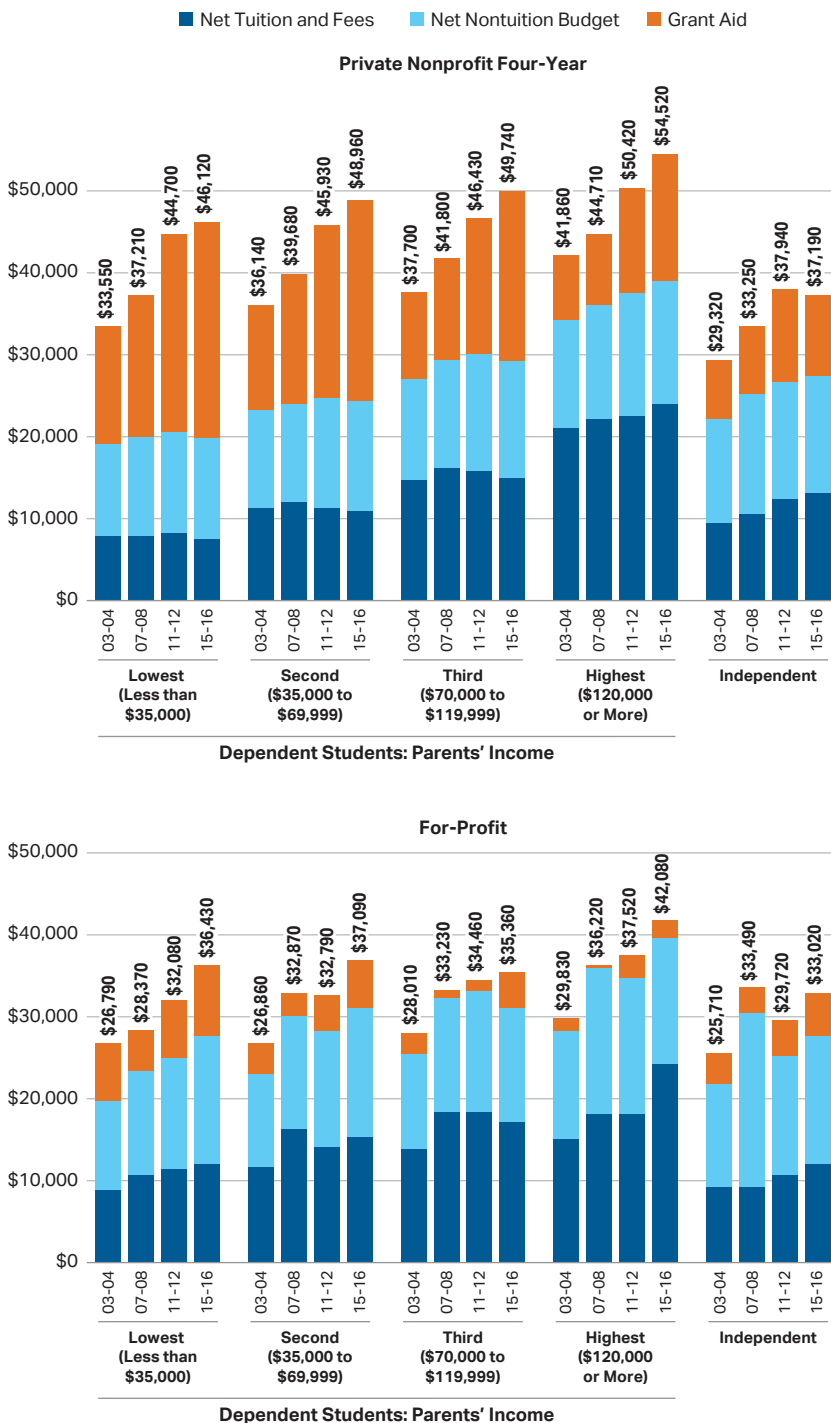
- The sources of grant aid differ across income and dependency groups. For example, in 2015-16, full-time dependent students from families with incomes below \$35,000 at public two-year colleges received 75% of their grant aid from the federal government and 6% from their institutions; for those from families with incomes of \$120,000 or higher, these shares were 1% federal and 45% institutional. (*Trends in Student Aid 2018*, Figure 18)
- In 2015-16, full-time dependent students from families with incomes below \$35,000 at public four-year institutions received 46% of their grant aid from the federal government and 20% from their institutions; for those from families with incomes of \$120,000 or higher, these shares were 1% federal and 57% institutional. (*Trends in Student Aid 2018*, Figure 18)



# Net Price by Income: Private Institutions

The average net tuition and fees paid by full-time students from families with incomes below \$35,000 at private nonprofit four-year institutions rose by \$710, from \$7,710 (in 2015 dollars) to \$8,420 between 2003-04 and 2011-12 and fell to \$7,580 in 2015-16.

**FIGURE 12** Average Net Tuition and Fees, Net Nontuition Budget, and Grant Aid (in 2015 Dollars) by Income and Dependency Status, Private Institutions, 2003-04, 2007-08, 2011-12 and 2015-16



- The average net tuition and fee price paid by full-time students from the highest-income families at private nonprofit four-year institutions rose by \$1,310, from \$21,050 (in 2015 dollars) to \$22,360 between 2003-04 and 2011-12, and by another \$1,610 to \$23,970 in 2015-16.
- In 2007-08, average grant aid per full-time student at private nonprofit four-year institutions was \$17,330 (in 2015 dollars) for those from the lowest-income families and \$8,630 for those from the highest-income families. In 2015-16, these averages were \$26,160 and \$15,490, respectively.
- Average net tuition and fee price for dependent students from the lowest-income families at for-profit institutions rose 36%, from \$8,830 (in 2015 dollars) in 2003-04 to \$12,020 in 2015-16; the average net price for lowest-income students in the private nonprofit sector fell by 2% over these years.
- In 2015-16, the average net tuition and fee price for independent students was \$12,110 at for-profit institutions and \$13,160 at private nonprofit four-year colleges and universities.

## ALSO IMPORTANT:

- In 2015-16, full-time dependent students from families with incomes below \$35,000 at private nonprofit four-year institutions received 22% of their grant aid from the federal government and 63% from their institutions; for those from families with incomes of \$120,000 or higher, these shares were 0% federal and 85% institutional. (*Trends in Student Aid 2018*, Figure 19)
- In 2015-16, full-time dependent students from families with incomes below \$35,000 at for-profit institutions received 59% of their grant aid from the federal government and 21% from their institutions; for those from families with incomes of \$120,000 or higher, these shares were 0% federal and 78% institutional. (*Trends in Student Aid 2018*, Figure 19)

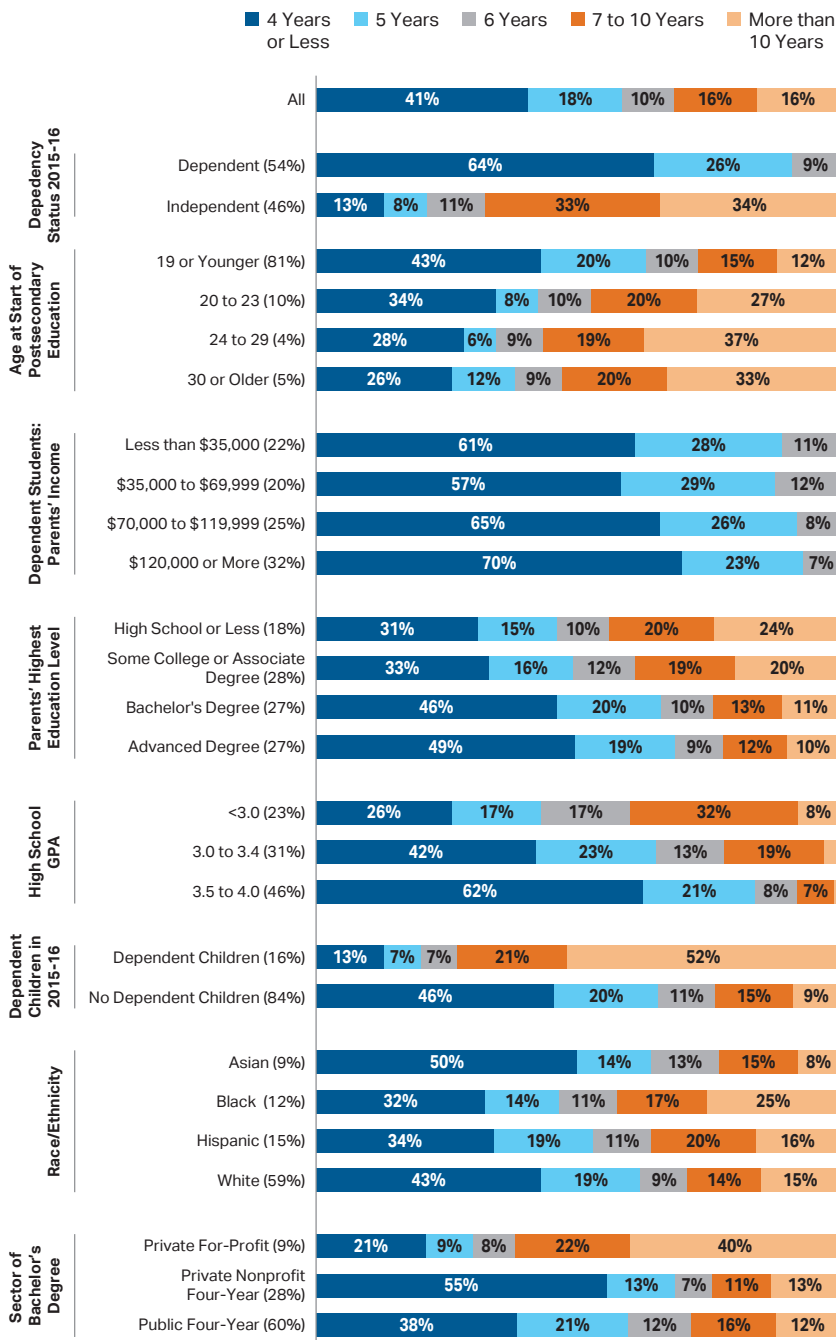
**NOTES:** Grant aid includes grants from all sources but not federal tax credits and deductions. It excludes military and veterans' benefits. Figure 12 is based on the NPSAS calculation of net tuition and fees, which applies any grant aid individual students receive in excess of the tuition and fee price to the other expenses in their budgets including books and supplies, housing, food, and transportation. Figures 8, 9 and 10 estimate average net tuition and fees by subtracting average grant aid from average tuition and fees, which can yield negative net tuition and fee prices. Income is for the year preceding the academic year; cutoffs are in 2014 dollars.

