

Public  
Two-Year

Private  
Nonprofit  
Four-Year

Private  
Nonprofit  
Two-Year

Public  
Four-Year

For-Profit  
Four-Year

For-Profit  
Two-Year

Undergraduate  
Enrollment

Trends in Higher Education Series

# Trends in College Pricing 2012



See the Trends in Higher Education website at [trends.collegeboard.org](https://trends.collegeboard.org) for more data.

**In addition to the figures and tables in this report, more information and data can be found on the Trends website.**

**The online icon at the bottom of each page indicates additional figures and tables that can be accessed by going to the website.**

## About the College Board

The College Board is a mission-driven not-for-profit organization that connects students to college success and opportunity. Founded in 1900, the College Board was created to expand access to higher education. Today, the membership association is made up of over 6,000 of the world's leading educational institutions and is dedicated to promoting excellence and equity in education. Each year, the College Board helps more than seven million students prepare for a successful transition to college through programs and services in college readiness and college success — including the SAT<sup>®</sup> and the Advanced Placement Program<sup>®</sup>. The organization also serves the education community through research and advocacy on behalf of students, educators and schools. For further information, visit [www.collegeboard.org](https://www.collegeboard.org).

## College Board Advocacy & Policy Center

The College Board Advocacy & Policy Center was established to help transform education in America. Guided by the College Board's principles of excellence and equity in education, we work to ensure that students from all backgrounds have the opportunity to succeed in college and beyond. We make critical connections between policy, research and real-world practice to develop innovative solutions to the most pressing challenges in education today.

[advocacy.collegeboard.org](https://advocacy.collegeboard.org)

# Highlights

Widespread concern about the high and rising price of college makes timely data on tuition increases in historical context particularly important. The increase in average published tuition and fees at public four-year colleges and universities for the 2012-13 academic year is smaller than it has been in recent years — and below the average growth rate for the decade from 2002-03 to 2012-13.

But the news about what students actually pay is less encouraging. From 2008-09 to 2010-11, grant aid and tax benefits increased rapidly enough to cause the average net prices to decline, even in the face of tuition increases. Through unusually large increases in Pell Grants, grants for veterans, and federal tax credits, the federal government increased its role in financing higher education, relieving the burden on students.

In contrast, the average net price paid by full-time students enrolled in public four-year colleges increased measurably in 2012-13 for the second consecutive year. Average net price also increased for public two-year and private nonprofit four-year students in 2011-12 and 2012-13, after three years of decline.

## PUBLISHED TUITION AND FEE AND ROOM AND BOARD CHARGES

Average published tuition and fees for in-state students at public four-year colleges and universities increased from \$8,256 in 2011-12 to \$8,655 in 2012-13. The 4.8% (\$399) increase in tuition and fees was accompanied by a \$325 (3.7%) increase in room and board charges for students living on campus. At \$9,205, room and board charges account for more than half of the total charges for these students.

- Average published tuition and fees for out-of-state students at public four-year institutions rose by \$883 (4.2%), from \$20,823 in 2011-12 to \$21,706 in 2012-13. Average total charges are \$30,911.
- Average published tuition and fees at private nonprofit four-year institutions rose by \$1,173 (4.2%), from \$27,883 to \$29,056 in 2012-13. Average total charges are \$39,518.
- Average published tuition and fees at public two-year colleges increased by \$172 (5.8%), from \$2,959 in 2011-12 to \$3,131 in 2012-13.
- Estimated average tuition and fees for full-time students in the for-profit sector increased by about \$435 (3.0%), from \$14,737 in 2011-12 to \$15,172 in 2012-13.
- Published prices at public four-year institutions rose more rapidly between 2002-03 and 2012-13 than over either of the two preceding decades, but the average annual rate of increase in inflation-adjusted tuition and fees at private nonprofit four-year institutions declined from 4.6% from 1982-83 to 1992-93, to 3.0% from 1992-93 to 2002-03, and to 2.4% over the most recent decade.

- About two-thirds of full-time students pay for college with the assistance of grant aid, and some of the remaining one-third receive federal tax credits and deductions to help cover expenses.

## VARIATION IN TUITION AND FEES

Half of all full-time students at public and private nonprofit four-year colleges attend institutions charging tuition and fees of \$10,282 or less; half attend institutions with higher published prices.

- Thirteen percent of full-time students at public four-year colleges and universities attend institutions that increased their published prices by 9% or more in 2012-13; 24% attend institutions that increased their prices by less than 3%.
- In the private nonprofit four-year sector, 72% of full-time students attend institutions that increased their tuition and fees by between 3% and 6% in 2012-13; about 19% attend institutions that increased their prices by less than 3%, while about 2% faced increases of 9% or more.
- The average published tuition and fee price for undergraduates enrolled at public master's universities is 80% of the price at public doctoral universities — \$7,606 versus \$9,539.
- The average published tuition and fee price for undergraduates enrolled at private nonprofit master's universities is 73% of the price at private doctoral universities — \$25,997 versus \$35,660.

### Geographical differences: by region

- In 2012-13, average published tuition and fees for in-state students at public four-year colleges range from \$7,621 in the South to \$11,019 in New England.
- Average published tuition and fees for public two-year colleges range from \$2,241 in the West to \$4,619 in New England.
- The percentage increase in public four-year tuition and fees over the decade beginning in 2002-03 was over twice as large in the West as in New England, but the average published price in the West in 2012-13 is \$2,289 lower than the price in New England.
- The largest percentage increase in public two-year college tuition and fees over the decade beginning in 2002-03 was 69% in the West, which still has a lower published price than any other region in 2012-13.

### Geographical differences: by state

- In 2012-13, the highest published tuition and fee prices in both public four-year and public two-year institutions are in New Hampshire and Vermont. Tuition and fees average \$14,576 and \$6,752 for public four-year and public two-year institutions, respectively, in New Hampshire and \$13,582 and \$6,790 in Vermont.
- The lowest published tuition and fee prices for public four-year institutions are \$4,278 in Wyoming and \$5,595 in Utah.

- The lowest published tuition and fee prices for public two-year colleges in 2012-13 are \$1,418 in California and \$1,537 in New Mexico.
- In 2012-13, published tuition and fees for in-state students at flagship universities range from \$4,278 in Wyoming and \$5,985 in Montana to \$16,422 at the University of New Hampshire and \$17,266 at Penn State. In four states, the flagship price declined in constant dollars in 2012-13. The largest increase was 13% in Washington.
- From 2007-08 to 2012-13, percentage increases in inflation-adjusted public four-year tuition and fees ranged from 2% in Maryland and 3% in Ohio to 72% in California and 78% in Arizona. Prices in Maryland and Ohio remain above the national average.
- From 2007-08 to 2012-13, percentage changes in inflation-adjusted public two-year tuition and fees ranged from a decline of 3% in Maine and an increase of 1% in Montana to increases of 49% in Virginia and 104% in California — which still has the lowest prices in the country.
- In 2009-10, education (instruction and student services) and related expenditures per FTE student ranged from \$7,650 at public two-year colleges to \$37,860 at private doctoral universities, where about one-third of all students are graduate students.
- At public two-year colleges, education and related expenditures declined from \$8,640 per FTE student (in 2010 dollars) to \$7,650 between 1999-2000 and 2009-10.
- In all sectors other than private doctoral universities, net tuition and fee revenue grew more rapidly than education and related expenditures between 1999-2000 and 2009-10. The subsidies per full-time equivalent (FTE) student — the difference between education expenditures and net tuition revenue — declined. In 2009-10, average subsidies per FTE student ranged from \$980 at private master's universities to \$17,260 at private doctoral universities.
- In both public and private colleges and universities, the percentage of employees who were faculty members was slightly higher in 2011 than in 1976, 1999, and 2009.

## WHAT STUDENTS ACTUALLY PAY

In 2012-13, full-time undergraduates at public four-year institutions receive an estimated average of \$5,750 in grant aid from all sources and federal tax benefits to help them pay the average \$8,665 published tuition and fees. The students pay an average net price of just over \$2,900.

- Full-time undergraduates at private nonprofit four-year institutions receive an estimated average of \$15,680 in grant aid from all sources and federal tax benefits to help them pay the average \$29,056 published tuition and fees. The average net price is about \$13,380.
- Full-time students at public two-year colleges receive an estimated average of \$4,350 in grant aid from all sources and federal tax benefits to help them pay the average \$3,131 published tuition and fees, as well as some of their other expenses.
- Average net tuition and fees paid by full-time students enrolled in public two-year and in private nonprofit four-year institutions are *lower* in inflation-adjusted dollars in 2012-13 than they were in 2007-08.
- About \$1,410 of the \$1,850 increase in average published tuition and fees at public four-year colleges between 2007-08 and 2012-13 was covered by increases in grant aid and tax benefits, and the student share increased by about \$440.

## INSTITUTIONAL FINANCES

State appropriations per full-time equivalent (FTE) student declined by 10% in 2011-12, leaving this source of funding 25% below its level five years earlier, after adjusting for inflation.

- Total state appropriations to public institutions declined by 3% in constant dollars in 2010-11 and by another 11% in 2011-12.

## ENROLLMENT PATTERNS

Over the decade from 1999-2000 to 2009-10, the percentage of all associate degrees awarded by for-profit institutions increased from 12% to 19%. The percentage of all bachelor's degrees awarded by this sector increased from 2% to 6%, and its percentage of all graduate degrees awarded increased from 2% to 9%.


















- In the decade from fall 2000 to fall 2010, the number of full-time undergraduate students increased by 45%, from 7.9 million to 11.4 million. The number of part-time undergraduate students increased by 27%, from 5.2 million to 6.6 million.
- In fall 2010, 13% of all FTE enrollment in degree-granting public institutions was in California colleges and universities. California, Texas, Florida, and New York enrolled one-third of all FTE students attending public institutions in the U.S.

## COLLEGE AFFORDABILITY


Over the entire income distribution in the United States, real average family incomes in 2011 were lower than they were a decade earlier. The largest declines were for the families in the lowest 20% of the population.

- Average income declined for all income groups every year from 2007 to 2010. It fell again in 2011 — by 1% to 2% — for each of the four lower income groups, but increased by 3% for the 20% of families with the highest incomes and by 7% for the top 5%.
- In 2011, the \$100,096 median income for families headed by a four-year college graduate was more than twice the median income for families headed by a high school graduate.

# Contents

<b>3</b>	Highlights		
<b>7</b>	Introduction		
<b>10</b>	Published Tuition and Fee and Room and Board Charges, 2012-13	<b>TABLE 1A</b> <b>TABLE 1B</b>	Average Published Undergraduate Charges by Sector, 2012-13 Average Published Undergraduate Charges by Carnegie Classification, 2012-13
<b>11</b>	Student Budgets	<b>FIGURE 1</b>	Average Estimated Undergraduate Budgets, 2012-13
<b>12</b>	Variation in Published Tuition and Fees, 2012-13	<b>FIGURE 2</b>	Distribution of Students by Tuition and Fees
<b>13</b>	Variation in Tuition and Fee Increases, 2012-13	<b>FIGURE 3</b>	Distribution of Students by Increases in Tuition and Fees
<b>14</b>	Tuition and Fee and Room and Board Charges over Time	<b>FIGURE 4</b> <b>FIGURE 5</b>	Average Rates of Growth of Tuition and Fees over Time Published Tuition and Fees Relative to 1982-83 by Sector
<b>15</b>	Tuition and Fee and Room and Board Charges over Time	<b>TABLE 2A</b> <b>TABLE 2B</b>  <b>TABLE 2</b>  <b>TABLE 3</b>	Tuition and Fee and Room and Board Charges over Time, 1972-73 through 2012-13, Selected Years Tuition and Fee and Room and Board Charges over Time, 2002-03 through 2012-13 Tuition and Fee and Room and Board Charges over Time Tuition and Fee and Room and Board Charges over Time (Unweighted)
<b>16</b>	Regional Variation in Charges	<b>FIGURE 6</b>  <b>TABLE 4</b>	Average Published Prices by Region, 2002-03 and 2012-13 Tuition and Fees by Region over Time
<b>17</b>	Tuition and Fees by State: Public Institutions	<b>FIGURE 7</b>  <b>TABLE 5</b>	In-State Tuition and Fees by State and Sector, 2012-13 and 5-Year Percentage Change In-State Tuition and Fees by State and Sector over Time
<b>18</b>	Tuition and Fees by State: Flagship Universities	<b>FIGURE 8</b>  <b>TABLE 6</b>	In-State Tuition and Fees at Flagship Universities, 2012-13 and 5-Year Percentage Change Tuition and Fees at Flagship Universities over Time
<b>19</b>	Average Net Price — Public Institutions	<b>FIGURE 9</b>  <b>TABLE 7</b>  <b>FIGURE 2011_8A</b>  <b>FIGURE 2011_8B</b>  <b>FIGURE 2010_8A</b>  <b>FIGURE 2010_8B</b>  <b>FIGURE 2009_8</b>	Average Net Price for Full-Time Students over Time — Public Institutions Average Net Price for Full-Time Students over Time — Public Institutions Net Prices by Selectivity: Public Four-Year Sector, 2007-08 Net Prices by Attendance Status: Public Two-Year Sector, 2007-08 Net Prices by Income and State Residency: Public Four-Year Sector, 2007-08 Net Prices by Income: Public Two-Year Sector, 2007-08 Net Prices by Income over Time: Public Sector
<b>20</b>	Average Net Price — Private Institutions	<b>FIGURE 10</b>  <b>TABLE 8</b>  <b>FIGURE 2011_9A</b>  <b>FIGURE 2011_9B</b>  <b>FIGURE 2010_9A</b>  <b>FIGURE 2010_9B</b>  <b>FIGURE 2009_9</b>	Average Net Price for Full-Time Students over Time — Private Institutions Average Net Price for Full-Time Students over Time — Private Institutions Net Prices by Selectivity: Private Nonprofit Four-Year Sector, 2007-08 Net Prices by Attendance Status: For-Profit Sector, 2007-08 Net Prices by Income and Level of Published Tuition and Fees: Private Nonprofit Four-Year Sector, 2007-08 Net Prices by Income: For-Profit Sector, 2007-08 Net Prices by Income over Time: Private Sector
<b>21</b>	Net Price	<b>FIGURE 11A</b> <b>FIGURE 11B</b>	Sources of Gross Tuition Revenue per FTE Student over Time — Public Institutions Sources of Gross Tuition Revenue per FTE Student over Time — Private Institutions
<b>22</b>	Institutional Revenues — Public Appropriations	<b>FIGURE 12A</b> <b>FIGURE 12B</b>	Annual Percentage Changes in State Appropriations and Public Four-Year Prices over Time Total and Per FTE Student State Appropriations and Public Enrollment over Time

# Contents — Continued

<b>23</b>	Institutional Revenues — Public Appropriations	<b>FIGURE 13A</b> <b>FIGURE 13B</b>	State Appropriations per \$1,000 in Personal Income over Time State Appropriations per \$1,000 in Personal Income by State, 2011-12 and 5-Year Percentage Change
<b>24</b>	Institutional Revenues	<b>FIGURE 14A</b> <b>FIGURE 14B</b> <b>FIGURE 14C</b>	Revenue Sources at Public Institutions over Time Revenue Sources at Private Institutions over Time Revenues from Private Gifts, Investment Returns, and Endowment Income
<b>25</b>	Institutional Revenues and Expenditures	<b>FIGURE 15A</b> <b>FIGURE 15B</b>	Net Tuition Revenues, Subsidies, and Education Expenditures per FTE Student over Time at Public Institutions Net Tuition Revenues, Subsidies, and Education Expenditures per FTE Student over Time at Private Nonprofit Institutions
<b>26</b>	Endowments	<b>FIGURE 16</b>	Endowment Assets per FTE Student, 2010-11
<b>27</b>	Endowments	<b>FIGURE 17A</b> <b>FIGURE 17B</b>	Changes in Private Sector Endowment Assets over Time Endowment Spending Rates over Time
<b>28</b>	Family Income	<b>FIGURE 18A</b> <b>FIGURE 18B</b>	Changes in Family Income over Time Family Income by Selected Characteristics, 2011
<b>29</b>	Enrollment Patterns over Time	<b>FIGURE 19</b>	Enrollment by Attendance Status over Time
<b>30</b>	Enrollment and Degrees Granted	<b>FIGURE 20</b> <b>FIGURE 21</b>  <b>FIGURE 2010_20B</b>	Degrees Granted by Sector over Time Distribution of Full-Time Undergraduates and of All Undergraduates by Sector, Fall 2010 Online Course Participation over Time
<b>31</b>	Enrollment by State	<b>FIGURE 22A</b> <b>FIGURE 22B</b>	FTE Enrollment at Public Institutions by State, Fall 2010 Percentage of All Public FTE Enrollment in Two-Year Colleges, Fall 2010
<b>32</b>	Changes in Enrollment by State	<b>FIGURE 23</b>	Percentage Increases in Total Public FTE Enrollment by State
<b>33</b>	Migration	<b>FIGURE 24A</b> <b>FIGURE 24B</b>	Percentage of U.S. First-Year Students Who Were State Residents, Fall 2000 to Fall 2010 Percentage of First-Year Students Who Were State Residents, by State, Fall 2010
<b>34</b>	Selectivity and Completion	<b>FIGURE 25A</b> <b>FIGURE 25B</b> <b>FIGURE 25C</b>	Distribution of Four-Year Institutions by Acceptance Rate, Fall 2010 Distribution of FTE Undergraduates at Four-Year Institutions by Acceptance Rate, Fall 2010 Graduation Rate by Acceptance Rate, Fall 2010
<b>35</b>	Faculty and Staff	<b>FIGURE 26A</b> <b>FIGURE 26B</b>	FTE Staff per 100 FTE Students over Time Composition of FTE Staff over Time
<b>36</b>	Faculty and Staff	<b>FIGURE 27A</b> <b>FIGURE 27B</b>	Changes in Faculty Compensation and in Tuition and Fees over Time Percentage of Instructional Faculty Employed Full-Time over Time
<b>37</b>	Notes and Sources	<b>TABLE A1A</b> <b>TABLE A1B</b> <b>TABLE A2</b>	Institutions Included in Table 1A Analysis Institutions Included in Table 1B Analysis Consumer Price Index

# Introduction

As we report on another year of increases in the published tuition and fee prices of colleges and universities around the country, it is important to step back to gain some historical perspective on these prices and the forces driving them.