**SOURCES:** NCES, NPSAS, 2004, 2008, 2012, 2016; calculations by the authors.

# Time to Degree

Of 2015-16 bachelor's degree (BA) recipients, 41% completed their degrees within four years of first enrolling in college; 59% finished within five years. For 16%, more than 10 years elapsed between starting college and completing a BA.

**FIGURE 13** Time Elapsed Between First Postsecondary Enrollment and Completion of Bachelor's Degree, 2015-16 Bachelor's Degree Recipients



- The share of graduates who completed their BAs within four or five years ranged from 63% of those who first enrolled at age 19 or younger to 38% of those who first entered at age 30 or older.
- About two-thirds of those whose parents had at least a BA graduated within five years; less than half of those whose parents did not have a BA finished this quickly.
- On-time completion is highly correlated with academic preparation: 62% of BA recipients with high school GPAs of 3.5 or higher graduated within four years, compared with 26% of those with GPAs below 3.0.
- Having dependent children is associated with longer time to degree: 66% of those with no dependent children at the time they completed their degrees graduated within five years, compared with 20% of those with dependent children.
- Among those who graduated from private nonprofit colleges and universities, 55% completed their degrees within four years and another 13% graduated within five years. These figures were 38% and 21% for public four-year college students. Thirty percent of those who completed their degrees at for-profit institutions did so in less than five years.

### ALSO IMPORTANT:

- Since all students age 24 or older are considered independent, almost all students who earned a BA while they were still considered dependent were in school for five years or less.
- Figure 13 reports time elapsed between first postsecondary enrollment and completion of a bachelor's degree. Many students leave school temporarily and are not enrolled for this entire period.

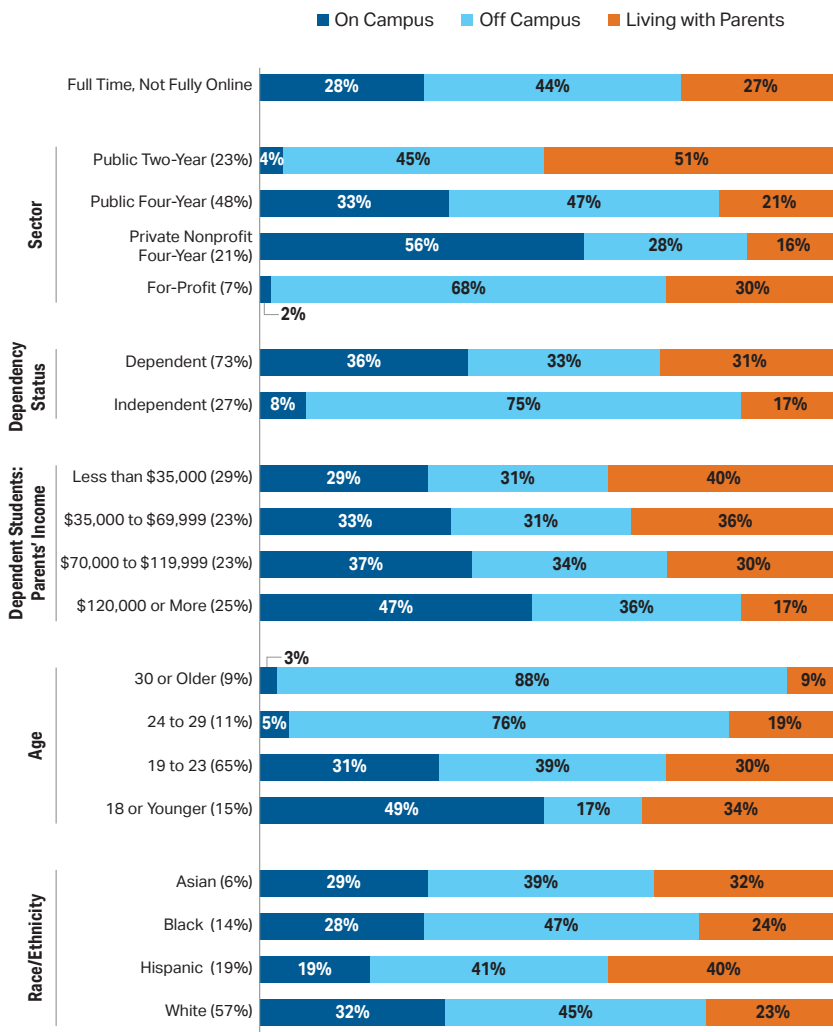
NOTE: Percentages in parentheses on the vertical axis represent shares of degree recipients in each group, or as noted, shares of those for whom the data on the grouping are available.

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

# Living Arrangements

In 2015-16, 28% of full-time undergraduates taking courses in classroom settings lived on campus; a similar share lived with their parents.

**FIGURE 14** Living Arrangements of Full-Time Undergraduate Students Taking Courses in Classroom Settings, 2015-16



- The share of part-time students living with their parents is larger than the share of full-time students—31% vs. 27%; 82% of fully online students live off campus and not with parents.
- More than half of full-time undergraduates at private nonprofit four-year institutions live on campus; only 16% live with their parents. About half of all full-time public two-year college students live with their parents.
- Among full-time dependent students, the share living on campus increases with family income, ranging from 29% of those from families with incomes less than \$35,000 to 47% of those from families with incomes of \$120,000 or more.
- Seventeen percent of full-time independent students including 19% of those between the ages of 24 and 29 live with their parents.
- Hispanic students are less likely than those from other racial and ethnic groups to live on campus and more likely to live with their parents.

### ALSO IMPORTANT:

- The student budgets colleges and universities develop to determine cost of attendance for financial aid purposes vary according to students' living arrangements. The estimated living expenses of students living with their parents vary considerably across institutions.
- In 2015-16, almost half of full-time undergraduate students taking courses in classroom settings attended institutions within 10 miles of their permanent residence; 16% went to colleges more than 100 miles from home. (NPSAS, 2016)
- White students, dependent students from families with incomes of \$120,000 or higher, and those attending private nonprofit four-year institutions were most likely to enroll more than 100 miles from home. (NPSAS, 2016)

### Living Arrangements by Online Status and by Attendance Status

	On Campus	Off Campus	Living with Parents
All	15%	57%	28%
<b>Online Status</b>			
Not Fully Online	17%	53%	29%
Fully Online	3%	82%	15%
<b>Attendance Status</b>			
Full Time	27%	47%	27%
Part Time	4%	65%	31%

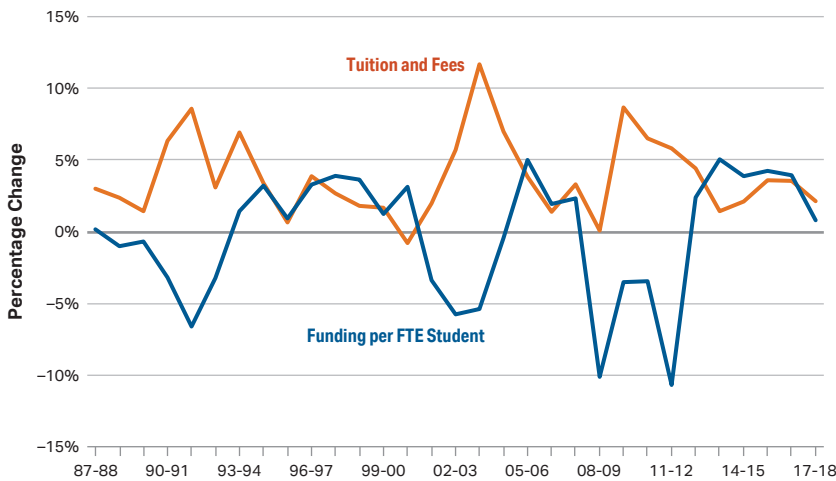
**NOTES:** Excludes international students. Because of small sample sizes in this survey, it is not possible to report separately on American Indian students or other small racial and ethnic groups. Percentages may not sum to 100 because of rounding.

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

# Institutional Revenues: State and Local Funding

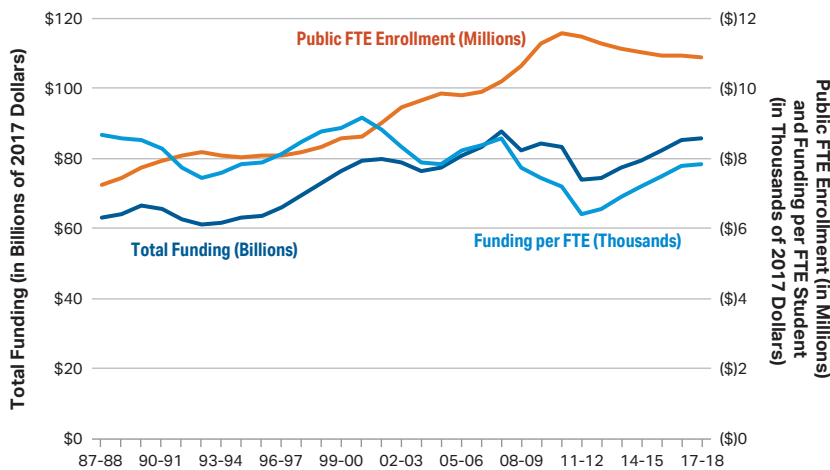
Average annual increases in tuition and fees at public colleges and universities were greater than 5% (after adjusting for inflation) in nine of the 30 years between 1987-88 and 2017-18. Each of those years followed a year in which average state and local funding per student declined.

**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, 1987-88 to 2017-18



- Funding per student rose in 2017-18 (in inflation-adjusted dollars) for the sixth consecutive year, following four years of decline.
- In 2017-18, total state and local funding was 2% lower (after adjusting for inflation) than a decade earlier (\$85.8 billion vs. \$87.9 billion); funding per student was 9% lower (\$7,850 vs. \$8,610). Total state and local funding was 36% higher than 30 years earlier (up from \$63.1 billion), but funding per student was 10% lower (down from \$8,700).
- Between 2007-08 and 2012-13, the combination of a 15% decline in total funding and an 11% increase in enrollment led to a 23% decline in state and local funding per public college student.
- By contrast, between 2012-13 and 2017-18, the combination of a 15% increase in total funding and a 3% decline in enrollment led to a 19% increase in funding per student.

**FIGURE 15B** Total and Per-Student State and Local Funding for Higher Education in 2017 Dollars and Public FTE Enrollment, 1987-88 to 2017-18



**NOTES:** Enrollment figures are fall FTE enrollments for public two-year and four-year institutions excluding medical students. Tuition and fees are the FTE enrollment-weighted average of the public two-year and four-year 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, 2018*, Table 307.10; State Higher Education Executive Offices Association (SHEEO), State Higher Education Finance (SHEF) reports; calculations by the authors.

## ALSO IMPORTANT:

- In 2017-18, local funding represented 13% of total state and local funding for higher education—an increase from 11% ten years earlier and 8% in 1987-88.

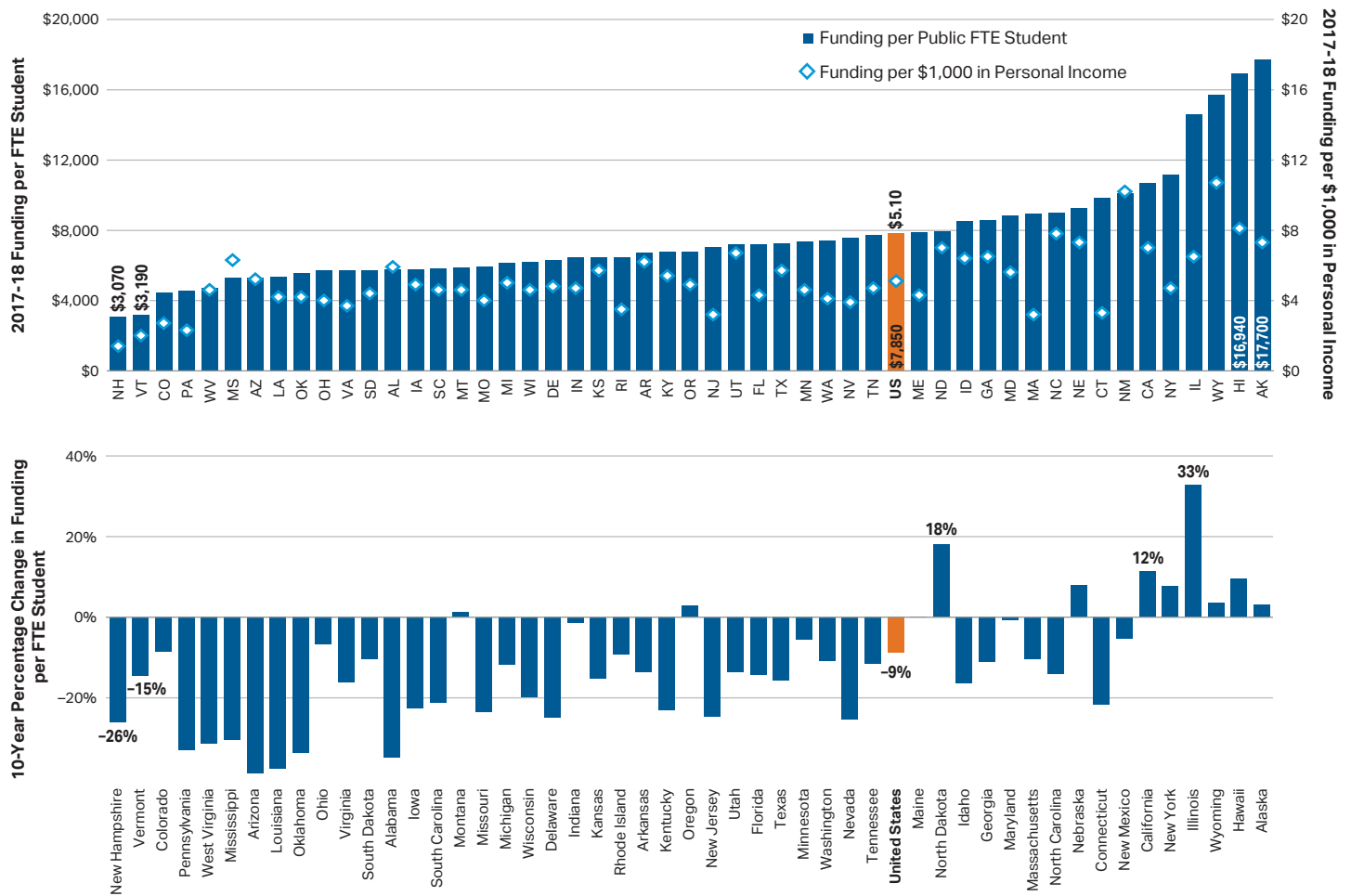




# Institutional Revenues: State and Local Funding

In 2017-18, state and local funding for public higher education averaged \$7,850 per full-time equivalent (FTE) student in the United States; it ranged from \$3,070 in New Hampshire and \$3,190 in Vermont to \$16,940 in Hawaii and \$17,700 in Alaska.

**FIGURE 16** 2017-18 State and Local Funding for Higher Education per Student and per \$1,000 in Personal Income and 10-Year Percentage Changes in Inflation-Adjusted Funding per Student, by State



NOTE: Funding per student in Figure 16 is based on unadjusted numbers from SHEEO.