The majority of students enroll in public colleges and universities, and it is the prices of these institutions that are of greatest concern from a public policy perspective. The public four-year sector accounts for 36% of all (and 44% of full-time) undergraduate students, and the public two-year sector accounts for 40% of all (and 26% of full-time) undergraduate students.

Prices at public two-year colleges remain relatively low. In 2012-13, the national average of \$3,131 tuition and fees for a full-time student at a public two-year college is just 36% of the average published tuition and fees at public four-year institutions. Moreover, on average, two-year public college students receive enough financial aid to cover their tuition payments — with some funds left over to apply to other expenses. Low tuition is vital in this sector, which is the gateway to postsecondary education for many low-income and first-generation students who have very limited resources and little or no familiarity with higher education systems and processes. Many students enroll in public two-year colleges with inadequate academic preparation for college-level work, and low prices make their postsecondary undertakings less risky.

The 4.8% increase in the published price of tuition and fees at public four-year colleges and universities this year is the smallest since 2000-01 — and the smallest in inflation-adjusted dollars since 2008-09 (when inflation was particularly high). It is smaller than the 5.8% increase for public two-year colleges, but higher than the 4.2% increase at private nonprofit four-year colleges and universities. However, the growth in published prices at public four-year institutions has been higher over the past decade (averaging 5.2% per year beyond inflation) than over either of the two preceding decades. Published prices have risen more rapidly in this sector than in the other sectors over both the past five years and the past 10 years. The average tuition and fee price at public four-year colleges was \$5,213 (in 2012 dollars) in 2002-03 and is \$8,655 today.

## PAST AND FUTURE

It would likely be wrong to assume that price increases will keep accelerating. After a 9.3% real increase in 2009-10, the growth rate has declined in each successive year. Similarly, large increases from 2002-03 through 2004-05 were followed by more moderate growth in prices. The same pattern occurred in 1990-91 through 1993-94 and before that, 1982-83 and 1983-84. As Figure 12A shows, state appropriations for public higher education are cyclical, and tuition prices show similar cycles.

As Figures 9 and 10 show, the difference between published tuition and fee prices and the average net prices that students pay has grown over time as financial aid programs have come to play a larger role. In particular, from 2008-09 to 2010-11, the federal government markedly increased its funding for students, causing average net prices for students to fall in years when tuition was rising rapidly. But that trend will not continue. Concern over federal budget deficits is growing, and while support for existing levels of student aid is strong, it is difficult to imagine continued growth in student aid programs that would compensate for future tuition increases to any significant extent.

College enrollments have grown rapidly in recent years. In the decade from 2001-02 to 2011-12, the number of full-time undergraduate students increased by 37%, from 8.6 million to 11.8 million. The number of part-time undergraduate students increased by 22%, from 5.5 million to 6.7 million. This growth is partly a result of the weak labor market that has made school a more appealing alternative and partly a result of the growing gap between the earnings of workers who have college degrees and those who do not.

Although the trend in rapid enrollment growth has already tapered off, it was met by a significant decline in per-student funding. If we are to meet the needs of our citizens and our economy for increased postsecondary attainment, state budgets will have to give a higher priority to education in the coming years.

We must also pursue innovative ways of increasing efficiency on college campuses and providing quality education to large numbers of students. Efforts are well under way to develop lower-cost methods of delivering college courses. It is too early to say whether or not these efforts will revolutionize higher education, or which segments of our diverse and multipurpose postsecondary education system will be most affected.

It is revenue shortages rather than expenditure growth that have driven the recent rapid rises in public college prices. Nonetheless, for the millions of Americans dependent on colleges and universities to improve their prospects for fulfilling and secure lives, cost reductions that are reflected in slower growth in prices are critical.

The data provided in *Trends in College Pricing* can inform policymakers, researchers, and others in their analyses of these issues. The companion publication, *Trends in Student Aid*, contains detailed information about the financial aid that helps students and families pay these prices. The Trends website ([trends.collegeboard.org](http://trends.collegeboard.org)) makes data easily available for reference and downloading.

## PUBLISHED PRICES

The published prices on which *Trends in College Pricing* is based come from data reported by institutions on the College Board's *Annual Survey of Colleges*. This survey, which is distributed to nearly 4,000 postsecondary institutions across the country, collects a wealth of data on enrollment, admission, degrees and majors, tuition, financial aid, and other aspects of undergraduate education.

The prices reported here are averages for one year of full-time undergraduate enrollment. About 36% of all undergraduates and 60% of those attending public two-year colleges are enrolled part-time. Because of the variety of enrollment and pricing patterns, it is not possible to provide estimates of the charges facing these students that would be as accurate as the information we provide about full-time students.

The prices included in *Trends in College Pricing* represent best estimates of average prices for all full-time undergraduate students. However, a growing number of institutions charge different prices for different years of study and/or for different academic majors. We are able to incorporate differences in prices by year of study reported to us by individual institutions, but not differences by programs. Another complexity that has developed in recent years is that more and more two-year colleges are offering a small number of four-year degrees or providing course work that leads to four-year degrees awarded on other campuses. While we make every effort to adjust our methodology to accommodate these changes, it is impossible to draw precise lines between sectors and to develop exact measures in all cases.

*Trends in College Pricing 2012* presents detailed pricing data for public two-year and four-year and private nonprofit four-year institutions for the 2012-13 academic year. While we provide an estimate of the average charges at for-profit institutions, because of the relatively small sample of those institutions from which we are able to collect data, it is important to interpret that information with caution.

Finally, when interpreting college prices, it is important to remember that *Trends in College Pricing* reports on the price of one year of college. Many students require more than two years of study to earn an associate degree or more than four years of study to earn a bachelor's degree. It is critical to consider the total price for all years of study when thinking about what is required to pay for college. There is considerable variation across sectors as well as among institutions within sectors in both average time to degree and overall graduation rates.

## TUITION AND FEES VERSUS TOTAL CHARGES

Some of the graphs in this report focus only on tuition and fees, but we also report room and board charges for residential students, living costs for commuter students, and other components of student budgets. Whether students live on or off campus, they all must pay for housing and food, buy books and supplies, and cover transportation and other basic living costs.

Room and board and other living costs are not really part of the cost of attending college. These are expenses people face whether or not they are in school. The largest real cost many students face is forgone earnings. It is very difficult to succeed in college while working full-time. However, the cost of students' time is difficult to measure, and we make no attempt to do so in this report. Because students tend to think of living expenses as part of the cost of going to college, and because they must come up with the funds to cover these outlays, it is useful to use these expenses as a proxy for forgone earnings.

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

## NET PRICES: WHAT STUDENTS ACTUALLY PAY

Although it is generally the published prices that make headlines, it is the net prices paid by individual students that matter most for college access and affordability. We estimate that in 2012-13, while the average published tuition and fee price at public four-year institutions is \$8,655, the average *net* price is just over \$2,900. Grants and tax credits and deductions cover the remainder for the average full-time student. Over the past five years, the average published price has increased by 27% in real terms, while the average net price has increased by 17%.

The definition of "net price" we use is the average price paid by all full-time students — including those who do and do not receive student aid — after subtracting grant aid from all sources in addition to federal tax credits and deductions. Data on prices from the *Annual Survey of Colleges* and on student aid from *Trends in Student Aid* allow us to generate new, updated estimates for average net prices by sector each year. Only data from the *National Postsecondary Student Aid Study*



allow us to estimate net prices for students at different income levels enrolled in different types of institutions, and no data are available from this source to update the 2007-08 information published in earlier editions of *Trends*. We have, however, included information on net tuition payments by students at different types of institutions, based on data from the Delta Cost Project. These net prices cannot easily be compared to our annual net price calculations because they cover payments by all students — full-time and part-time, in-state and out-of-state, graduate and undergraduate. But they provide an important additional perspective on the portion of gross tuition revenue paid by students and the portion being covered by institutional grant aid (discounts), and federal and state grant aid.

## HOW COLLEGE PRICES ARE CHANGING

The data in this report confirm the widespread perception that published college prices are rising more rapidly than the prices of other goods and services. This is not a new phenomenon, but one that has persisted over the entire 30-year period documented here. Only about one-third of full-time students pay the full published tuition price with no grant assistance, but the prices these students pay have increased very rapidly. In addition, the nontuition expenses associated with going to college continue to rise, and grant aid is rarely sufficient to meet those costs.

Another very significant issue is that, as documented in Figure 18A, incomes have declined over the past decade for families at all levels of the income distribution. In addition, families have not been able to plan for the fluctuations in the value of the assets they have saved to pay for college. Rising tuition levels cause even more problems because of the economic environment in which they are occurring.

Neither changes in average published prices nor changes in average net prices necessarily describe the circumstances facing individual students. There is considerable variation in prices across sectors and across states and regions as well as among institutions within these categories. College students in the United States have a wide variety of educational institutions from which to choose, and these come with many different price tags. Moreover, different students may pay different prices at the same institution. One of the problems many students face is how to make sense of all the options and complex pricing structures.

Annual percentage increases in tuition and fees consistently receive most of the attention, but the actual price level and dollar increases in the price level matter most to students and families. Small percentage increases at colleges and universities

with high tuition and fee levels may translate into large dollar increases. At lower-priced institutions, larger percentage increases have less impact on affordability.

Rapidly rising postsecondary enrollments indicate that students are finding ways to finance their education and are largely explained by the understanding that more education generally leads to higher earnings throughout life. Nonetheless, the reality is that more students and families are struggling to pay for higher education, both during the college years and in the following years when education loans must be repaid.

## THE CONSUMER PRICE INDEX

We provide much of our data in constant dollars, adjusting values for changes in the Consumer Price Index (CPI). We use the change in the CPI from July 2011 to July 2012 to compare the price level for academic year 2012-13 to earlier prices. A decline in the CPI of 2.1% from 2008-09 to 2009-10 followed an increase of 5.6% in the preceding year. The CPI increased by 1.2% in 2010-11, by 3.6% between July 2010 and July 2011, and by 1.4% from July 2011 to July 2012.

## A NOTE ON TRENDS DATA

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 precise annual percentage changes. Each year we revise the average prices calculated the previous year to account for corrected data we receive from institutions and to provide an enrollment-weighted average based on the most recent available data on the number of full-time students attending each institution. If, over time, increasing numbers of students were to enroll in the lower-priced institutions within a sector, our measure of the average price increase would be lower than if enrollment were stable. Details relating to our methodology and to other technical issues and data reliability can be found at the end of the report, in the Notes and Sources section.

*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 on our website at [trends.collegeboard.org](http://trends.collegeboard.org). Please feel free to cite or reproduce the data in Trends for noncommercial purposes with proper attribution.*

# Published Tuition and Fee and Room and Board Charges, 2012-13

Average published tuition and fees for in-state students at public four-year colleges and universities increased from \$8,256 in 2011-12 to \$8,655 in 2012-13. The 4.8% increase in tuition and fees followed increases of 8.4% in 2011-12 and 8.0% in 2010-11.

- In 2012-13, the percentage increase in published prices for out-of-state students was 4.2%, smaller than that for state residents at public four-year institutions. Still, the dollar gap in the two prices increased from \$12,567 to \$13,051.
- The \$172 increase in average published tuition and fees for full-time students at public two-year colleges reflected a 5.8% increase from \$2,959 in 2011-12 to \$3,131 in 2012-13.
- The \$1,173 increase in average published tuition and fees for full-time students at private nonprofit four-year institutions reflected a 4.2% increase from \$27,883 in 2011-12 to \$29,056 in 2012-13.
- Data on charges at for-profit institutions are incomplete, but tuition and fees in this sector rose by an estimated 3.0%, from \$14,737 in 2011-12 to \$15,172 in 2012-13.
- The average published tuition and fee price for full-time in-state undergraduates at public master's universities is 80% of the price at public doctoral universities — \$7,606 versus \$9,539.
- The average published tuition and fee price for full-time undergraduates at private nonprofit master's universities is 73% of the price at private nonprofit doctoral universities — \$25,997 versus \$35,660.

## ALSO IMPORTANT:

- About 13% of full-time public four-year undergraduate students study out of state, but many states have reciprocity agreements with neighboring states that allow students to pay less than the published prices for nonresident students.
- About two-thirds of undergraduate students enrolled full-time receive grants that reduce the actual price of college. In addition, many states and institutions grant tuition waivers to groups such as dependents of employees, veterans, or teachers. See Figures 9 and 10 for estimates of net prices paid by students and *Trends in Student Aid 2012* for details about student aid.
- The total price of a college education depends on how long a student is enrolled before completing a degree. Many students spend more than four years earning a bachelor's degree. Average time to degree is longer in public than in private nonprofit colleges.
- In fall 2011, 60% of students at public two-year colleges were enrolled part-time, as were 23% of undergraduates at public four-year, 17% at private nonprofit four-year, and 24% at for-profit institutions. (National Center for Education Statistics [NCES], unpublished data)

**TABLE 1A** Average Published Charges for Full-Time Undergraduates by Type and Control of Institution, 2012-13 (Enrollment-Weighted)

Sector	Tuition and Fees				Room and Board				Total Charges			
	2012-13	2011-12	\$ Change	% Change	2012-13	2011-12	\$ Change	% Change	2012-13	2011-12	\$ Change	% Change
Public Two-Year In-State	\$3,131	\$2,959	\$172	5.8%	\$7,419	\$7,332	\$87	1.2%	\$10,550	\$10,291	\$259	2.5%
Public Four-Year In-State	\$8,655	\$8,256	\$399	4.8%	\$9,205	\$8,880	\$325	3.7%	\$17,860	\$17,136	\$724	4.2%
Public Four-Year Out-of-State	\$21,706	\$20,823	\$883	4.2%	\$9,205	\$8,880	\$325	3.7%	\$30,911	\$29,703	\$1,208	4.1%
Private Nonprofit Four-Year	\$29,056	\$27,883	\$1,173	4.2%	\$10,462	\$10,088	\$374	3.7%	\$39,518	\$37,971	\$1,547	4.1%
For-Profit	\$15,172	\$14,737	\$435	3.0%	—	—	—	—	—	—	—	—

— Sample too small to provide meaningful information.

**TABLE 1B** Average Published Charges for Full-Time Undergraduates by Carnegie Classification, 2012-13 (Enrollment-Weighted)

Carnegie Classification	Tuition and Fees				Room and Board				Total Charges			
	2012-13	2011-12	\$ Change	% Change	2012-13	2011-12	\$ Change	% Change	2012-13	2011-12	\$ Change	% Change
Public Doctoral In-State	\$9,539	\$9,126	\$413	4.5%	\$9,643	\$9,314	\$329	3.5%	\$19,182	\$18,440	\$742	4.0%
Public Master's In-State	\$7,606	\$7,207	\$399	5.5%	\$8,511	\$8,195	\$316	3.9%	\$16,117	\$15,402	\$715	4.6%
Public Bachelor's In-State	\$6,718	\$6,433	\$285	4.4%	\$8,736	\$8,385	\$351	4.2%	\$15,454	\$14,818	\$636	4.3%
Private Doctoral	\$35,660	\$34,230	\$1,430	4.2%	\$12,187	\$11,763	\$424	3.6%	\$47,847	\$45,993	\$1,854	4.0%
Private Master's	\$25,997	\$24,903	\$1,094	4.4%	\$10,104	\$9,738	\$366	3.8%	\$36,101	\$34,641	\$1,460	4.2%
Private Bachelor's	\$27,482	\$26,427	\$1,055	4.0%	\$9,494	\$9,150	\$344	3.8%	\$36,976	\$35,577	\$1,399	3.9%

NOTE: Prices reported for 2011-12 have been revised and may differ from those reported in *Trends in College Pricing 2011*. See Notes and Sources on p. 37 for definitions of the institutional categories in Table 1B. Public two-year room and board charges are based on commuter housing and food costs. Tuition and fee figures for the for-profit sector should be interpreted with caution because of the low response rate.

SOURCE: The College Board, *Annual Survey of Colleges*.