SOURCES: SHEEO, SHEF reports; Bureau of Economic Analysis, Annual State Personal Income 2017; calculations by the authors.

- States with high levels of personal income or low levels of enrollment have higher per-student funding than other states devoting the same share of income to higher education. In 2017-18, Mississippi's \$6.30 in funding per \$1,000 of personal income yielded \$5,300 in fiscal support per FTE student; Idaho's \$6.40 per \$1,000 of personal income yielded \$8,510 per FTE student.
- Between 2007-08 and 2017-18, total inflation-adjusted per-student state and local funding for higher education declined by 39% in Arizona, by 38% in Louisiana, and by 25% or more in another nine states; it increased by 33% in Illinois (where much of the funding went to under-funded pensions and there was a significant enrollment decline), by 18% in North Dakota, by 12% in California, and by smaller amounts in eight other states.

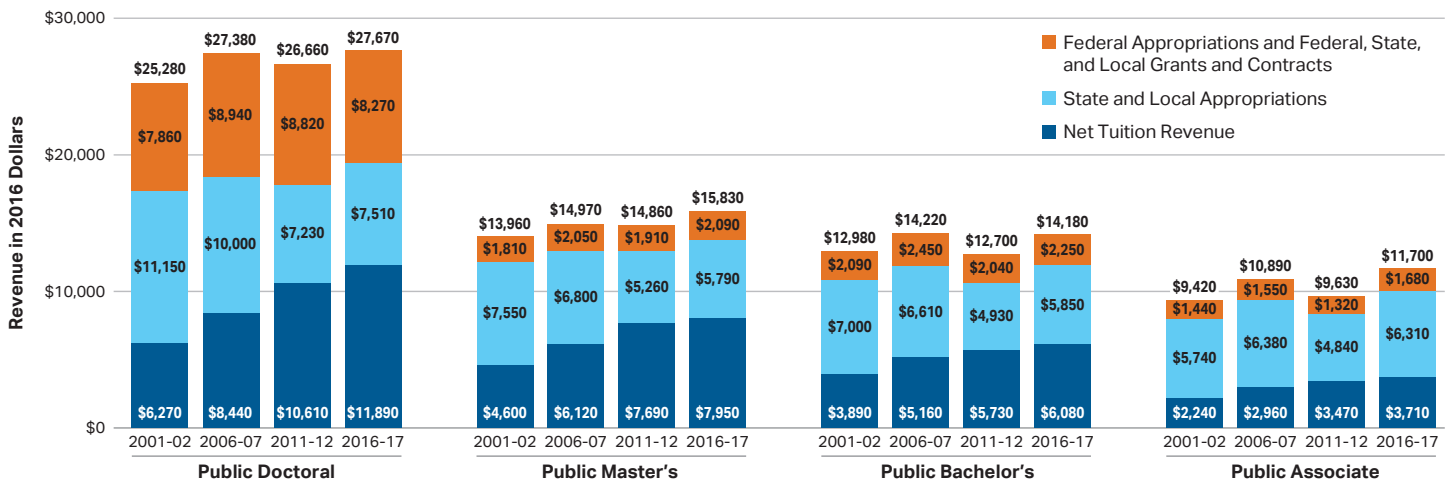
## ALSO IMPORTANT:

- 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 Oklahoma and Pennsylvania, the large per-student funding declines occurred even when enrollment did not increase. (Figure 22A)

# Institutional Revenues

Net tuition revenue per student accounted for 43% of total revenues at public doctoral universities in 2016-17—an increase from 25% in 2001-02, 31% in 2006-07, and 40% in 2011-12.

**FIGURE 17** Institutional Revenues per Full-Time Equivalent (FTE) Student in 2016 Dollars at Public Institutions, 2001-02, 2006-07, 2011-12, and 2016-17



## Percentage of Institutional Revenues from Various Sources

	Net Tuition Revenue	State and Local Appropriations	Federal Appropriations and Federal, State, and Local Grants and Contracts
<b>Public Doctoral</b>			
2001-02	25%	44%	31%
2006-07	31%	37%	33%
2011-12	40%	27%	33%
2016-17	43%	27%	30%
<b>Public Master's</b>			
2001-02	33%	54%	13%
2006-07	41%	45%	14%
2011-12	52%	35%	13%
2016-17	50%	37%	13%
<b>Public Bachelor's</b>			
2001-02	30%	54%	16%
2006-07	36%	46%	17%
2011-12	45%	39%	16%
2016-17	43%	41%	16%
<b>Public Associate</b>			
2001-02	24%	61%	15%
2006-07	27%	59%	14%
2011-12	36%	50%	14%
2016-17	32%	54%	14%

**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. Includes both undergraduate and graduate 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.

- Net tuition as a share of total revenues declined somewhat at public master's, bachelor's, and two-year institutions between 2011-12 and 2016-17. For example, at public two-year colleges, net tuition revenue rose from 24% of the total in 2001-02 to 27% in 2006-07 and 36% in 2011-12, before declining to 32% in 2016-17.
- In 2016-17, per-student revenues from the combination of government sources and net tuition were more than twice as large at public doctoral universities as at public two-year colleges. These per-student revenues were \$27,670 at doctoral universities, \$15,830 at master's universities, \$14,180 at bachelor's colleges, and \$11,700 at associate institutions in the public sector.
- Despite declines between 2006-07 and 2011-12, inflation-adjusted total revenues per student increased by 9% at public doctoral and bachelor's, by 13% at public master's, and by 24% at public two-year institutions between 2001-02 and 2016-17.
- State and local appropriations make up a larger share of revenues at public two-year colleges than at public four-year institutions. However, this share at public two-year colleges declined from 61% in 2001-02 to 50% in 2011-12 and was 54% in 2016-17.

## ALSO IMPORTANT:

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

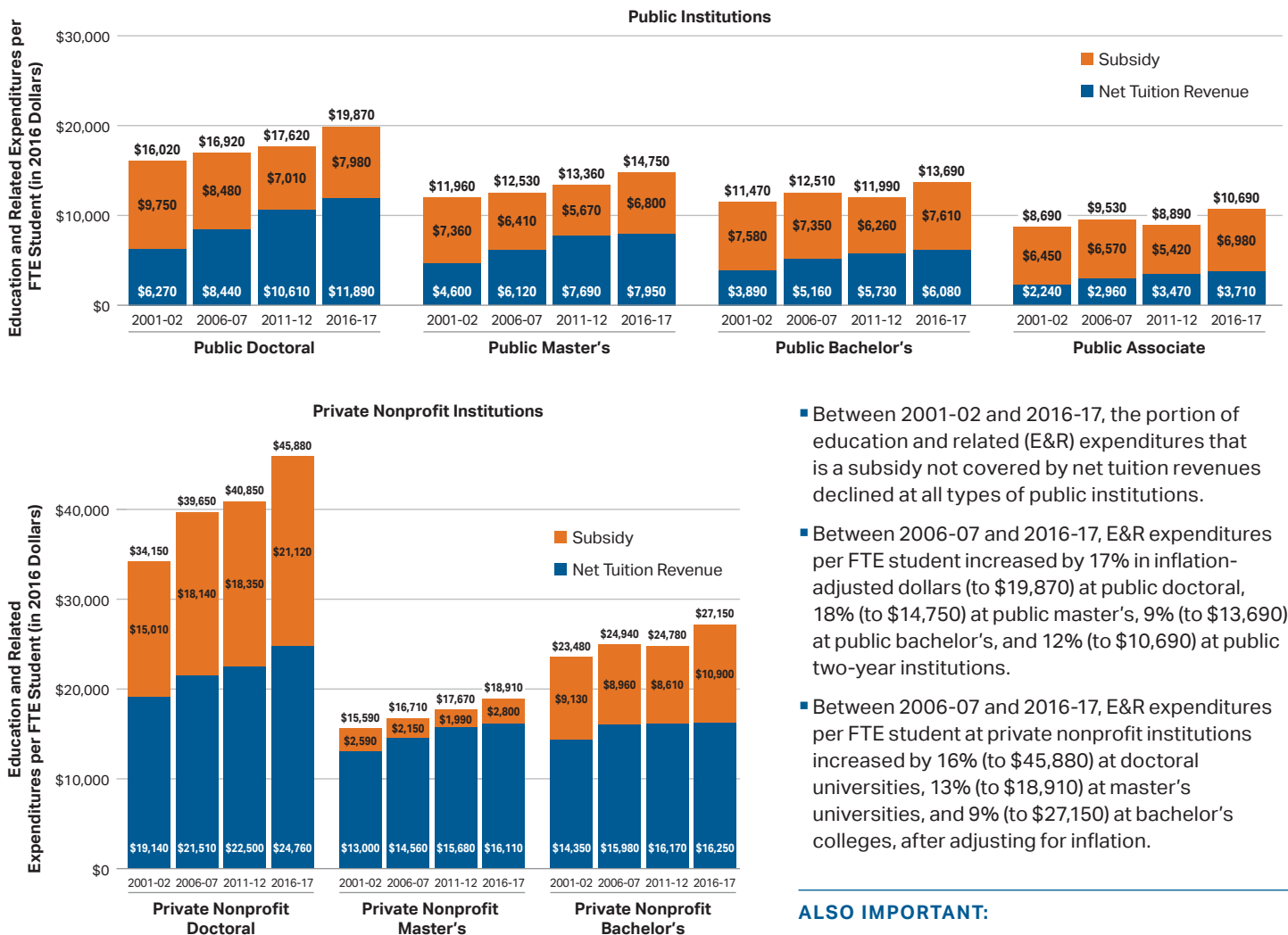
**SOURCES:** NCES, IPEDS Finance data, 2002, 2007, 2012 and 2017; calculations by the authors.