*Enrollment-weighted tuition and fees weight the price charged by each institution by the number of full-time students enrolled in fall 2011. Public four-year in-state charges are weighted by total fall 2011 full-time 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 students enrolled at each institution. Room and board charges are weighted by the number of students residing on campus for four-year institutions and by the number of commuter students for public two-year institutions.*

# Student Budgets

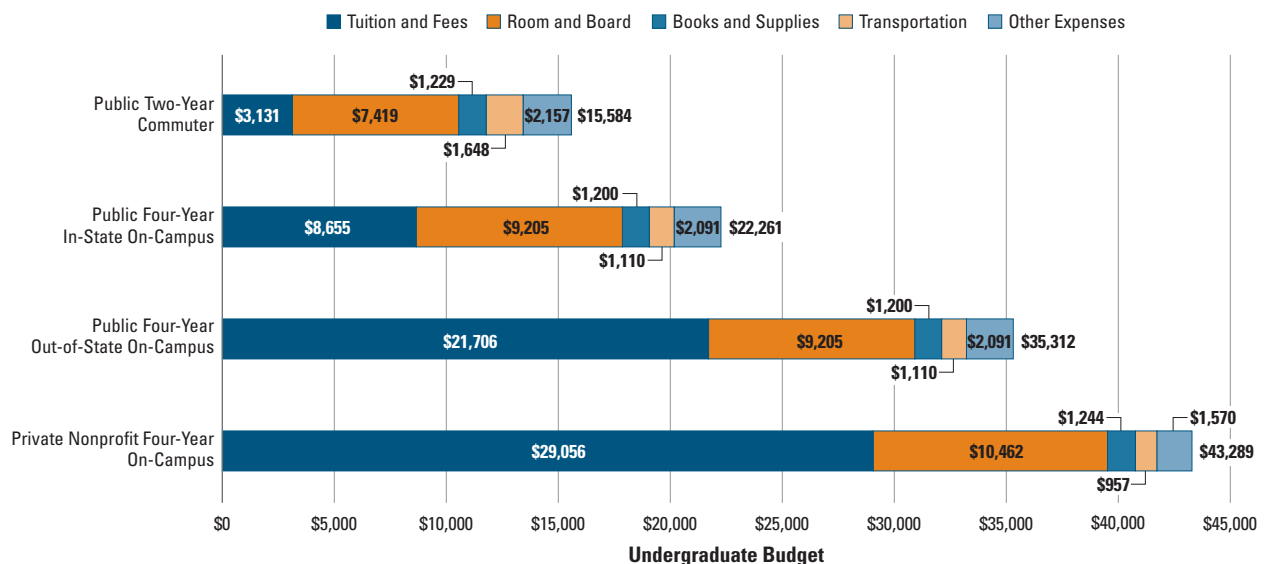
Tuition and fees constitute about 39% of the total budget for in-state students living on campus at public four-year colleges and universities, and about 20% of the budget for public two-year college students who pay for off-campus housing.

- 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 financial aid for which students are eligible.
- Tuition and fees differ more across sectors than room and board and other components of student budgets. As a result, while the average published tuition and fee price at public four-year colleges is 2.8 times as high as the price at two-year public colleges, the total student budget is only 1.4 times as high.
- The average published tuition and fee price at public four-year colleges is about 30% of the average at private nonprofit four-year institutions, but the average student budget is 51% as high.

## ALSO IMPORTANT:

- According to the National Association of College Stores, expenditures on textbooks are declining as students increasingly rely on textbook rentals, used books, and digital resources. ([www.nacs.org/advocacynewsmedia/pressreleases/studentspendingontextbookscontinuestodecline.aspx](http://www.nacs.org/advocacynewsmedia/pressreleases/studentspendingontextbookscontinuestodecline.aspx))

**FIGURE 1** Average Estimated Full-Time Undergraduate Budgets, 2012-13 (Enrollment-Weighted)



NOTE: Expense categories are based on institutional budgets for students as reported by colleges and universities in the *Annual Survey of Colleges*. They do not necessarily reflect actual student expenditures.

SOURCE: The College Board, *Annual Survey of Colleges*.

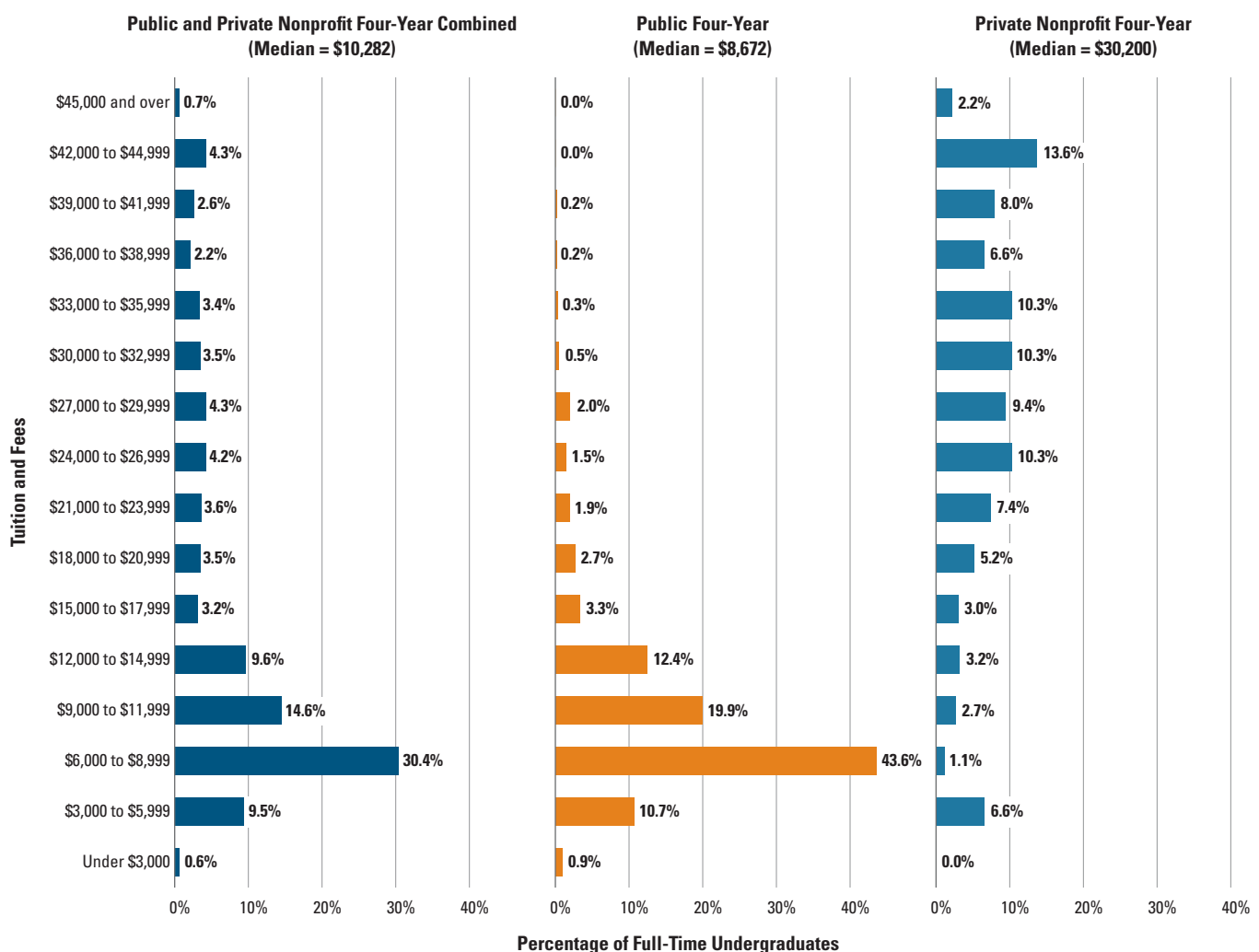


# Variation in Published Tuition and Fees, 2012-13

Half of all full-time undergraduates at public and private nonprofit four-year colleges and universities attend institutions charging tuition and fees of \$10,282 or less, and half attend institutions with published tuition and fees of \$10,282 or more.

- The median full-time public four-year undergraduate, including both in-state and out-of-state students, is enrolled at an institution with published tuition and fees of \$8,672, while the median full-time undergraduate in the private nonprofit four-year sector faces published charges of \$30,200.
- One-quarter of full-time undergraduates enrolled in private nonprofit four-year institutions attend institutions with published tuition and fees of \$22,390 or lower, and 25% of the students in this sector face published prices of \$38,450 or more.
- About 12% of full-time undergraduates at public four-year colleges and universities are enrolled in institutions charging less than \$6,000. About 7% of undergraduates at private nonprofit four-year colleges and universities are enrolled in institutions in this price range.

**FIGURE 2** Distribution of Full-Time Undergraduates at Four-Year Institutions by Published Tuition and Fees, 2012-13



NOTE: For out-of-state students enrolled in public four-year colleges, the nonresident premium has been added to in-state tuition and fees. Some out-of-state students actually pay lower prices because of 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 2011. Percentages may not sum to 100 because of rounding.

SOURCE: The College Board, *Annual Survey of Colleges*.



For detailed data behind the graphs and additional information, please visit: [trends.collegeboard.org](https://trends.collegeboard.org).

# Variation in Tuition and Fee Increases, 2012-13

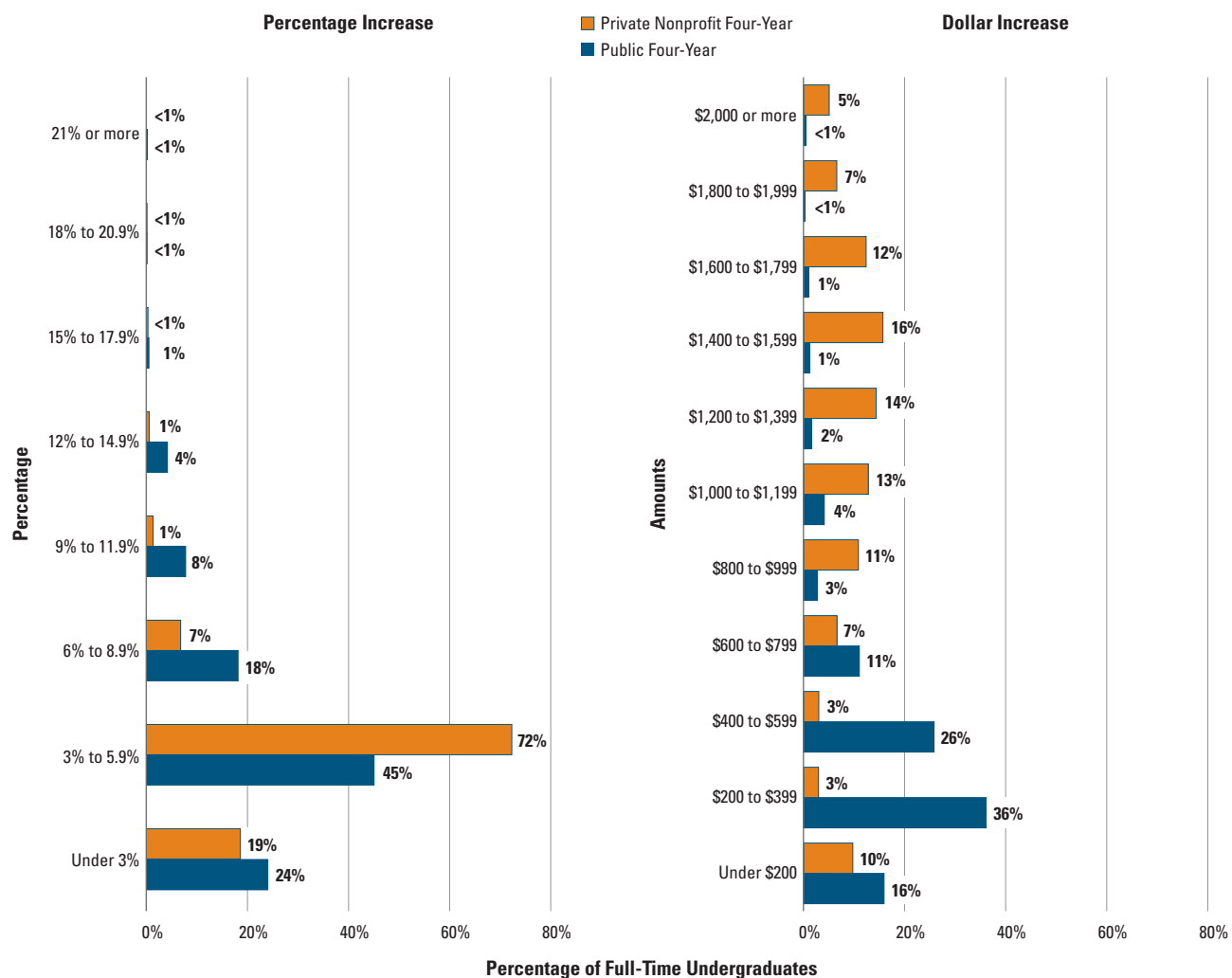
Although the average increase in tuition and fees at public four-year colleges in 2012-13 is 4.8% for in-state undergraduates and 4.2% for out-of-state undergraduates, 13% of full-time undergraduates at public four-year colleges and universities attend institutions that increased their published prices by 9% or more, and 24% attend institutions that increased their prices by less than 3%.

- The average increase in tuition and fees at private nonprofit four-year colleges and universities in 2012-13 is 4.2%, and 72% of the full-time undergraduates in this sector attend institutions that increased their charges by between 3% and 6%. About 19% of undergraduates in this sector attend institutions that increased their prices by less than 3%, while about 2% faced increases of 9% or more.
- The median 2012-13 dollar increase in published tuition and fees for public four-year college undergraduates is \$384. The median dollar increase for private nonprofit four-year college undergraduates is \$1,231.

## ALSO IMPORTANT:

- Increases in published prices do not necessarily correspond to increases in the amounts students pay. The amounts students pay also depend on the amount of grant aid they receive.

**FIGURE 3** Distribution of Full-Time Undergraduates at Public and Private Nonprofit Four-Year Institutions by Percentage and Dollar Increase in Published Tuition and Fees, 2012-13



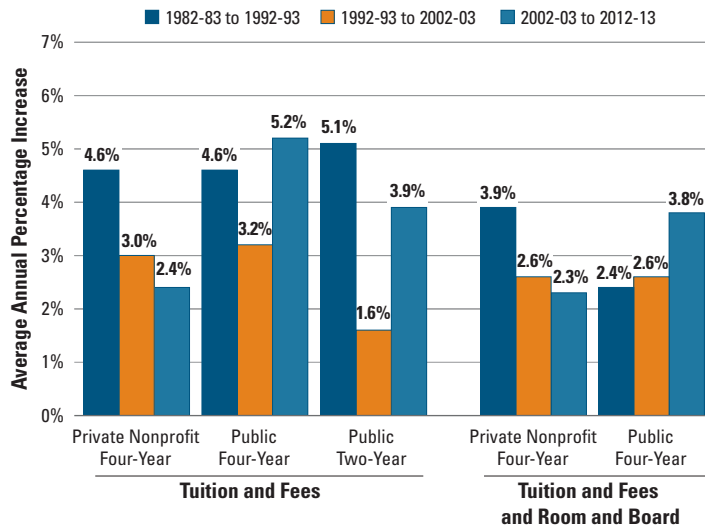
NOTE: For out-of-state students enrolled in public four-year colleges, the nonresident premium has been added to in-state tuition and fees. Some out-of-state students actually pay lower prices because of reciprocity agreements, which allow students from neighboring states to pay less than the full out-of-state price. The distribution of students across institutions is based on the latest available enrollment data, which are for fall 2011. Percentages may not sum to 100 because of rounding.

SOURCE: The College Board, *Annual Survey of Colleges*.

# Tuition and Fee and Room and Board Charges over Time

**FIGURE 4**

Average Annual Percentage Increases in Inflation-Adjusted Published Prices by Decade, 1982-83 to 2012-13



Each bar in Figure 4 shows the average annual rate of growth of published prices in inflation-adjusted dollars over a 10-year period. For example, from 2002-03 to 2012-13, average published tuition and fees at private nonprofit four-year colleges rose by an average of 2.4% per year beyond increases in the Consumer Price Index.

SOURCES: The College Board, *Annual Survey of Colleges*; National Center for Education Statistics (NCES), *Integrated Postsecondary Education Data System (IPEDS)*.

**FIGURE 5**

Inflation-Adjusted Published Tuition and Fees Relative to 1982-83, 1982-83 to 2012-13 (1982-83 = 100)

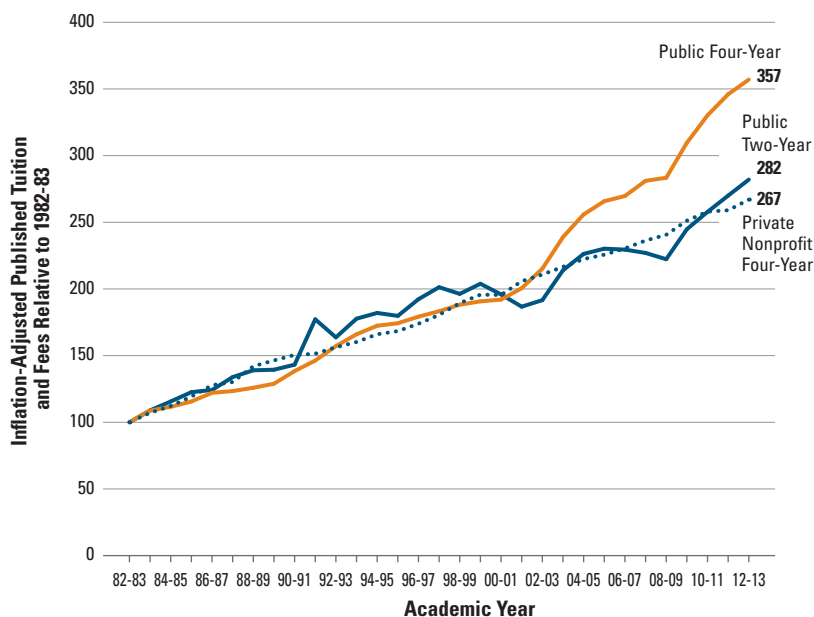


Figure 5 shows published tuition and fees by sector, adjusted for inflation, as a percentage of 1982-83 published prices. For example, a value of 357 indicates that the tuition and fee price in the public four-year sector in 2012-13 is 3.57 times as high as it was in 1982-83, after adjusting for increases in the Consumer Price Index.