# Institutional Revenues and Expenditures

The average subsidy per full-time equivalent (FTE) student rose (after adjusting for inflation) at all types of public and private nonprofit institutions between 2011-12 and 2016-17. However, at public doctoral and master's universities, it remained smaller than in 2001-02.

**FIGURE 18** Net Tuition Revenues, Subsidies, and Education and Related Expenditures per Full-Time Equivalent (FTE) Student in 2016 Dollars, 2001-02, 2006-07, 2011-12, and 2016-17



- Between 2001-02 and 2016-17, the portion of education and related (E&R) expenditures that is a subsidy not covered by net tuition revenues declined at all types of public institutions.
- Between 2006-07 and 2016-17, E&R expenditures per FTE student increased by 17% in inflation-adjusted dollars (to \$19,870) at public doctoral, 18% (to \$14,750) at public master's, 9% (to \$13,690) at public bachelor's, and 12% (to \$10,690) at public two-year institutions.
- Between 2006-07 and 2016-17, E&R expenditures per FTE student at private nonprofit institutions increased by 16% (to \$45,880) at doctoral universities, 13% (to \$18,910) at master's universities, and 9% (to \$27,150) at bachelor's colleges, after adjusting for inflation.

## ALSO IMPORTANT:

- Because of differences including enrollment of graduate students and level of research activity, per-student revenues and expenditures at different types of institutions are not strictly comparable.
- In addition to E&R expenditures, institutional budgets include expenditures for other purposes such as research, public service, and auxiliary enterprises.

## Subsidy as a Percentage of Education and Related Expenditures

	Public				Private Nonprofit		
	Doctoral	Master's	Bachelor's	Associate	Doctoral	Master's	Bachelor's
2001-02	61%	62%	66%	74%	44%	17%	39%
2006-07	50%	51%	59%	69%	46%	13%	36%
2011-12	40%	42%	52%	61%	45%	11%	35%
2016-17	40%	46%	56%	65%	46%	15%	40%

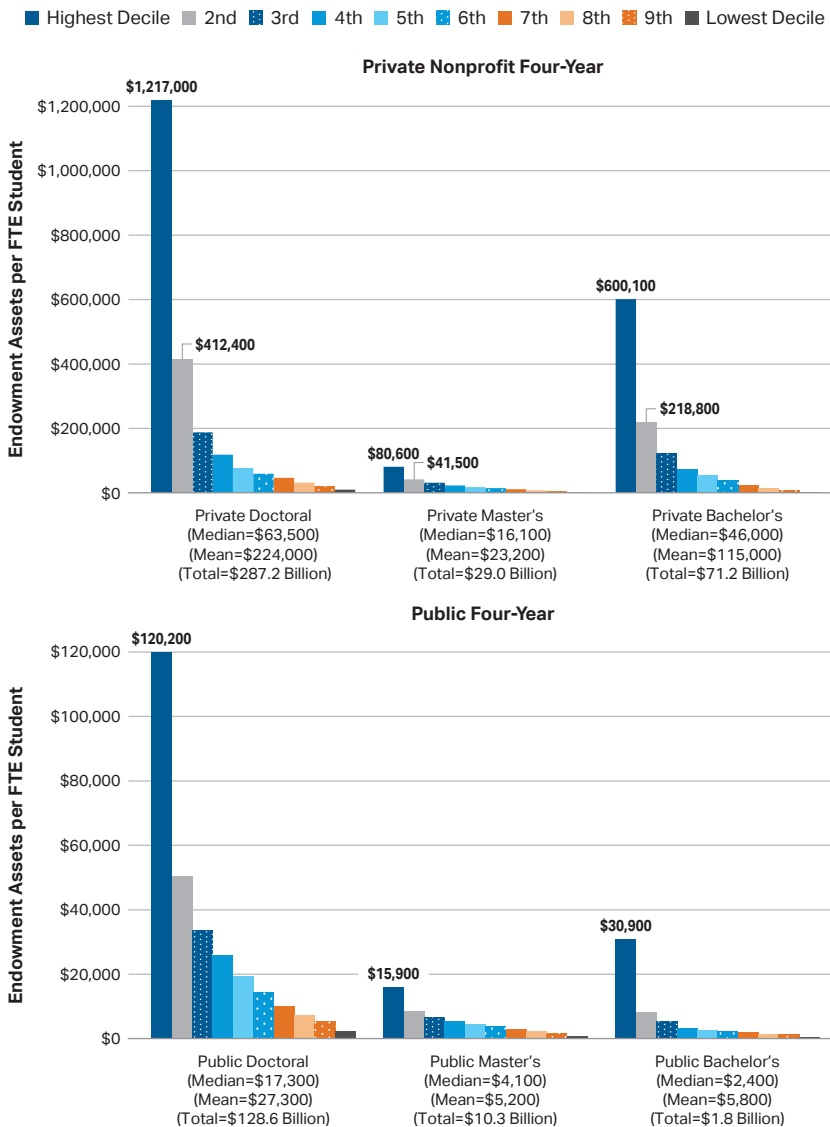
**NOTES:** Net tuition revenue is institutional revenue from tuition and fees, net of all institutional grant aid. Some of this revenue comes in the form of Pell Grants and other financial aid from federal and state governments and other sources. Subsidies are the portion of the cost of educating students not covered by net tuition revenue. E&R 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. These estimates include expenditures for both undergraduate and graduate students. Institutional averages are weighted by 12-month FTE enrollments.

**SOURCES:** NCES, IPEDS Finance data, 2002, 2007, 2012, and 2017; calculations by the authors.

# Endowments

In 2016-17, the 10% of students enrolled in the private doctoral universities with the highest endowments per student benefited from endowments averaging \$1.22 million per full-time equivalent (FTE) student. The median endowment per FTE student in this sector was \$63,500.

**FIGURE 19** Endowment Assets per Full-Time Equivalent (FTE) Student at Four-Year Colleges and Universities by Decile, 2016-17



**NOTES:** The value of endowment assets is as of the end of FY17. Based on data for 189 public doctoral, 255 public master's, 94 public bachelor's, 112 private doctoral, 379 private master's and 399 private bachelor's institutions in the United States that offer undergraduate degrees or certificates. The average endowment per student for each decile is calculated by ordering the institutions in the sector by assets per student and dividing the students in the sector into deciles. Total assets in institutions enrolling 10% of students in the sector are divided by the number of students in those institutions.

**SOURCES:** NCES, IPEDS 2017 Finance data; calculations by the authors.

- In 2016-17, endowment per FTE student at the 11 private nonprofit doctoral universities in the top decile ranged from \$516,000 to \$2.84 million. Assuming a 4.5% annual spending rate, this yields annual budget supplements ranging from about \$23,000 to \$128,000 per FTE student.
- In 2016-17, the 10% of students at the wealthiest private nonprofit bachelor's colleges benefited from endowments averaging \$600,100 per FTE student. The average for the second 10% of students was \$218,800.
- In 2016-17, the 10% of students at the wealthiest public research universities attended institutions with average endowment assets of \$120,200 per FTE student. The average for the second 10% of students was \$50,300.