SOURCES: The College Board, *Annual Survey of Colleges*; NCES, *IPEDS*.

The 4.8% one-year increase in average published tuition and fees for in-state students at public four-year institutions in 2012-13 was 3.4% after adjusting for inflation — less than the 5.2% average annual real increase over the decade from 2002-03 to 2012-13.

- Published prices (both tuition and fees and room and board) at public four-year institutions rose more rapidly between 2002-03 and 2012-13 than over either of the two preceding decades.
- The average annual rate of increase in inflation-adjusted tuition and fees at private nonprofit four-year colleges and universities declined from 4.6% from 1982-83 to 1992-93 to 3.0% from 1992-93 to 2002-03, and to 2.4% over the most recent decade.
- Tuition and fees at public two-year colleges rose less than average prices in the economy in 2006-07, 2007-08, and 2008-09, but rose by 11.7% in 2003-04 and by 10.2% beyond inflation in 2009-10. Between 1992-93 and 2002-03, there were three years with negative real increases and the largest single-year increase was 4.0%.
- Over the decade from 2002-03 to 2012-13, when published tuition and fees at public four-year institutions rose at an average rate of 5.2% per year beyond inflation, room and board charges increased by 2.6% per year, leading to a 3.8% average annual rate of growth in total charges.
- Over the decade from 2002-03 to 2012-13, when published tuition and fees at private nonprofit four-year institutions rose at an average rate of 2.4% per year beyond inflation, room and board charges increased by 1.9% per year, leading to a 2.3% average annual rate of growth in total charges.
- Over the 30 years from 1982-83 to 2012-13, average published tuition and fees at private nonprofit four-year institutions rose by 167%, from \$10,901 (in 2012 dollars) to \$29,056. The average published price at public two-year colleges rose by 182%, from \$1,111 (in 2012 dollars) to \$3,131, while the increase for in-state students at public four-year institutions was 257%, from \$2,423 to \$8,655.

## ALSO IMPORTANT:

- About 40% of full-time dependent students enrolled in public four-year institutions live on campus. Another 40% live in off-campus housing and about 20% live with their parents. Among dependent students at private nonprofit four-year colleges, 70% live on campus, 17% live in off-campus housing, and 12% live with their parents. (NCES, *National Postsecondary Student Aid Study (NPSAS)*, 2008)

# Tuition and Fee and Room and Board Charges over Time

The annual increase in inflation-adjusted average tuition and fees at public four-year colleges and universities has declined in each of the past four years, from 9.3% in 2009-10 to 3.4% in 2012-13.

- Average published tuition and fees at public four-year colleges and universities increased by 31% beyond the rate of inflation over the five years from 2002-03 to 2007-08, and by another 27% between 2007-08 and 2012-13.
- Average published tuition and fees at public two-year colleges increased by 18% in inflation-adjusted dollars, from \$2,129 (in 2012 dollars) in 2002-03 to \$2,523 in 2007-08, and by another 24%, to \$3,131 in 2012-13.
- The 13% real increase in average published tuition and fees at private nonprofit four-year institutions from 2007-08 to 2012-13 was similar to that in the previous five years.
- In both the public four-year and the private nonprofit four-year sectors, the largest one-year percentage increase in the constant dollar published price for tuition, fees, room and board over the decade from 2002-03 to 2012-13 was in 2009-10.
- The annual increase in inflation-adjusted average published tuition and fees at public two-year colleges declined from 10.2% in 2009-10 to 5.3% in 2010-11 and 4.7% in 2011-12, and was 4.3% in 2012-13.

**TABLE 2A** Average Tuition and Fee and Room and Board Charges in 2012 Dollars, 1972-73 to 2012-13, Selected Years

	Tuition and Fees in 2012 Dollars						Tuition, Fees, and Room and Board in 2012 Dollars			
	Private Nonprofit Four-Year	5-Year % Change	Public Four-Year	5-Year % Change	Public Two-Year	5-Year % Change	Private Nonprofit Four-Year	5-Year % Change	Public Four-Year	5-Year % Change
72-73	\$10,378	—	\$2,225	—	\$1,274	—	\$16,611	—	\$7,972	—
77-78	\$10,141	-2%	\$2,460	11%	\$1,149	-10%	\$15,925	-4%	\$7,654	-4%
82-83	\$10,901	7%	\$2,423	-2%	\$1,111	-3%	\$16,745	5%	\$7,510	-2%
87-88	\$14,189	30%	\$2,990	23%	\$1,488	34%	\$21,048	26%	\$8,453	13%
92-93	\$17,037	20%	\$3,806	27%	\$1,820	22%	\$24,504	16%	\$9,513	13%
97-98	\$19,677	15%	\$4,441	17%	\$2,237	23%	\$27,635	13%	\$10,662	12%
02-03	\$22,974	17%	\$5,213	17%	\$2,129	-5%	\$31,633	14%	\$12,304	15%
07-08	\$25,759	12%	\$6,809	31%	\$2,523	18%	\$35,188	11%	\$14,912	21%
12-13	\$29,056	13%	\$8,655	27%	\$3,131	24%	\$39,518	12%	\$17,860	20%

**TABLE 2B** Average Tuition and Fee and Room and Board Charges in 2012 Dollars, 2002-03 to 2012-13

	Tuition and Fees in 2012 Dollars						Tuition, Fees, and Room and Board in 2012 Dollars			
	Private Nonprofit Four-Year	1-Year % Change	Public Four-Year	1-Year % Change	Public Two-Year	1-Year % Change	Private Nonprofit Four-Year	1-Year % Change	Public Four-Year	1-Year % Change
02-03	\$22,974	—	\$5,213	—	\$2,129	—	\$31,633	—	\$12,304	—
03-04	\$23,608	2.8%	\$5,787	11.0%	\$2,378	11.7%	\$32,462	2.6%	\$13,118	6.6%
04-05	\$24,247	2.7%	\$6,201	7.2%	\$2,515	5.7%	\$33,222	2.3%	\$13,761	4.9%
05-06	\$24,599	1.5%	\$6,439	3.9%	\$2,558	1.7%	\$33,701	1.4%	\$14,205	3.2%
06-07	\$25,115	2.1%	\$6,534	1.5%	\$2,551	-0.3%	\$34,334	1.9%	\$14,452	1.7%
07-08	\$25,759	2.6%	\$6,809	4.2%	\$2,523	-1.1%	\$35,188	2.5%	\$14,912	3.2%
08-09	\$25,849	0.3%	\$6,865	0.8%	\$2,471	-2.1%	\$35,204	0.0%	\$14,961	0.3%
09-10	\$27,383	5.9%	\$7,500	9.3%	\$2,721	10.2%	\$37,310	6.0%	\$16,183	8.2%
10-11	\$28,128	2.7%	\$8,000	6.7%	\$2,866	5.3%	\$38,320	2.7%	\$16,984	5.0%
11-12	\$28,276	0.5%	\$8,372	4.6%	\$3,001	4.7%	\$38,506	0.5%	\$17,377	2.3%
12-13	\$29,056	2.8%	\$8,655	3.4%	\$3,131	4.3%	\$39,518	2.6%	\$17,860	2.8%

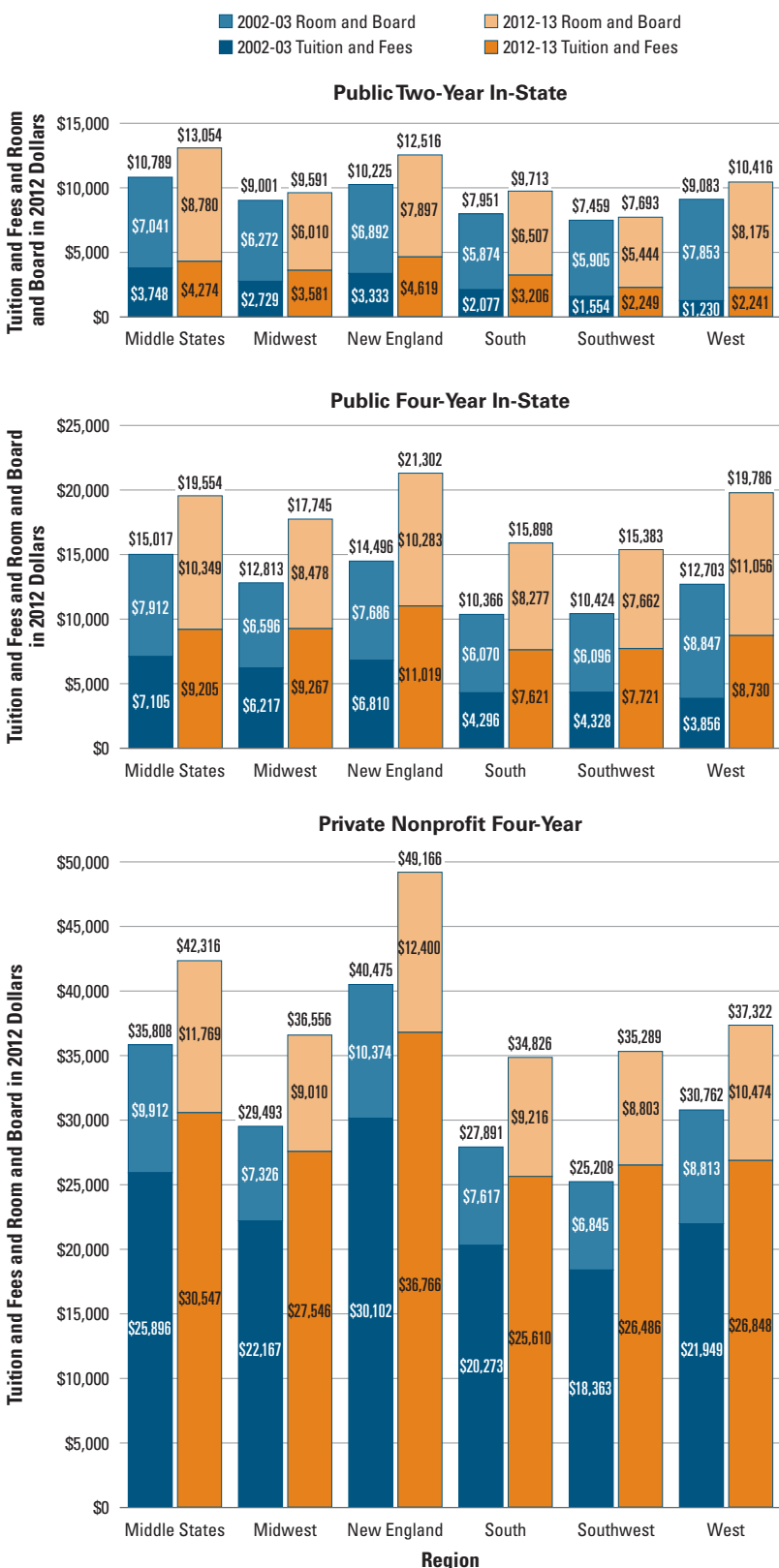
SOURCES: The College Board, *Annual Survey of Colleges*; NCES, *IPEDS*.



See Table 2 and Table 3 online for historical data on tuition and fee and room and board charges.

# Regional Variation in Charges

**FIGURE 6**  
Average Tuition and Fee and Room and Board Charges by College Board Region and Sector, in 2012 Dollars, 2002-03 and 2012-13 (Enrollment-Weighted)



In 2012-13, average published tuition and fees for in-state students at public four-year colleges range from \$7,621 in the South to \$11,019 in New England.

- Average published tuition and fees for full-time students at public two-year colleges range from \$2,241 in the West to \$4,619 in New England in 2012-13.
- Over the decade from 2002-03 to 2012-13, dollar increases in average public four-year tuition and fees ranged from \$2,100 (in 2012 dollars) in the Middle States region to \$4,874 in the West. Percentage increases ranged from 30% in the Middle States region to 126% in the West.
- The percentage increase in public four-year college tuition and fees over the decade beginning in 2002-03 was over twice as large in the West as in New England, but the average published tuition and fee price in the West in 2012-13 is \$2,289 lower than the price in New England.
- The largest percentage increase in public two-year college tuition and fees over the decade beginning in 2002-03 was 82% in the West, which still has a lower published tuition and fee price than any other region in 2012-13.
- Room and board charges at public four-year institutions are higher in the West than in other regions. The Middle States region had the highest average tuition, fees, and room and board combined in 2002-03, but the highest charges in 2012-13 are in New England.
- The largest dollar gap between average 2012-13 tuition and fees at public two-year and public four-year institutions is \$6,489 in the West, where the published price at two-year colleges is 26% of the price at public four-year colleges and universities. The smallest gap is \$4,415 in the South, where the ratio is 42%.

*The blue bars report 2002-03 prices and the orange bars report 2012-13 prices. In each bar, the darker segment corresponds to published tuition and fees and the lighter segment corresponds to room and board charges. The height of the entire bar reflects total tuition and fee and room and board charges.*

NOTE: Public two-year room and board charges are based on commuter housing and food costs. States included in the regions are as follows: Middle States: DC, DE, MD, NJ, NY, PA, and PR; Midwest: IA, IL, IN, KS, MI, MN, MO, NE, ND, OH, SD, WI, and WV; New England: CT, MA, ME, NH, RI, and VT; South: AL, FL, GA, KY, LA, MS, NC, SC, TN, and VA; Southwest: AR, NM, OK, and TX; West: AK, AZ, CA, CO, HI, ID, MT, NV, OR, UT, WA, and WY.

SOURCE: The College Board, *Annual Survey of Colleges*.



# Tuition and Fees by State: Public Institutions

In 2012-13, the highest published tuition and fee prices in both public four-year and public two-year institutions are in New Hampshire and Vermont. Tuition and fees average \$14,576 and \$6,752 for public four-year and public two-year institutions, respectively, in New Hampshire and \$13,582 and \$6,790 in Vermont. For the nation as a whole, average tuition and fee prices are \$8,655 for public four-year and \$3,131 for public two-year institutions.

- The lowest published tuition and fee prices for public four-year colleges and universities in 2012-13 are \$4,278 in Wyoming and \$5,595 in Utah.
- The lowest published tuition and fee prices for public two-year colleges in 2012-13 are \$1,418 in California and \$1,537 in New Mexico.
- Over the five years from 2007-08 to 2012-13, percentage increases in public four-year tuition and fees ranged from 2% in Maryland (\$176 in 2012 dollars) and 3% in Ohio (\$250) to 72% in California (\$3,923) and 78% (\$4,275) in Arizona. Prices in Maryland and Ohio remain above the national average.
- Over the five years from 2007-08 to 2012-13, percentage changes in public two-year tuition and fees ranged from a decline of 3% (-\$103 in 2012 dollars) in Maine and an increase

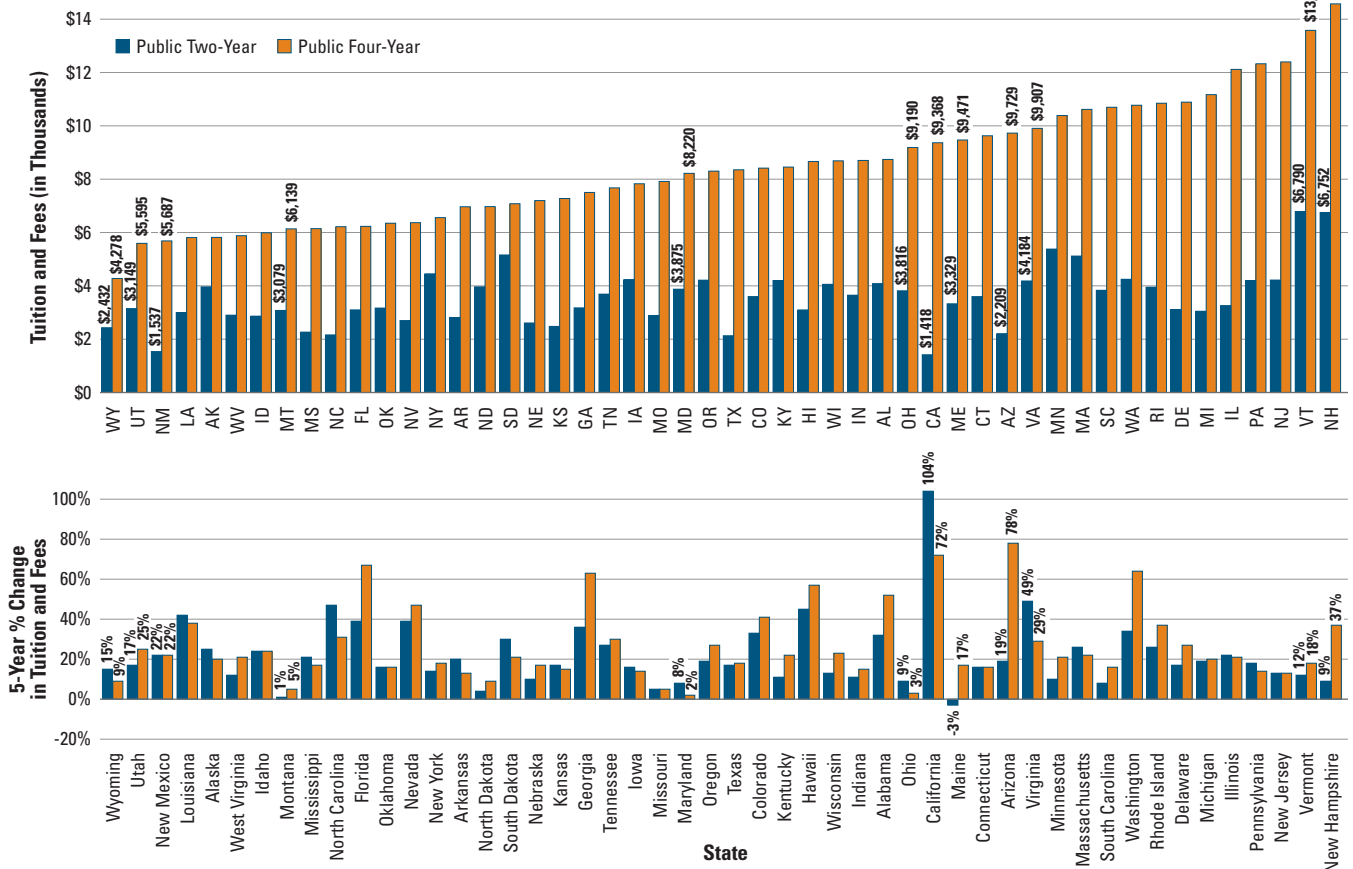
of 1% in Montana (\$32) to increases of 49% in Virginia (\$1,367) and 104% in California (\$722), which still has the lowest prices in the country.

### ALSO IMPORTANT:

- As Figure 12B indicates, New Hampshire had the lowest appropriations per \$1,000 of personal income of any state in 2011-12, and Vermont had the fourth lowest. Wyoming had the highest appropriations per \$1,000 of personal income and New Mexico had the third highest.
- As Figure 12B indicates, Arizona, which had the largest percentage increase in public four-year tuition and fees over the past five years, also faced the second largest percentage decline in appropriations per \$1,000 of personal income (39%) from 2006-07 to 2011-12. In contrast, Maryland faced only a 7% decline over these years.

**FIGURE 7**

Average In-State Tuition and Fees at Public Four-Year and Two-Year Institutions, by State, 2012-13 and 5-Year Percentage Change in Inflation-Adjusted Tuition and Fees, 2007-08 to 2012-13



SOURCE: The College Board, *Annual Survey of Colleges*.

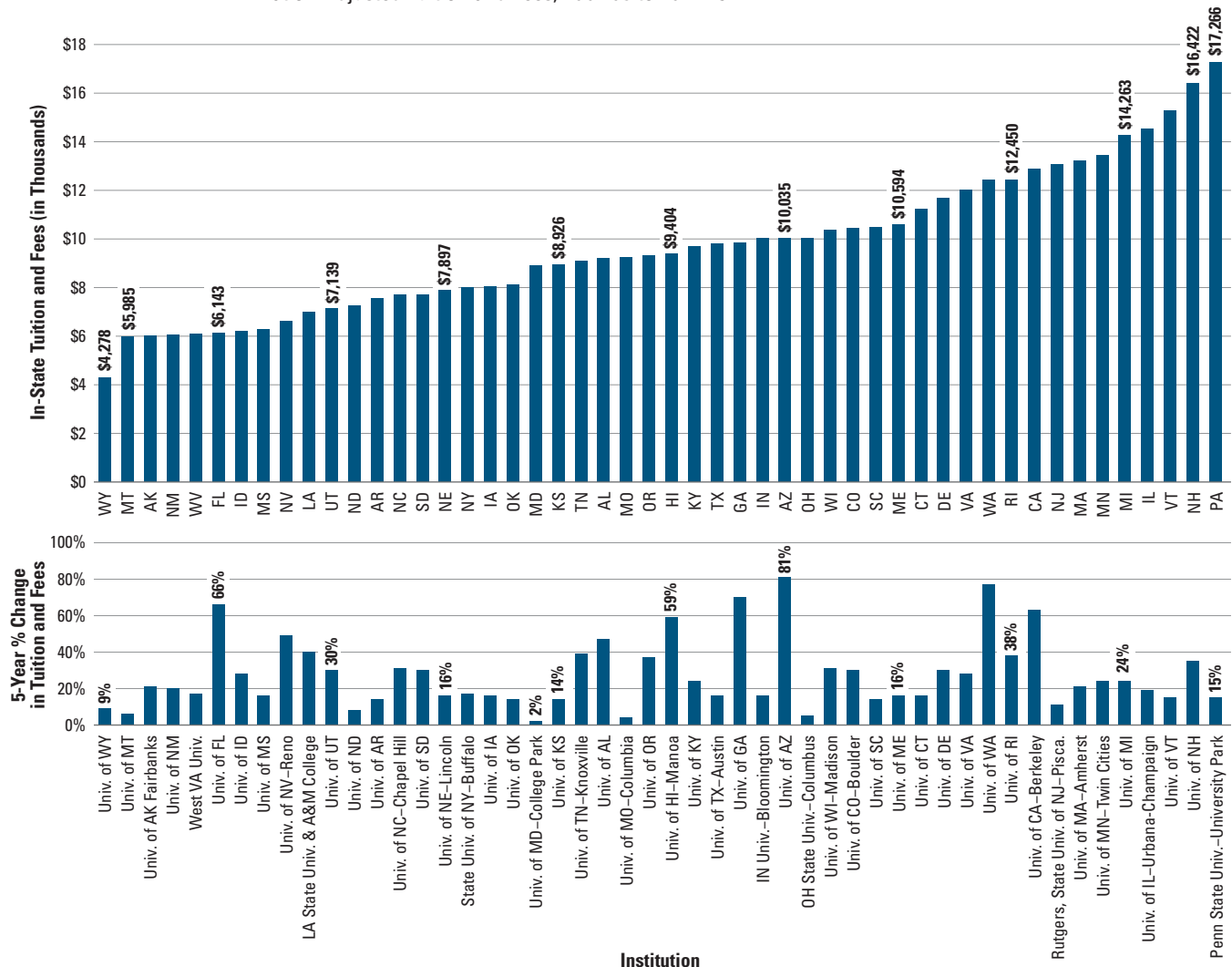
See Table 5 online for additional data on tuition and fees at public institutions by state.

# Tuition and Fees by State: Flagship Universities

In 2012-13, published tuition and fees for in-state students at flagship universities range from \$4,278 at the University of Wyoming and \$5,985 at the University of Montana to \$16,422 at the University of New Hampshire and \$17,266 at Penn State.

- Changes in published tuition and fees for in-state students at flagship universities over the five years from 2007-08 to 2012-13 range from a 2% real increase at the University of Maryland, College Park, to an increase of 81% at the University of Arizona.
- At four flagship universities, in-state tuition and fees declined in inflation-adjusted dollars in 2012-13. The largest increase was 13% at the University of Washington (online Table 6).
- In 2012-13, published tuition and fees for out-of-state students at flagship universities range from \$9,650 at the University of South Dakota and \$13,428 at the University of Wyoming to \$37,336 at the University of Virginia and \$39,122 at the University of Michigan (online Table 6).
- In three states, the price for out-of-state students declined in inflation-adjusted dollars in 2012-13. The largest increase was 13% at Louisiana State University (online Table 6).
- Changes in published prices for out-of-state students at flagship universities over the five years from 2007-08 to 2012-13 range from a 21% decline in inflation-adjusted dollars at the University of Minnesota–Twin Cities, to a 59% increase at the University of Hawaii at Manoa (online Table 6).

**FIGURE 8** In-State Tuition and Fees at Flagship Universities, by State, 2012-13 and 5-Year Percentage Change in Inflation-Adjusted Tuition and Fees, 2007-08 to 2012-13



SOURCE: The College Board, *Annual Survey of Colleges*.

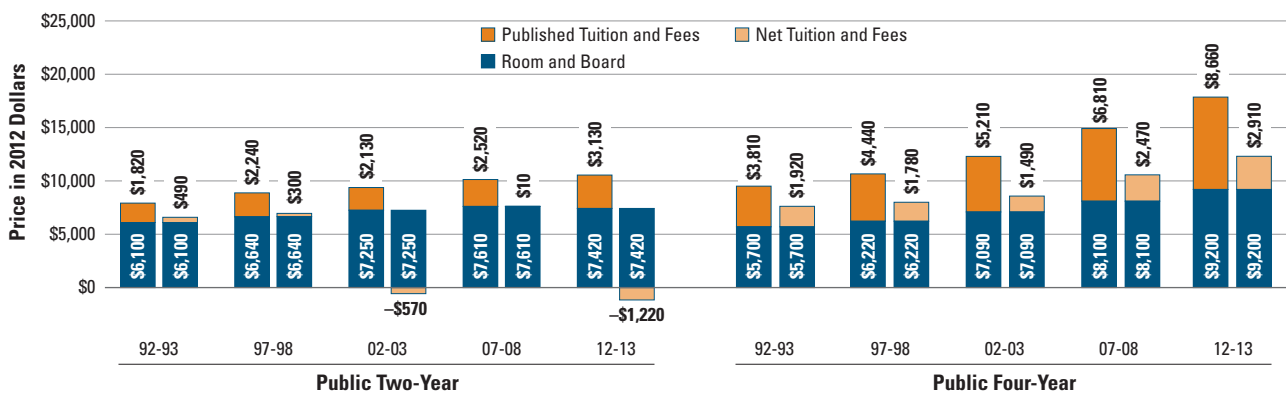
# Average Net Price — Public Institutions

Between 2007-08 and 2012-13, average published tuition and fees at public four-year colleges and universities increased by about \$1,850 (in 2012 dollars) from \$6,810 to \$8,660. About \$1,410 of this \$1,850 increase was covered by increases in grant aid from all sources and federal education tax credits and deductions, with the student share increasing by about \$440.

- The average net tuition and fees that in-state undergraduates pay after taking grant aid and tax benefits into consideration increased from \$2,470 to \$2,910 over this time period.
- In 2012-13, undergraduates enrolled full-time in public four-year institutions receive an estimated average \$5,750 in grant aid and tax benefits to help them pay for college. This aid averages about \$4,350 for those enrolled in public two-year institutions.
- Because of unusually large increases in grant aid and tax credits, the average net tuition and fees paid by full-time in-state undergraduates at public four-year institutions declined in real terms between 2007-08 and 2009-10, falling from \$2,470 (in 2012 dollars) to \$1,950 — the lowest level since 2003-04. Over the three years since, the average net tuition and fees have increased by an estimated \$960.
- The average full-time undergraduate enrolled in a public four-year college receives enough grant aid to cover a significant portion of tuition and fees, but not to cover any other expenses. As a result, total net price — including tuition and fees as well as room and board — equals the \$2,910 in net tuition and fees plus the full \$9,200 for room and board, yielding an estimated total net price of \$12,110 in 2012-13.
- In 2012-13, the average student enrolled full-time in a public two-year college receives enough funding through federal tax benefits and grant aid from all sources to cover tuition and fees plus about \$1,220 in other expenses.

**FIGURE 9**

Published Tuition and Fees, Net Tuition and Fees, and Room and Board in 2012 Dollars, Full-Time Undergraduate Students at Public Institutions, 1992-93, 1997-98, 2002-03, 2007-08, and 2012-13 (Estimated)



	92-93	97-98	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13
<b>Public Two-Year Institutions</b>													
Published Tuition and Fees	\$1,820	\$2,240	\$2,130	\$2,380	\$2,510	\$2,560	\$2,550	\$2,520	\$2,470	\$2,720	\$2,870	\$3,000	\$3,130
Total Grant Aid and Tax Benefits	\$1,330	\$1,940	\$2,700	\$2,780	\$2,730	\$2,620	\$2,520	\$2,510	\$2,920	\$3,610	\$4,330	\$4,350	\$4,350
Net Tuition and Fees	\$490	\$300	-\$570	-\$400	-\$220	-\$60	\$30	\$10	-\$450	-\$890	-\$1,460	-\$1,350	-\$1,220
Published Tuition, Fees, Room, and Board	\$7,920	\$8,880	\$9,380	\$9,390	\$9,570	\$9,560	\$9,920	\$10,130	\$9,880	\$10,320	\$10,620	\$10,440	\$10,550
Net Tuition, Fees, Room, and Board	\$6,590	\$6,940	\$6,680	\$6,610	\$6,840	\$6,940	\$7,400	\$7,620	\$6,960	\$6,710	\$6,290	\$6,090	\$6,200
<b>Public Four-Year Institutions</b>													
Published Tuition and Fees	\$3,810	\$4,440	\$5,210	\$5,790	\$6,200	\$6,440	\$6,530	\$6,810	\$6,860	\$7,500	\$8,000	\$8,370	\$8,660
Total Grant Aid and Tax Benefits	\$1,890	\$2,660	\$3,720	\$3,900	\$4,050	\$4,070	\$4,180	\$4,340	\$4,520	\$5,550	\$5,880	\$5,750	\$5,750
Net Tuition and Fees	\$1,920	\$1,780	\$1,490	\$1,890	\$2,150	\$2,370	\$2,350	\$2,470	\$2,340	\$1,950	\$2,120	\$2,620	\$2,910
Published Tuition, Fees, Room, and Board	\$9,510	\$10,660	\$12,300	\$13,120	\$13,760	\$14,200	\$14,450	\$14,910	\$14,960	\$16,180	\$16,980	\$17,380	\$17,860
Net Tuition, Fees, Room, and Board	\$7,620	\$8,000	\$8,580	\$9,220	\$9,710	\$10,130	\$10,270	\$10,570	\$10,440	\$10,630	\$11,100	\$11,630	\$12,110

Because data for 2012-13 are not yet available, financial aid and the resulting net prices for 2012-13 are preliminary estimates.

NOTE: Prices have been rounded to the nearest \$10.

SOURCES: The College Board, *Annual Survey of Colleges*; *Trends in Student Aid 2012*; calculations by the authors.

See Table 7, Figures 2009\_8, 2010\_8A, 2010\_8B, 2011\_8A, and 2011\_8B online for additional data on net price at public institutions.

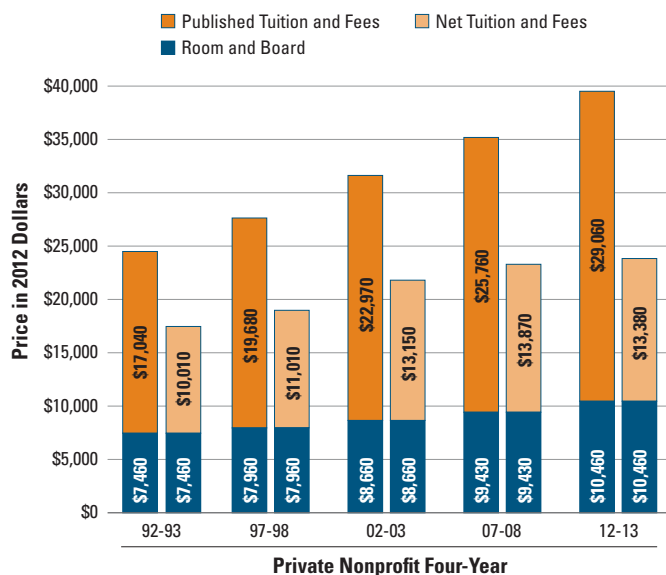
# Average Net Price — Private Institutions

Average net tuition and fees for full-time undergraduates at private nonprofit four-year institutions rose from \$12,600 (in 2012 dollars) in 2011-12 to an estimated \$13,380 in 2012-13. This increase comes after three consecutive years of decline between 2007-08 and 2010-11 and a small increase of \$60 between 2010-11 and 2011-12.

- The average private nonprofit four-year net tuition and fee price of \$12,540 in 2010-11 was the lowest since 2000-01 in inflation-adjusted dollars.
- In 2012-13, on average, undergraduates enrolled full-time in private nonprofit four-year colleges receive an estimated \$15,680 in grant aid and tax benefits to help them pay for college.
- The average full-time undergraduate enrolled in a private nonprofit four-year college receives enough grant aid to cover a significant portion of tuition and fees, but not to cover any other expenses. As a result, total net price — including tuition and fees as well as room and board — equals the \$13,380 in net tuition and fees plus the full \$10,460 for room and board, yielding an estimated total net price of \$23,840 in 2012-13.

**FIGURE 10**

Published Tuition and Fees, Net Tuition and Fees, and Room and Board in 2012 Dollars, Full-Time Undergraduate Students at Private Nonprofit Four-Year Institutions, 1992-93, 1997-98, 2002-03, 2007-08, and 2012-13 (Estimated)



## ALSO IMPORTANT:

- Large increases in federal Pell Grants and veterans benefits in 2009-10, combined with the 2009 implementation of the American Opportunity Tax Credit, had a significant impact on the net prices paid by students who benefit from these programs.
- Net prices vary considerably across students within institutions and within sectors. For those who do not receive grant aid or tax benefits, the net price is equal to the published price.
- In 2012-13, net tuition and fees for full-time students at private for-profit institutions, after considering grant aid from all sources and federal education tax credits and deductions, average about \$4,950, compared to published tuition and fees of about \$15,170.

	92-93	97-98	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13
Published Tuition and Fees	\$17,040	\$19,680	\$22,970	\$23,610	\$24,250	\$24,600	\$25,110	\$25,760	\$25,850	\$27,380	\$28,130	\$28,280	\$29,060
Total Grant Aid and Tax Benefits	\$7,030	\$8,670	\$9,820	\$10,270	\$10,690	\$11,030	\$11,410	\$11,890	\$12,410	\$14,730	\$15,590	\$15,680	\$15,680
Net Tuition and Fees	\$10,010	\$11,010	\$13,150	\$13,340	\$13,560	\$13,570	\$13,700	\$13,870	\$13,440	\$12,650	\$12,540	\$12,600	\$13,380
Published Tuition, Fees, Room, and Board	\$24,500	\$27,640	\$31,630	\$32,460	\$33,220	\$33,700	\$34,330	\$35,190	\$35,200	\$37,310	\$38,320	\$38,510	\$39,520
Net Tuition, Fees, Room, and Board	\$17,470	\$18,970	\$21,810	\$22,190	\$22,530	\$22,670	\$22,920	\$23,300	\$22,790	\$22,580	\$22,730	\$22,830	\$23,840

Because data for 2012-13 are not yet available, financial aid and the resulting net prices for 2012-13 are preliminary estimates.