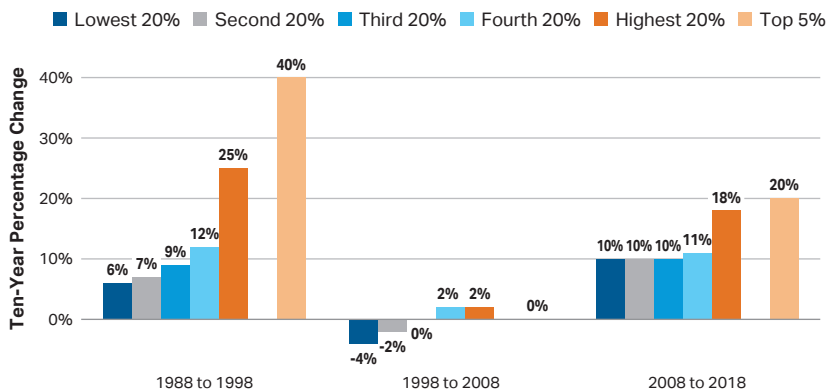
**ALSO IMPORTANT:**

- The four private doctoral universities with the largest endowments—ranging in size from \$23.4 billion to \$37.1 billion—hold 21% of all endowment assets (\$528.1 billion) and 29% of the assets in the private nonprofit sector (\$387.3 billion).
- 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. In 2016-17, about 30 institutions were in this category.
- 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.
- From 2000-01 through 2017-18, the average percentage of their endowment values that institutions spent each year fluctuated between 4.2% and 5.1%. The average spending rate was 4.4% in 2016-17 and 2017-18.

# Family Income

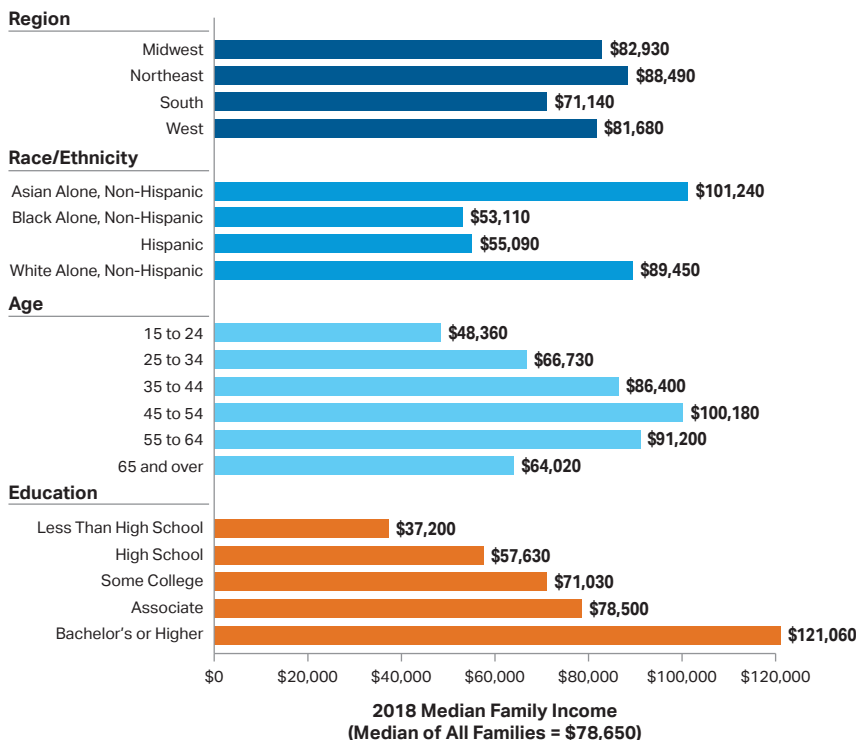
Inequality in family incomes increased in each of the three decades from 1988 to 2018 as income grew fastest for those with higher incomes.

**FIGURE 20A** Percentage Changes in Inflation-Adjusted Mean Family Income by Quintile, 1988 to 1998, 1998 to 2008, and 2008 to 2018



	Lowest 20%	Second 20%	Third 20%	Fourth 20%	Highest 20%	Top 5%
\$ Change from 1988 to 2018	\$2,170	\$6,820	\$13,000	\$25,170	\$87,930	\$185,590
% Change from 1988 to 2018	12%	16%	20%	27%	51%	68%
2018 Income Bracket	\$35,864 or Less	\$35,865 to \$63,023	\$63,024 to \$96,340	\$96,341 to \$150,117	\$150,118 or More	\$279,240 or More
2018 Mean Income	\$20,380	\$49,210	\$78,970	\$119,900	\$261,760	\$457,190

**FIGURE 20B** Median Family Income by Selected Characteristics, 2018



SOURCES: U.S. Census Bureau, Current Population Survey, 2018 Annual Social and Economic Supplement, Table F-1, Table F-3, Table F-5, and FINC-01; calculations by the authors.

- In 2018, the average income for the highest 20% of families was 3.3 times as high as that for the middle 20% (\$261,760 vs. \$78,970 in 2018 dollars). It was 2.6 times as high in 1988 (\$173,830 vs. \$65,970).
- In 2018, the average income for the middle 20% of families was 3.9 times as high as that for the lowest 20% (\$78,970 vs. \$20,380). It was 3.6 times as high in 1988 (\$65,970 vs. \$18,200).
- The average income of the top 5% of families was \$185,590 higher (in 2018 dollars) in 2018 than in 1988. This increase was 2.4 times as large as the average income of the middle quintile of families in 2018 and nine times as large as the average income of the lowest fifth of families in 2018.
- In 2018, median family income of families headed by individuals ages 45 to 54—the age bracket of most parents of traditional age college students—was 27% higher than the overall median (\$100,180 compared with \$78,650).
- In 2018, median incomes of black and Hispanic families were 59% and 62%, respectively, of the median for white families. The median income of Asian families was 13% higher than the median for white families.
- In 2018, the \$121,060 median family income of families headed by a four-year college graduate was more than twice the median for families headed by a high school graduate.

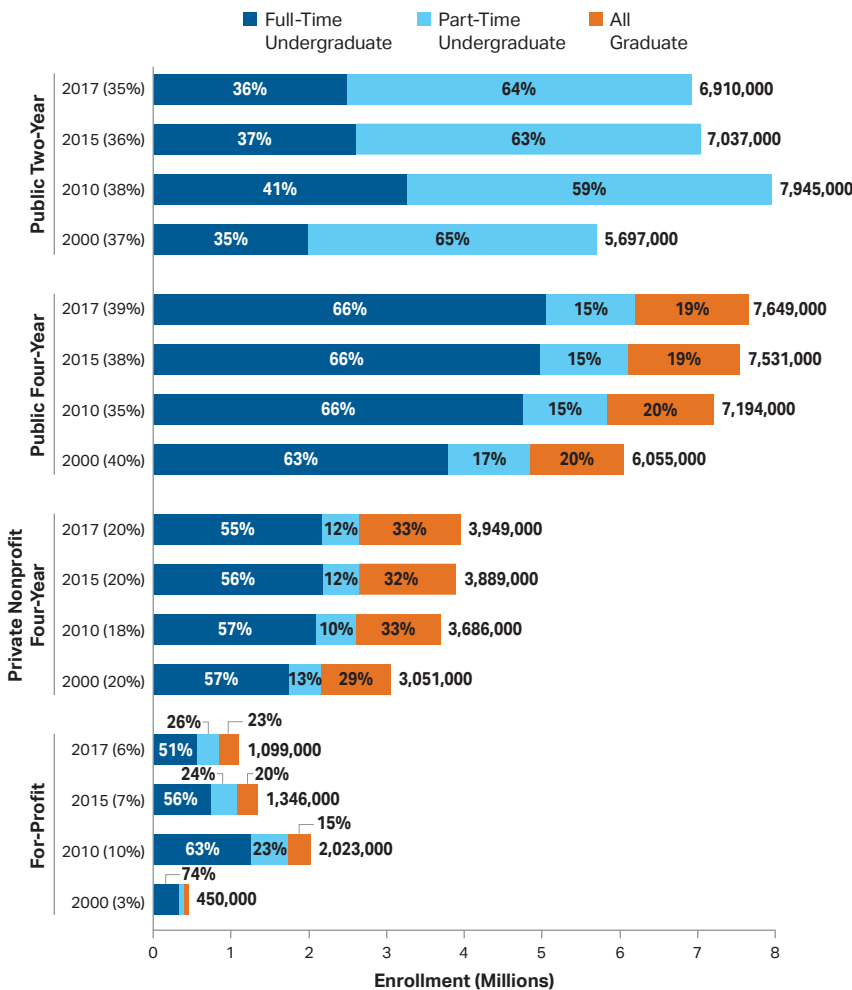
**ALSO IMPORTANT:**

- The share of all income going to the 20% of families with the lowest incomes has steadily declined, from 4.6% in 1988 to 4.2% in 1998, to 4.0% in 2008, and to 3.8% in 2018. The share of income going to the top 5% of families rose from 17.2% in 1988 to 20.7% in 1998. It was 20.5% in 2008 and 21.6% in 2018. (U.S. Census Bureau, Table F-2)
- Average published tuition and fees for in-state students attending public four-year colleges rose by \$6,850 (in 2018 dollars) over this 30-year period—53% of the increase in income (\$13,000) of the middle 20% of families and 8% of the increase in income (\$87,930) of the 20% of families with the highest incomes. (Online Table 2; calculations by the authors)

# Enrollment Patterns Over Time

Total postsecondary enrollment fell by 196,000 (1%) between fall 2015 and fall 2017. There were 118,000 (2%) more students at public four-year institutions and 60,000 (2%) more in the private nonprofit four-year sector, but 127,000 (2%) fewer at public two-year colleges and 247,000 (18%) fewer in the for-profit sector.