NOTE: Prices have been rounded to the nearest \$10.

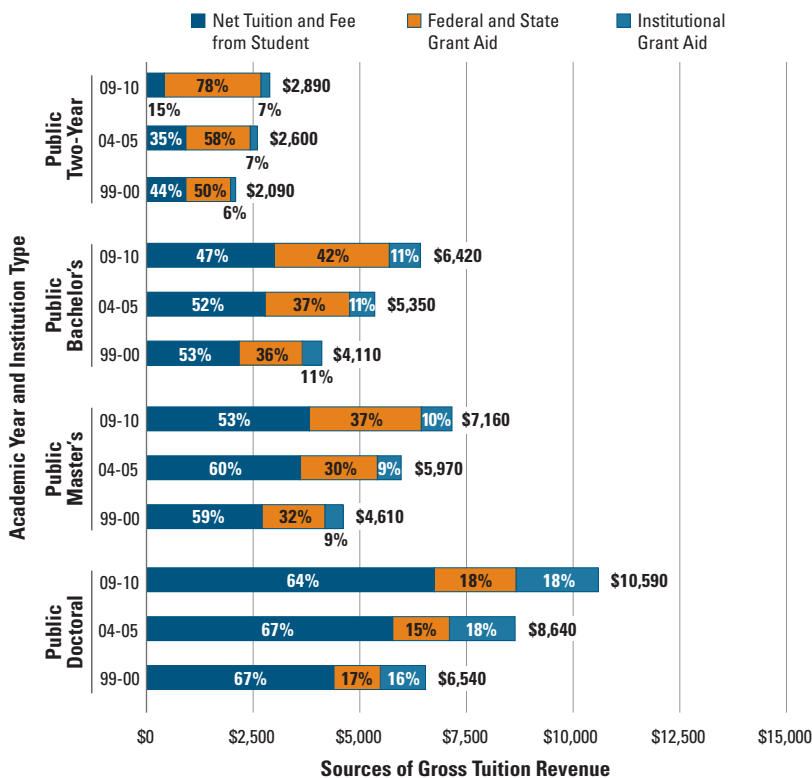
SOURCES: The College Board, *Annual Survey of Colleges*; *Trends in Student Aid 2012*; calculations by the authors.



# Net Price

**FIGURE 11A**

Sources of Gross Tuition Revenue per Full-Time Equivalent (FTE) Student at Public Institutions by Carnegie Sector: Payments Directly from Students, Federal and State Grants, and Institutional Grants, 1999-2000, 2004-05, and 2009-10

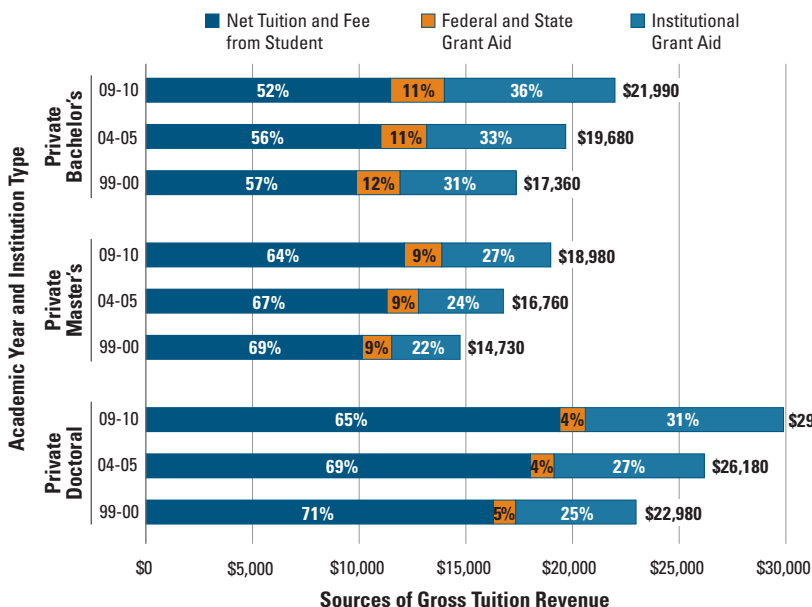


Between 1999-2000 and 2009-10, the net tuition revenue per FTE student received by public doctoral universities increased from \$5,480 to \$8,660. Payments from students increased from \$4,390 to \$6,750, and the share of gross tuition covered by state and federal grant aid increased from 17% to 18%.

- The tuition paid by public two-year college students, net of institutional, federal, and state grant aid, declined from \$920 per FTE student (in 2010 dollars) in 1999-2000 to \$420 in 2009-10.
- At private doctoral universities, tuition revenue directly from students, which does not include institutional grant aid, declined from 76% of gross tuition revenue in 1999-2000 to 69% in 2009-10. The decline was from 78% to 73% at private master's universities and from 69% to 64% at private bachelor's colleges.
- Over the decade from 1999-2000 to 2009-10, increases in gross tuition revenues — the amounts students would have paid in the absence of federal, state, and institutional grant aid — ranged from 27% at private bachelor's colleges (from \$17,360 in 2010 dollars to \$21,990) to 62% at public doctoral universities (from \$6,540 in 2010 dollars to \$10,590).

**FIGURE 11B**

Sources of Gross Tuition Revenue per Full-Time Equivalent (FTE) Student at Private Nonprofit Institutions by Carnegie Sector: Payments Directly from Students, Federal and State Grants, and Institutional Grants, 1999-2000, 2004-05, and 2009-10



- Over the decade, increases in net tuition revenues — funds institutions received from students and from federal and state grant aid — ranged from 17% in inflation-adjusted dollars at private bachelor's colleges to 58% at public doctoral universities.

*The total length of the bars in Figures 11A and 11B represents gross tuition revenue per FTE student — the amount institutions would receive if they gave no discounts (institutional grant aid). The sum of the net tuition received directly from students and the portion of tuition paid on behalf of students through federal and state grant aid programs represents the net tuition revenues of institutions.*

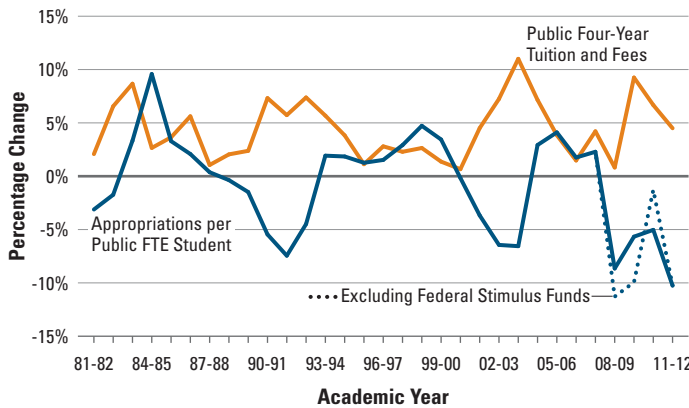
NOTE: Based on 12-month FTE enrollment. Both published tuition and net prices reported elsewhere in *Trends in College Pricing* apply to full-time students only. Percentages may not sum to 100 because of rounding.

SOURCES: The Delta Cost Project; calculations by the authors.

# Institutional Revenues — Public Appropriations

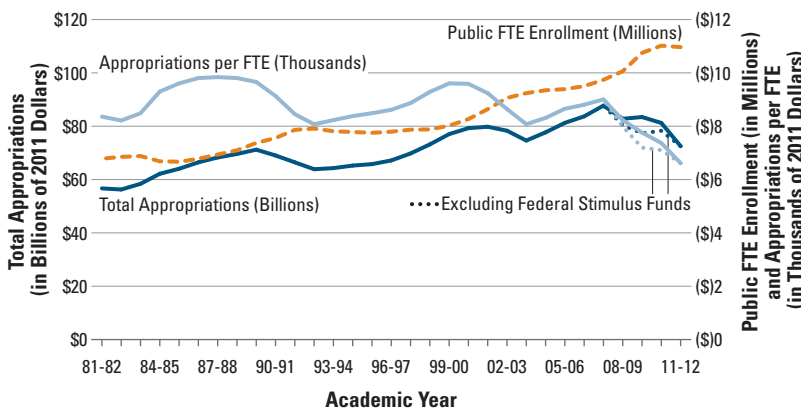
Inflation-adjusted state appropriations per public full-time equivalent (FTE) student fell sharply for a fourth consecutive year in 2011-12. The 10% decrease followed declines of 9% in 2008-09, 6% in 2009-10, and 5% in 2010-11. The average annual real increase in published tuition and fees at public four-year institutions in the four years succeeding each of these declines was 6.0%.

**FIGURE 12A**  
Annual Percentage Change in State Appropriations for Higher Education per Full-Time Equivalent (FTE) Student and Percentage Change in Inflation-Adjusted Tuition and Fees at Public Four-Year Institutions, 1981-82 to 2011-12



The 0% line corresponds to changes in appropriations per FTE student that compensate only for the overall rate of inflation in consumer prices. Negative percentage changes indicate declines in inflation-adjusted appropriations per FTE student amounts. The blue dotted line represents the percentage change that would have occurred were federal stimulus funds not appropriated in 2008-09 through 2010-11.

**FIGURE 12B**  
State Appropriations for Higher Education: Total Appropriations in 2011 Dollars (in Billions), Appropriations per Public FTE Student in 2011 Dollars, and Public FTE Enrollment (in Millions), 1981-82 to 2011-12



NOTE: Enrollment figures are fall FTE enrollments for public two-year and four-year institutions. Enrollment for fall 2011 was estimated based on preliminary IPEDS numbers. Appropriations reported here are for institutional operating expenses, not for capital expenditures. Funding includes both tax revenues and other state funds allocated to higher education.

SOURCES: The College Board, *Annual Survey of Colleges*; Illinois State University, *Grapevine* reports; NCES, *Digest of Education Statistics 2011*, Table 227; calculations by the authors.

- Three consecutive declines in inflation-adjusted appropriations per public FTE student from 2001-02 through 2003-04 were followed by three years of increases in published tuition and fees, averaging 8.5% and peaking in 2003-04.
- Total state appropriations to public colleges and universities declined by 3% in 2010-11 and by another 11% in 2011-12, after adjusting for inflation.
- State appropriations per public FTE student increased by 1% from 1981-82 to 1991-92 and by 9% from 1991-92 to 2001-02 after adjusting for inflation, but declined by 5% from 2001-02 to 2006-07, and by another 25% from 2006-07 to 2011-12, including a 10% decline in the most recent year.
- Federal funds from the American Recovery and Reinvestment Act supplemented state funds over three fiscal years, increasing state appropriations (in 2011 dollars) by \$2.4 billion in 2008-09, \$6.1 billion in 2009-10, and \$2.9 billion in 2010-11.
- Total FTE enrollment in public two-year and four-year colleges and universities grew by 16% from 1981-82 to 1991-92 and by 10% from 1991-92 to 2001-02. Enrollment growth was much more rapid over the most recent decade, with increases of 10% from 2001-02 to 2006-07 and 15% from 2006-07 to 2011-12.

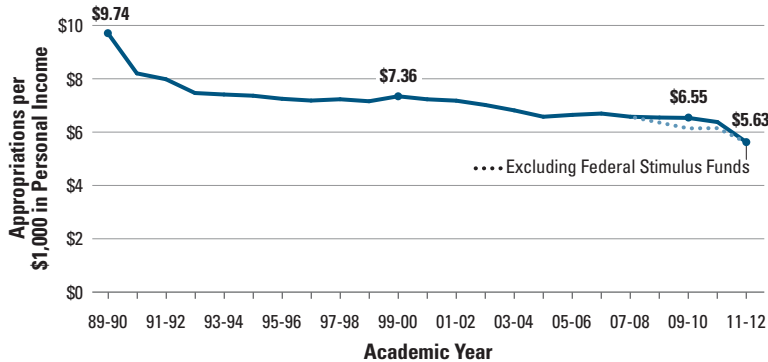
**ALSO IMPORTANT:**

- From fall 2000 to fall 2010, total FTE enrollment in public institutions in the United States increased by 33%. Enrollment growth ranged from 15% in Louisiana and 16% in Illinois to 55% in Nevada and 69% in Georgia. (Figure 23)
- Between 2006-07 and 2011-12, total state appropriations for higher education, including federal stimulus funds, increased by 60% in North Dakota and by 21% in Wyoming. Appropriations declined by 33% in New Hampshire, by 32% in Arizona, and by more than 10% in 14 additional states. (Illinois State University, *Grapevine*, [www.grapevine.ilstu.edu/fifty\\_state\\_summary.htm](http://www.grapevine.ilstu.edu/fifty_state_summary.htm))

# Institutional Revenues — Public Appropriations

State appropriations per \$1,000 in personal income declined from \$9.74 in 1989-90 to \$7.36 in 1999-2000, to \$6.55 in 2009-10, and to \$5.63 in 2011-12 as the allocation of public resources moved away from higher education toward other private and social goods and services.

**FIGURE 13A**  
Average State Appropriations for Higher Education per \$1,000 in Personal Income, 1989-90 to 2011-12

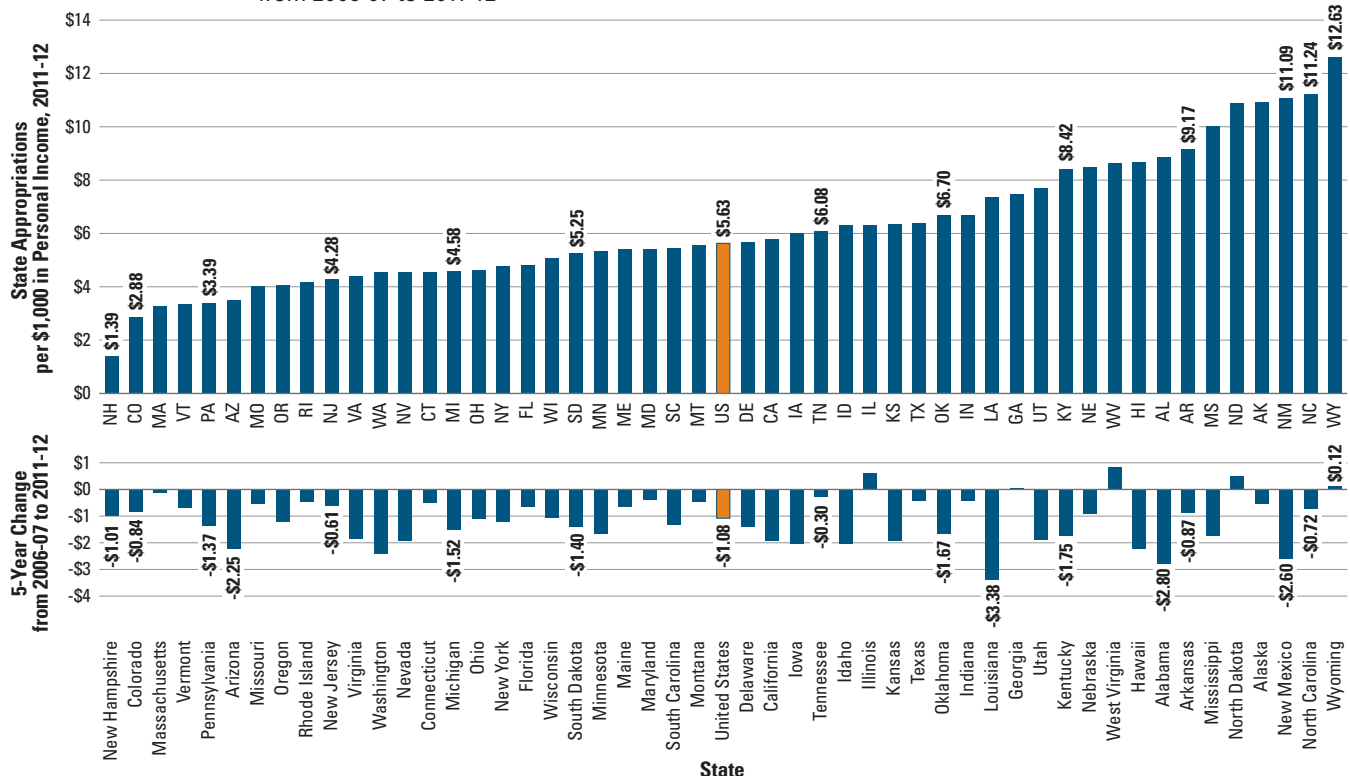


NOTE: The ratios of dollars of appropriations to dollars of personal income illustrated in Figure 13A and Figure 13B are the same whether they are based on current dollars or inflation-adjusted dollars.  
SOURCES: Illinois State University, *Grapevine* reports; calculations by the authors.

*The Bureau of Economic Analysis (BEA) measure of personal income is the sum of income from all sources received by individuals. It includes earnings (net of social insurance taxes but not income taxes) plus interest, dividends, rental income, and transfer payments received by individuals. Personal income is a measure of the fiscal capacity of the state.*

- Average per capita personal income grew by 18% from \$32,400 in 1990 to \$38,300 in 2000 (in 2010 dollars), and by another 6% to \$40,600 in 2010. (*Statistical Abstract of the United States 2012*, Table 681; calculations by the authors)
- In 2011-12, when average state appropriations per \$1,000 in personal income were \$5.63 for the nation as a whole, New Hampshire provided \$1.39 and Colorado provided \$2.88 per \$1,000. At the other end of the spectrum, appropriations per \$1,000 in personal income were \$11.09 in New Mexico, \$11.24 in North Carolina, and \$12.63 in Wyoming.
- From 2006-07 to 2011-12, appropriations per \$1,000 in personal income fell by \$1.08 (16%) for the nation as a whole. The largest dollar declines were \$3.38 in Louisiana (32%) and \$2.80 in Alabama (24%). New Hampshire's decline was \$1.01 (42%) and Arizona's was \$2.25 (39%).
- In five states, state appropriations per \$1,000 in personal income increased between 2006-07 and 2011-12. The largest increases were in West Virginia, Illinois, and North Dakota.

**FIGURE 13B** State Appropriations for Higher Education per \$1,000 in Personal Income, 2011-12 and 5-Year Change from 2006-07 to 2011-12

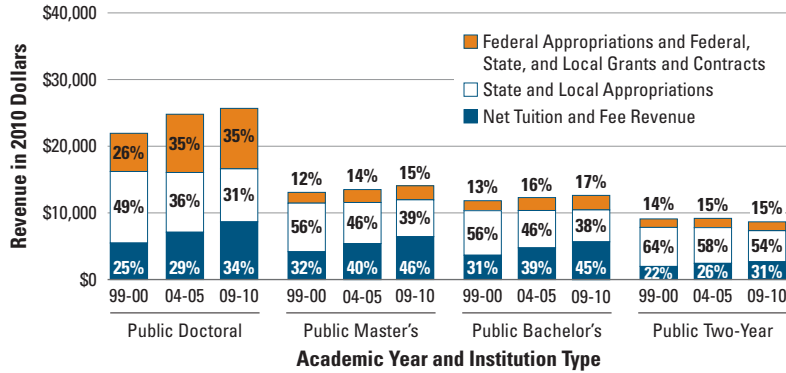


SOURCE: Illinois State University, 2011-12 *Grapevine* data, Table 5.

# Institutional Revenues

**FIGURE 14A**

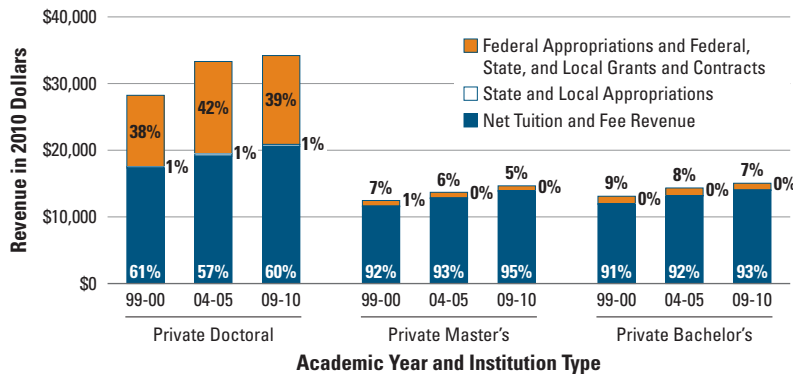
Institutional Revenues per FTE Student in 2010 Dollars at Public Institutions, by Revenue Source, 1999-2000 to 2009-10, Selected Years



Net tuition revenue is the amount of revenue an institution takes in from tuition and fees, net of all institutional grant aid provided to students. Some of this revenue comes in the form of financial aid to students from federal and state governments and other sources.

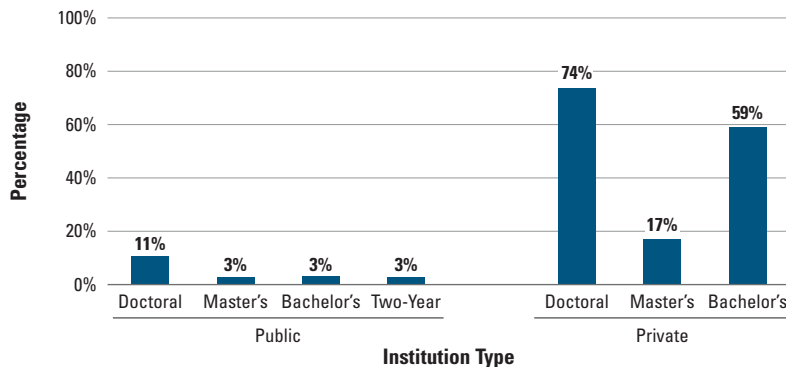
**FIGURE 14B**

Institutional Revenues per FTE Student in 2010 Dollars at Private Nonprofit Institutions, by Revenue Source, 1999-2000 to 2009-10, Selected Years



**FIGURE 14C**

Aggregate Total Revenue from Private Gifts, Investment Returns, and Endowment Income as a Percentage of Aggregate Revenue from Other Sources, 1999-2000 to 2009-10



Revenue from private gifts, investment income, and endowment returns is measured by the change in asset value from one year to the next. Figure 14C shows the ratio of the sum of revenue received from these sources across all years from 1999-2000 to 2009-10 to the sum of revenue received from net tuition and fees and federal, state, and local appropriations, grants, and contracts over these 11 years. In some years, investment income was negative.

At all types of public institutions, the average share of revenues coming from net tuition increased between 1999-2000 and 2009-10, while the share coming from state and local appropriations decreased.

- Among public doctoral institutions, net tuition as a percentage of total revenues from net tuition and federal, state, and local appropriations, grants, and contracts increased from 25% in 1999-2000 to 34% in 2009-10, while state and local appropriations decreased from 49% to 31%.
- In 2009-10, tuition contributed 60% of revenues from the combination of the categories included in Figure 14B for private doctoral universities, 95% for private master's universities, and 93% for private bachelor's colleges.
- Revenue from private gifts, investment returns, and endowment income supplements the revenue sources shown in Figures 14A and 14B. For private doctoral universities, this additional revenue was approximately 74% as large as the sum of the revenue sources included in Figure 14B over the 1999-2000 to 2009-10 decade. The corresponding percentage was 59% for private bachelor's colleges, but only 17% for private master's institutions.
- At private doctoral universities, revenue from gifts, investment income, and endowment earnings fell, on average, from 185% of the total revenues from the sources included in Figure 14B in 1999-2000 to 30% in 2000-01 and was more than 50% higher than the total from the other revenue sources in 2006-07. Losses from this source exceeded combined revenues from the other sources in 2008-09.

**ALSO IMPORTANT:**

- Changes in accrued asset value are not a reliable measure of the resources available for annual institutional budgets. It is common practice for institutions to spend a fixed percentage of their endowment values each year, but to smooth spending by using a three-year moving average of the endowment value.
- Colleges and universities also receive revenues from auxiliary enterprises, hospitals, and independent operations. Revenues from enterprises such as dormitories and dining halls are usually dedicated to running those operations. In 2009-10, average revenue per FTE student from these sources ranged from \$20,940 at private doctoral universities (many of which have hospitals) to \$5,260 at private bachelor's colleges, and to \$580 at public two-year colleges, which rarely have dormitories.

NOTE: The institutional averages reported in Figures 14A and 14B are weighted by 12-month FTE enrollments. The averages reported by the Delta Cost Project are unweighted averages across institutions. Percentages may not sum to 100 because of rounding.

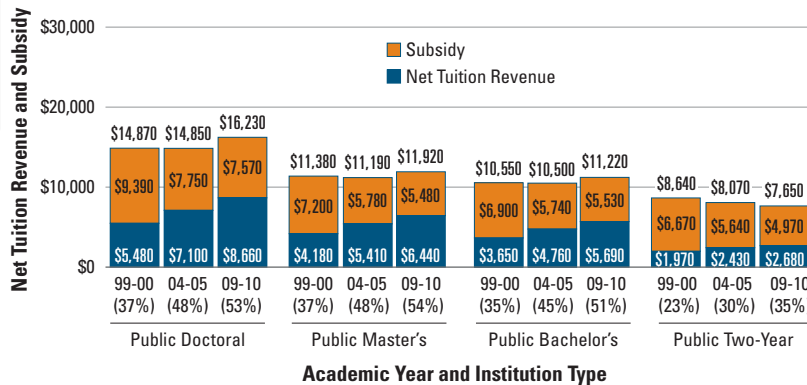
SOURCES: The Delta Cost Project; calculations by the authors.



# Institutional Revenues and Expenditures

**FIGURE 15A**

Net Tuition Revenues, Subsidies, and Education and Related Expenditures per Full-Time Equivalent (FTE) Student in 2010 Dollars at Public Institutions (and Percentage of Expenditures Covered by Net Tuition), 1999-2000, 2004-05, and 2009-10

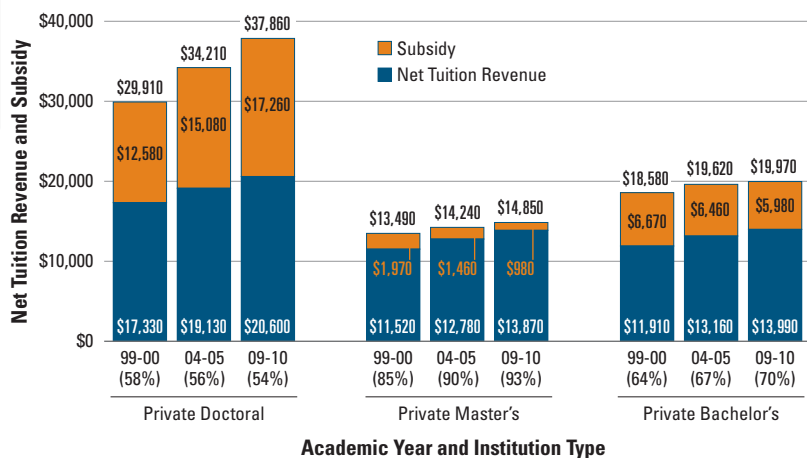


In all sectors, with the exception of private doctoral universities, net tuition and fee revenue grew more rapidly than education and related expenditures between 1999-2000 and 2009-10, while subsidies per full-time equivalent (FTE) student declined.

- After adjusting for inflation, net tuition and fee revenue per FTE student at public two-year colleges increased at an average annual rate of about 3.1% between 1999-2000 and 2009-10. The growth rate was between 4.4% and 4.7% at all types of public four-year institutions.

**FIGURE 15B**

Net Tuition Revenues, Subsidies, and Education and Related Expenditures per Full-Time Equivalent (FTE) Student in 2010 Dollars at Private Nonprofit Institutions (and Percentage of Expenditures Covered by Net Tuition), 1999-2000, 2004-05, and 2009-10



- Net tuition and fee revenue per FTE student increased at a slower rate in the private sector than in the public sector between 1999-2000 and 2009-10. After adjusting for inflation, the average annual rate of increase was between 1.6% and 1.9% for each category of private nonprofit institutions.

- In 2009-10, average net tuition and fee revenue per FTE student ranged from \$2,680 at public two-year colleges to \$20,600 at private doctoral universities.

- In 2009-10, education and related expenditures per FTE student ranged from \$7,650 at public two-year colleges to \$37,860 at private doctoral universities, where about one-third of all students are graduate students.

- Education and related expenditures grew most rapidly at private doctoral universities between 1999-2000 and 2009-10 — at an average annual rate of 2.4% in inflation-adjusted dollars. At public two-year colleges, these expenditures declined from \$8,640 per FTE student (in 2010 dollars) to \$7,650 over this 10-year period.

- Subsidies per FTE student — the difference between education expenditures and net tuition revenues — increased by \$4,680 in 2010 dollars (37%) between 1999-2000 and 2009-10 at private doctoral universities. Subsidies declined in all other sectors, including a \$1,700 (25%) decline at public two-year colleges.

- In 2009-10, average subsidies per FTE student ranged from \$980 at private master's universities to \$17,260 at private doctoral universities.

The percentages on the horizontal axis of the graph correspond to the percentages of education and related expenses covered by net tuition and fees. For example, 53% of the \$16,230 in average expenditures per FTE student at public doctoral universities in 2009-10 was covered by net tuition and fee revenue, and the other 47% was covered by state and local appropriations and other revenue sources.

Net tuition revenue is the amount of revenue an institution takes in from tuition and fees, net of all institutional grant aid provided to students. Some of this revenue comes in the form of financial aid to students from federal and state governments and other sources.

Education and related expenditures include spending on instruction, student services, and the education share of spending on central academic and administrative support as well as operations and maintenance. Expenditures for both undergraduate students and graduate students are included in these estimates.

NOTE: Averages represent FTE enrollment-weighted averages of education and related expenses per FTE student. Averages reported by the Delta Cost Project are unweighted averages across institutions. Because of differences in undergraduate and graduate tuition, tuition paid by part-time, out-of-state, and international students; and accounting conventions, these net tuition-per-student figures are not comparable to either the published prices or the net prices faced by students reported elsewhere in *Trends in College Pricing*.

SOURCES: The Delta Cost Project; calculations by the authors.



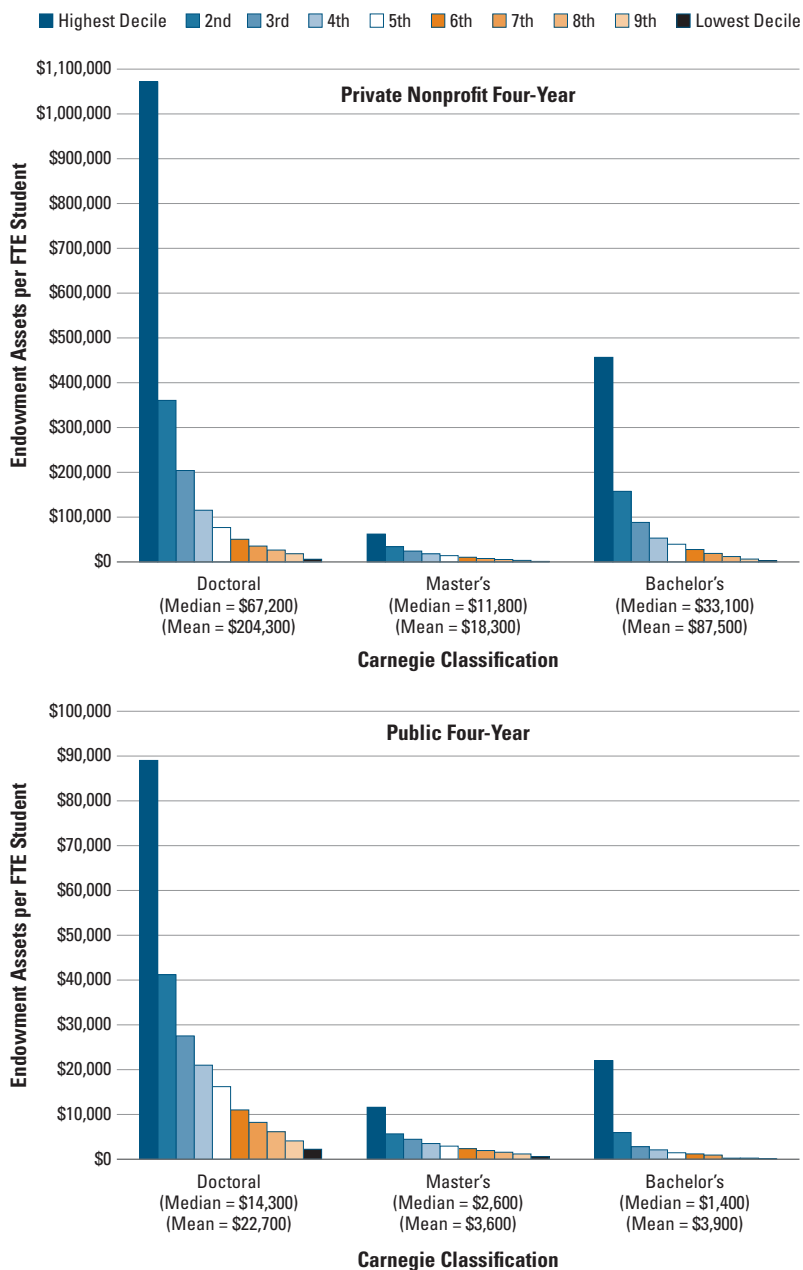
For detailed data behind the graphs and additional information, please visit: [trends.collegeboard.org](https://trends.collegeboard.org).

# Endowments

Endowment assets are highly concentrated among a small number of institutions within each sector. Ten private doctoral universities hold about 43% of the total endowment assets of all private nonprofit doctoral, master's, and bachelor's institutions combined, and 10 public doctoral universities hold about 34% of the total endowment assets of public doctoral, master's, and bachelor's institutions combined.

**FIGURE 16**

Endowment Assets per Full-Time Equivalent (FTE) Student at Four-Year Colleges and Universities by Decile and Carnegie Classification, 2010-11



*Endowments consist of funds that have been donated to colleges and universities and returns that have accumulated over time on those funds. Attached to some of these funds is a requirement that the principal be preserved in perpetuity. Restricted endowment funds can only be used to support purposes specified by the donor. Institutions have more flexibility over the use of unrestricted endowment funds.*

- Average endowment per student is about nine times as high in private doctoral institutions as in public doctoral institutions. The private-to-public ratio is about 5 to 1 for master's universities and about 23 to 1 for bachelor's colleges.
- Assuming a spending rate of about 5% of the endowment value, the 5% of students in the 18 private bachelor's colleges with the highest endowment assets per student benefited from about \$31,000 per year in income from the endowment in 2010-11. The second 5% of students benefited from about \$15,000 per year from their institutions' endowments.
- Among private doctoral universities, the four institutions with the highest endowment assets per student enroll 6% of the students in that sector. These students benefited from an average of \$72,000 of annual endowment income per student in 2010-11 — more than twice as much as the average of \$32,000 per student at the other institutions in the top decile.
- The 5% of students enrolled at the seven public doctoral universities with the highest endowments per student benefited from about \$5,900 of annual endowment income per student in 2010-11 — more than twice as much as the \$2,700 per student for the second 5%.