**FIGURE 21** Postsecondary Fall Enrollment by Attendance Status and Level of Enrollment (with Percentage of All Students Enrolled in Each Sector), 2000 to 2017, 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, 2010, 2015, and 2017; calculations by the authors.

- Total undergraduate enrollment (including full-time and part-time students) fell by 260,000 between fall 2015 and fall 2017; total graduate student enrollment rose by 64,000.
- The share of public two-year college students enrolled full time rose from 35% in fall 2000 to 41% in 2010 but had fallen back to 36% in 2017.
- Graduate students rose from 10% of all students in the for-profit sector in fall 2000 to 15% in 2010 and 23% in 2017. Despite the sharp decline in enrollment in the sector between 2010 and 2017, there were more than twice as many students enrolled in 2017 (1.1 million) as in 2000 (450,000).

## ALSO IMPORTANT:

- The students reported in Figure 21 are only those who 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 constitute 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 39% to 45%.

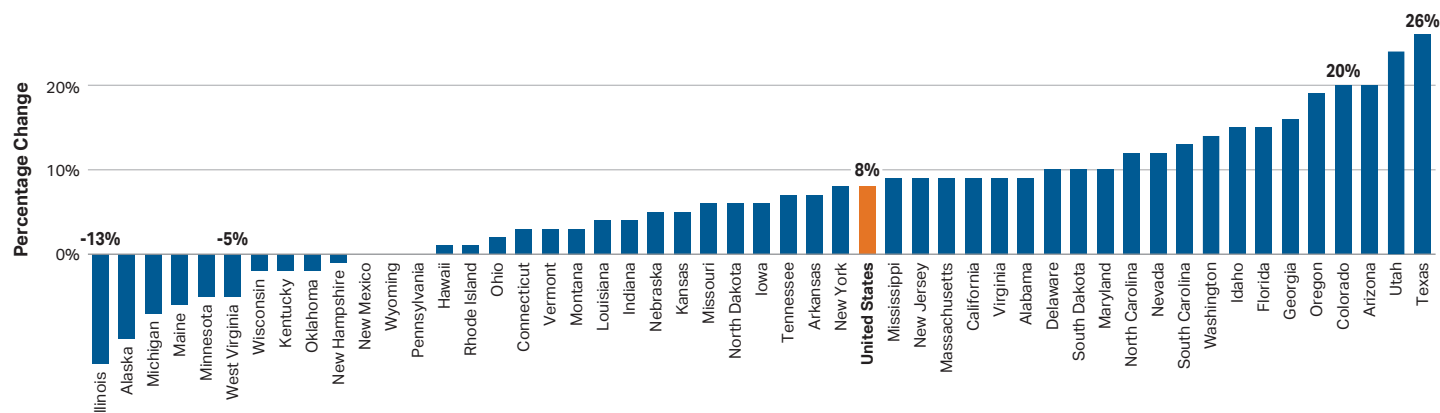
## Total Postsecondary Enrollment (in Millions)

Year	Enrollment (in Millions)
2000	15.3
2010	20.8
2015	19.8
2017	19.6

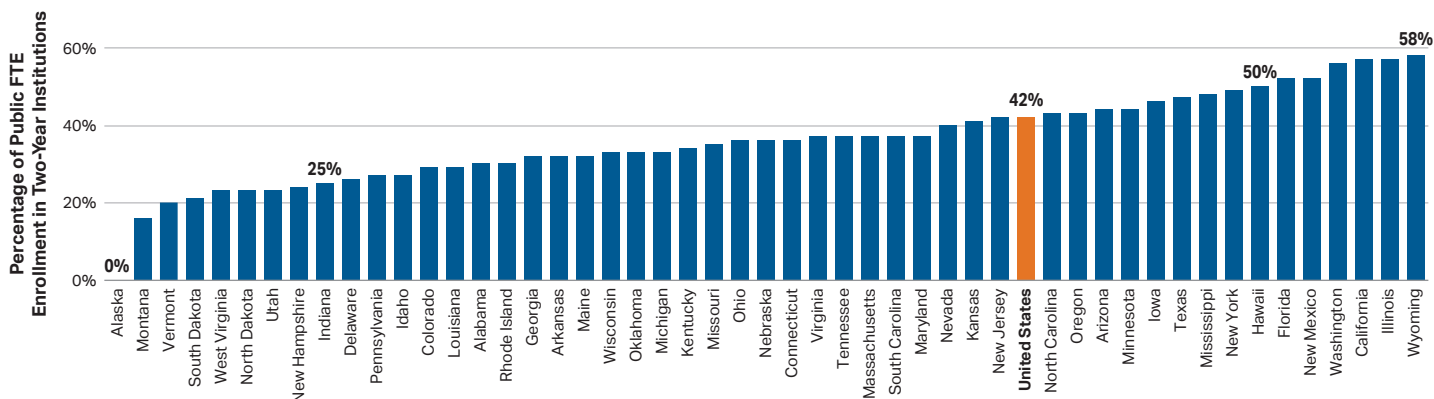
# Public Enrollment by State

Total full-time equivalent (FTE) enrollment in public colleges and universities in the United States increased by 8% between 2007 and 2017—from 9.6 million to 10.4 million. However, changes across states ranged from declines of 13% in Illinois and 10% in Alaska to increases of 24% in Utah and 26% in Texas.

**FIGURE 22A** Percentage Changes in Full-Time Equivalent (FTE) Enrollment in Public Institutions by State, Fall 2007 to Fall 2017



**FIGURE 22B** Percentage of All Public Full-Time Equivalent (FTE) Undergraduate Enrollment in Two-Year Institutions by State, Fall 2017



**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, 2007 and 2017; calculations by the authors.

- Between 2007 and 2017, public FTE enrollment increased by 20% or more in four states and declined by 5% or more in six states.
- Overall, two-year colleges, some of which offer a limited number of bachelor's degrees, accounted for 42% of the public FTE undergraduate enrollment in 2017. In seven states, this share was 50% or more; in eight states, it was less than 25%.

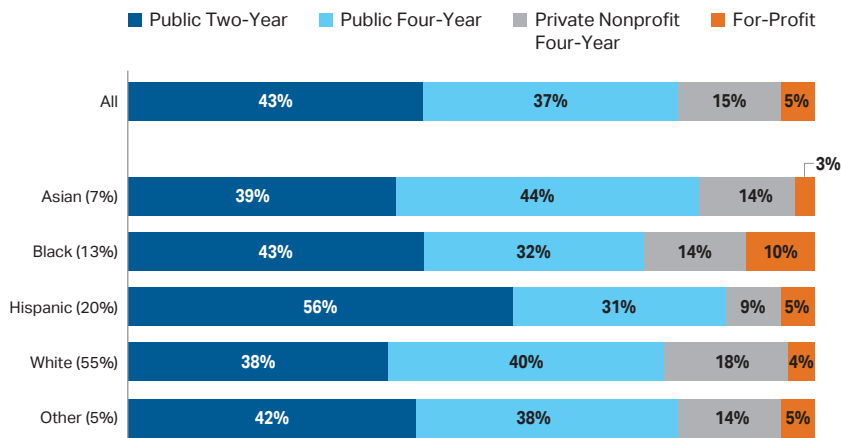
## ALSO IMPORTANT:

- California and Texas, which together enrolled 24% of the nation's public college and university students in 2017, accounted for 41% of the overall increase in FTE enrollment over the decade.
- The graduate student share of public FTE enrollments in fall 2017 ranged from 7% in Alaska, California, and Maine to 13% in Alabama, Maryland, Nebraska, and West Virginia and 14% in Michigan.
- Between 2007 and 2017, public graduate FTE enrollment increased by 13%, compared with 8% for undergraduates. In Vermont, North Dakota, and Arkansas, public graduate FTE enrollment increased by more than 25% over the decade, while undergraduate enrollment rose by less than 5%. However, in 14 states public undergraduate FTE enrollment grew more rapidly (or fell less) than graduate enrollment.

# Enrollment by Race/Ethnicity

Ten percent of black undergraduates attend for-profit institutions—more than twice the share of any other group enrolled in that sector.

**FIGURE 23A** Distribution of Undergraduate Enrollment by Sector Within Race/Ethnicity Groups, Fall 2017

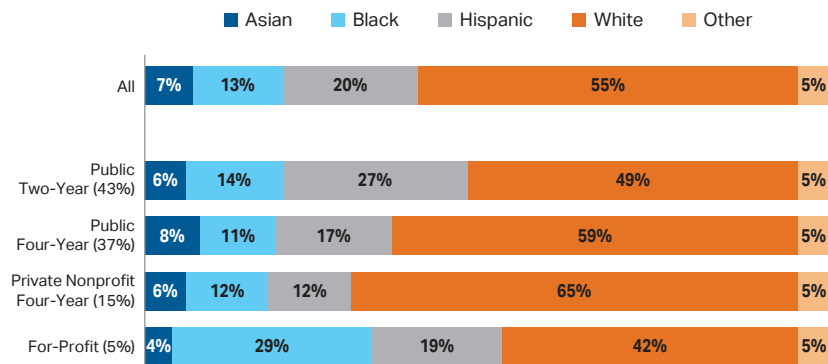


- Fifty-six percent of Hispanic undergraduates are enrolled in public two-year colleges. Between 38% and 43% of black, white, Asian, and other students attend these institutions.
- Among undergraduates who are black, Hispanic, or members of smaller racial/ethnic groups, larger shares attend public two-year than public four-year institutions. White and Asian students are more likely to be enrolled at public four-year than public two-year institutions.
- The share of undergraduates who are white ranges from 42% in the for-profit sector to 65% at private nonprofit four-year institutions.

**ALSO IMPORTANT:**

- Racial differences in the sectors students are most likely to enroll in are partially a function of geography. For example, about three-quarters of Hispanic undergraduates—but only half of all undergraduates—live in states where the share of public college students enrolled in two-year institutions is above the national average. (Figure 22 and Governing.com, <https://www.governing.com/gov-data/census/state-minority-population-data-estimates.html>)

**FIGURE 23B** Distribution of Undergraduate Enrollment by Race/Ethnicity Within Sectors, Fall 2017



**NOTES:** Includes degree-granting Title IV postsecondary institutions. “Other” category includes Native Hawaiian or Other Pacific Islander, American Indian or Alaska Native, and two or more races. Excludes international students and unknown. Four-year institutions include only those where more than 50% of degrees/certificates awarded are bachelor’s degrees or higher. Percentages may not sum to 100 because of rounding.

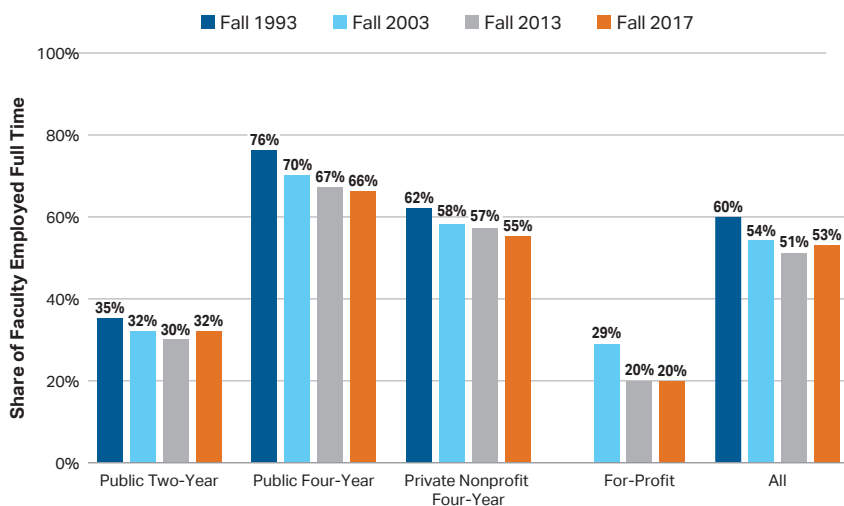
**SOURCES:** NCES, IPEDS Fall Enrollment data, 2017; calculations by the authors.



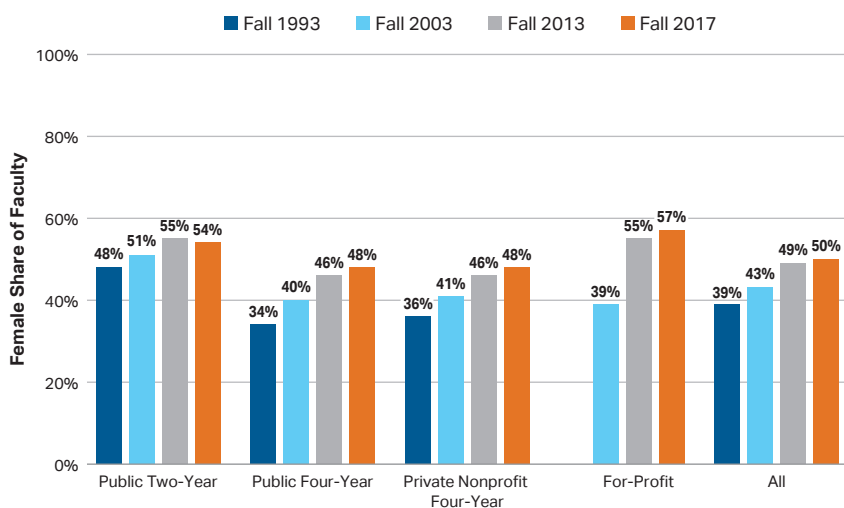
# Faculty and Staff

In fall 2017, the share of college and university faculty employed full time ranged from 20% at for-profit institutions to 66% at public four-year colleges and universities.

**FIGURE 24A** Share of Faculty in Degree-Granting Postsecondary Institutions Employed Full Time, Fall 1993 to Fall 2017, Selected Years



**FIGURE 24B** Female Share of Faculty in Degree-Granting Postsecondary Institutions, Fall 1993 to Fall 2017, Selected Years



**NOTE:** Includes faculty members with the title of professor, associate professor, assistant professor, instructor, lecturer, adjunct professor, or interim professor (or the equivalent).

**SOURCES:** NCES, *Digest of Education Statistics*, 1994, Table 223; 2004, Table 224; 2014, Table 314.30; 2018, Table 314.30.

- The share of faculty at public four-year institutions employed full time fell from 76% in fall 1993 to 67% in fall 2013 and was 66% in fall 2017. At private nonprofit four-year institutions, the full-time share fell from 62% in fall 1993 to 57% in fall 2013 and was 55% in fall 2017.
- The share of faculty who are female has risen over time in all sectors, reaching 48% in the public and private nonprofit four-year sectors in fall 2017, 54% at public two-year colleges, and 57% at for-profit institutions.

## ALSO IMPORTANT:

- The share of faculty who were at public four-year institutions fell from 41% in fall 1995 to 38% in fall 2003 but rose again to 42% in fall 2017. The share who were at public two-year institutions fell steadily from 29% in fall 1995 to 21% in fall 2017. (NCES, *Digest of Education Statistics*, 2018, Table 314.20)
- The share of faculty who were at for-profit institutions rose from 4% in fall 2003 to 8% in fall 2013; it fell to 6% in fall 2017. The share who were at private nonprofit institutions was 28%-29% in fall 1993, 2003, and 2013; it was 31% in fall 2017. (NCES, *Digest of Education Statistics*, 2018, Table 315.10)

# 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 College Board in its Annual Survey of Colleges. Data for 2019-20 are from an online questionnaire distributed in October 2018, with data collected and reviewed through August 2019. 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 [research.collegeboard.org/trends](https://research.collegeboard.org/trends).

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 2018-19 used in this analysis differ somewhat from the 2018-19 averages reported last year because of revised price data and updated enrollment weighting. Prices for all years through 2017-18 are weighted by same-year full-time enrollments. 2018-19 and 2019-20 prices are weighted by fall 2017 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 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 [research.collegeboard.org/trends](https://research.collegeboard.org/trends).

## 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 2019* 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 2019-20 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 2018 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/](https://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; "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 College Board; Sandy Baum, nonresident senior fellow at the Urban Institute; Matea Pender, policy research scientist at College Board; and CJ Libassi, senior policy research analyst at College Board.

### Contact Information for the Authors

trends@collegeboard.org  
sandybaum73@gmail.com

*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: [research.collegeboard.org/trends](https://research.collegeboard.org/trends).

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 when possible, 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.