NOTE: The value of endowment assets was as of the end of fiscal year 2011. Endowment assets were based on data for 105 private doctoral, 342 private master's, 463 private bachelor's, 170 public doctoral, 258 public master's, and 94 public bachelor's institutions. Average endowment per FTE for each decile of institutions is calculated by ordering the institutions in the sector by assets per FTE and dividing the students in the sector into deciles. Total assets in the institutions enrolling 10% of students in the sector are divided by the number of students in those institutions.

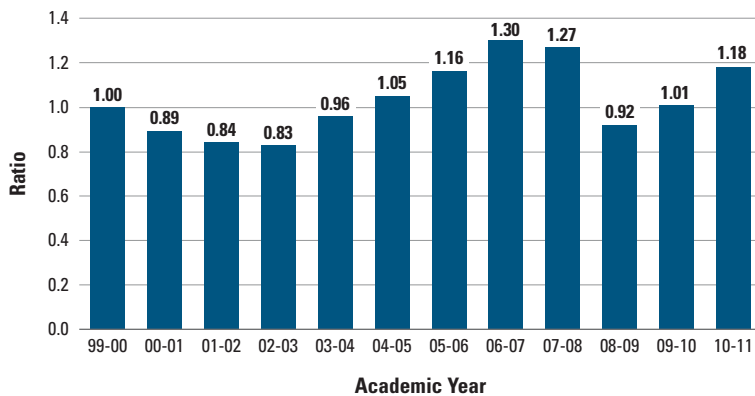
SOURCES: National Association of College and University Business Officers (NACUBO) *Endowment Study*; Commonfund Institute; NCES, *IPEDS*; calculations by the authors. Data are from NACUBO where available.

# Endowments

In 2010-11, average endowment assets at private nonprofit four-year colleges and universities increased in value by about 17% after adjusting for inflation, following a 10% increase in 2009-10.

**FIGURE 17A**

Inflation-Adjusted Endowment Assets at Private Nonprofit Four-Year Colleges and Universities Relative to 1999-2000, 1999-2000 to 2010-11



NOTE: The value of endowment assets was as of the end of June (i.e., June 2011 for 2010-11). Because *IPEDS* endowment data are available for only a limited number of institutions before 2002-03, the analysis is based on 140 private nonprofit four-year institutions that reported data for each year from 1999-2000 to 2002-03 and 1,021 institutions that reported data for each year from 2003-04 to 2010-11.

SOURCES: NACUBO, *Endowment Study*; Commonfund Institute; NCES, *IPEDS*; calculations by the authors. Data are from NACUBO and Commonfund Institute where available.

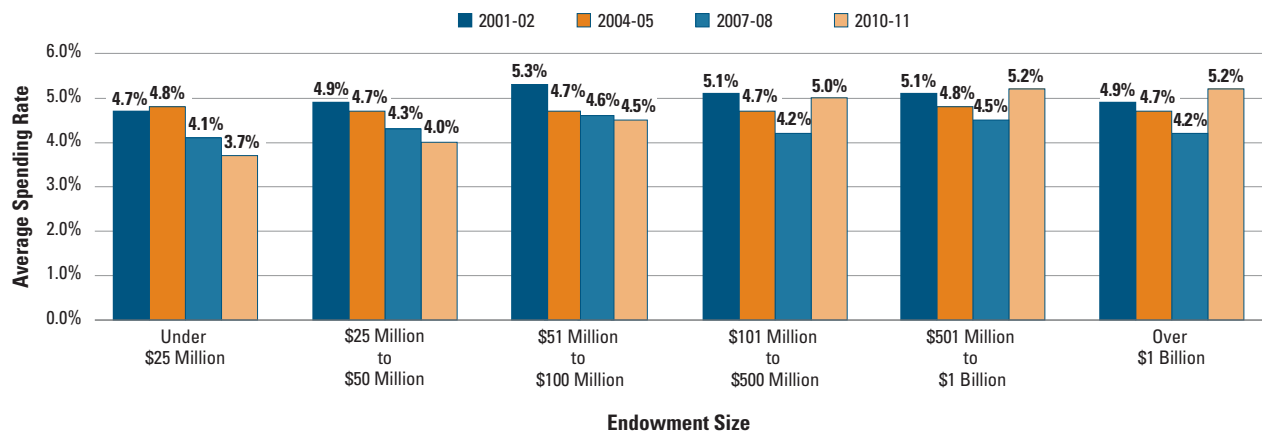
- On average, the value of endowment assets in the private nonprofit four-year sector declined almost 30% in 2008-09 to a level slightly below their 2003-04 value (in 2011 dollars). The 2010-11 increase brought assets back to approximately their 2005-06 value.
- Since 2007-08, the wealthiest institutions have increased their draw from endowments, while the spending rates have continued to decline for those with endowments below \$100 million. For example, the average spending rate rose from 4.2% in 2007-08 to 5.2% in 2010-11 for institutions with assets of \$1 billion or higher, and from 4.2% to 5.0% for those with assets between \$101 million and \$500 million. Institutions with endowments of \$50 million or less lowered their spending rates after 2007-08.

## ALSO IMPORTANT:

- According to NACUBO, the overall average endowment spending rate for public institutions was 4.5% in 2010-11, higher than in the previous two years.
- The overall average endowment spending rate for private colleges and universities fell from 5.0% in 2001-02 to 4.3% in 2007-08. It was 4.6% in 2010-11.

**FIGURE 17B**

Average Reported Spending Rates for College and University Endowments and Affiliated Foundations, 2001-02 to 2010-11, Selected Years



NOTE: Reported spending rates are simple averages of spending rates reported by individual institutions and are not weighted by enrollments.

SOURCES: NACUBO, *Endowment Study*; Commonfund Institute.

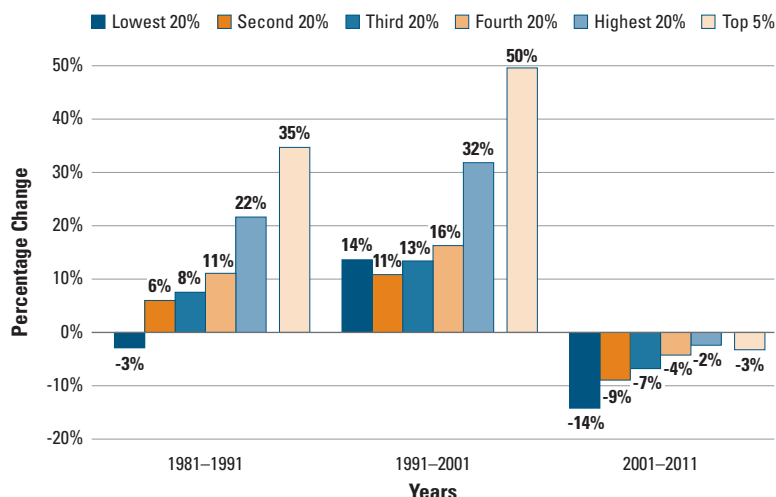
*The spending rate is defined as the percentage of the beginning market value of the endowment that is withdrawn to support institutional expenditures. The rate is calculated net of any investment fees or other expenses related to managing and administering the endowment.*



For detailed data behind the graphs and additional information, please visit: [trends.collegeboard.org](http://trends.collegeboard.org).

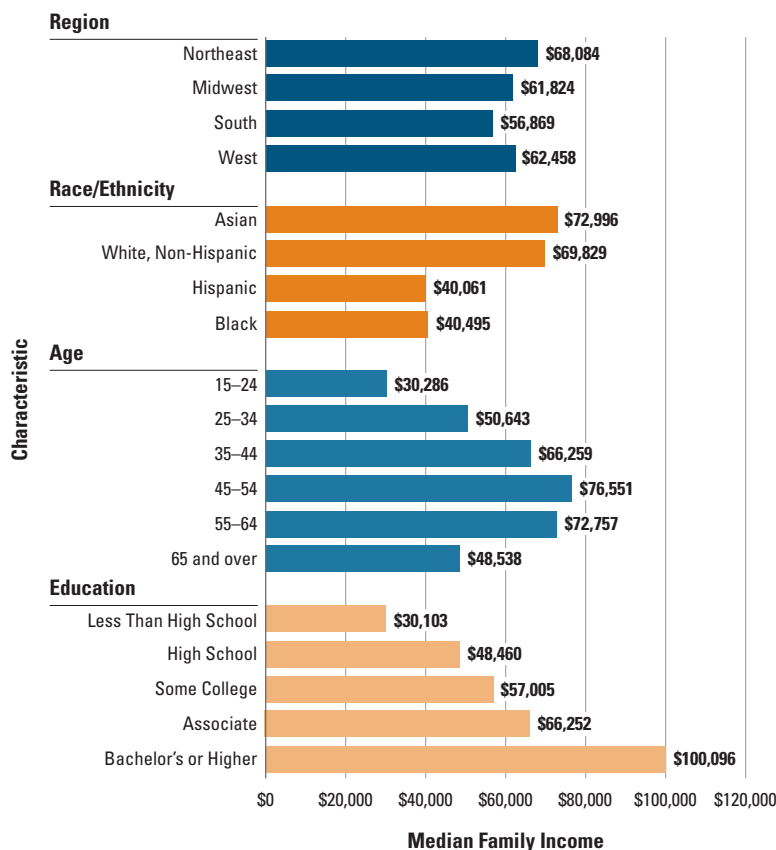
# Family Income

**FIGURE 18A**  
Percentage Change in Inflation-Adjusted Mean Family Income by Quintile, 1981–1991, 1991–2001, and 2001–2011



	Lowest 20%	Second 20%	Third 20%	Fourth 20%	Highest 20%	Top 5%
\$ Change 1981–2011	-\$860	\$2,452	\$7,342	\$17,851	\$71,452	\$167,797
% Change 1981–2011	-5%	7%	14%	24%	56%	95%
2011 Income Bracket	\$27,218 or less	\$27,219 to \$48,502	\$48,503 to \$75,000	\$75,001 to \$115,866	\$115,867 or more	\$205,200 or more
2011 Mean Income	\$15,282	\$37,556	\$61,032	\$93,232	\$197,932	\$344,531

**FIGURE 18B**  
Median Family Income by Selected Characteristics, 2011



Over the entire income distribution in the United States, average family incomes in 2011 were lower in inflation-adjusted dollars than they were a decade earlier. The largest declines were for the families in the lowest 20% of the population.

- Average inflation-adjusted income declined for all income groups every year from 2007 to 2010. It fell again in 2011 — by 1% to 2% — for each of the four lower income groups, but increased by 3% for the 20% of families with the highest incomes and by 7% for the top 5%.
- Over the three decades from 1981 to 2011, average family income declined by 5% (\$860 in 2011 dollars) for the poorest 20% of families. Average income rose by 14% (\$7,342) for the middle 20% of families and by 95% (\$167,797) for the wealthiest 5% of families.
- In 2011, when median family income for all families was \$60,974, the median income for families headed by individuals ages 45 to 54 — the age bracket of most parents of traditional-age college students — was \$76,551 (26% higher than the overall median).
- In 2011, the median income for black and Hispanic families was less than 60% of the median income for white families.
- In 2011, the \$100,096 median family income for families headed by a four-year college graduate was more than twice the median income for families headed by a high school graduate.

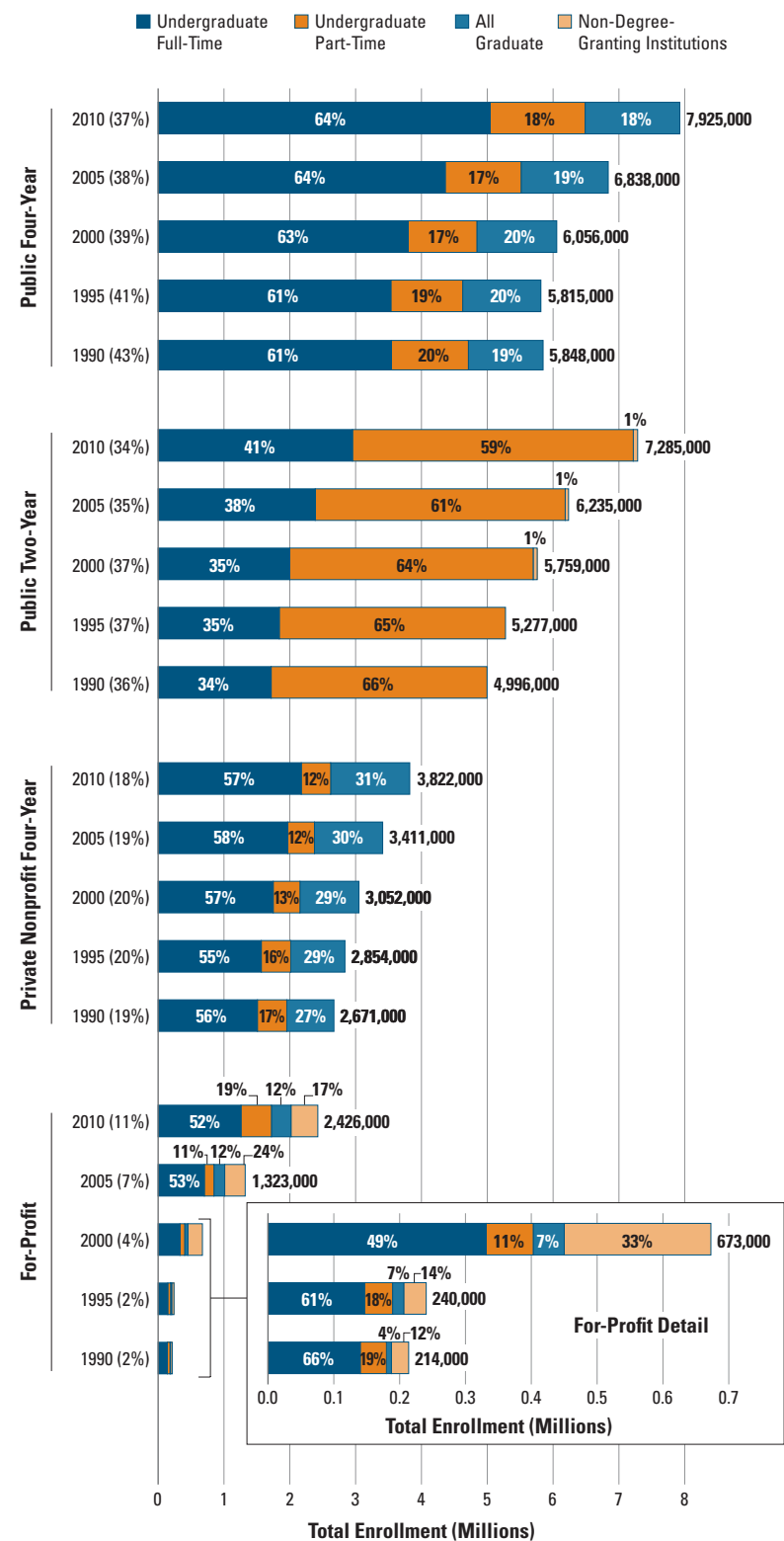
**ALSO IMPORTANT:**

- The share of all income going to the 20% of families with the lowest incomes has steadily declined, from 5.3% in 1981 to 4.5% in 1991, 4.2% in 2001, and 3.8% in 2011. The share of income going to the top 5% of families rose from 14.4% to 21.3% over this 30-year period. (U.S. Census Bureau, *Current Population Survey*, Table F-2)
- Average published tuition and fees at public four-year colleges rose by about \$6,100 (in 2011 dollars) over this 30-year period — about 83% of the increase in income (\$7,342) of the middle 20% of families and about 9% of the increase in income (\$71,452) of the 20% of families in the highest income bracket.

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

# Enrollment Patterns over Time

**FIGURE 19**  
Distribution of Students by Attendance Status and Level of Enrollment (with Percentage of All Students Enrolled in Each Sector), Fall 1990 Through Fall 2010, Selected Years



In the decade between 1990 and 2000, the number of full-time undergraduate students increased by 14%, from 6.9 million to 7.9 million. In the following decade, the number increased by 44%, from 7.9 million to 11.4 million.

- In the most recent decade, 35% of the increase in enrollment of full-time undergraduate students was in the public four-year sector. About a quarter of the new students were in public two-year colleges and a similar number enrolled in for-profit institutions.
- The number of part-time undergraduate students increased by 6%, from 4.9 million to 5.2 million, between fall 1990 and fall 2000. The number increased by 27%, from 5.2 million to 6.6 million, between fall 2000 and fall 2010.
- In the most recent decade, 41% of the increase in enrollment of part-time undergraduate students was in the public two-year sector. About 28% of the new students were in public four-year institutions and a similar number enrolled in for-profit institutions.
- In fall 2010, graduate students constituted 31% of the students in private nonprofit four-year institutions, compared to 18% in public four-year colleges and universities.
- In fall 2010, about 17% of students in the for-profit sector attended institutions that award certificates, but not associate, bachelor's, or graduate degrees.

**ALSO IMPORTANT:**

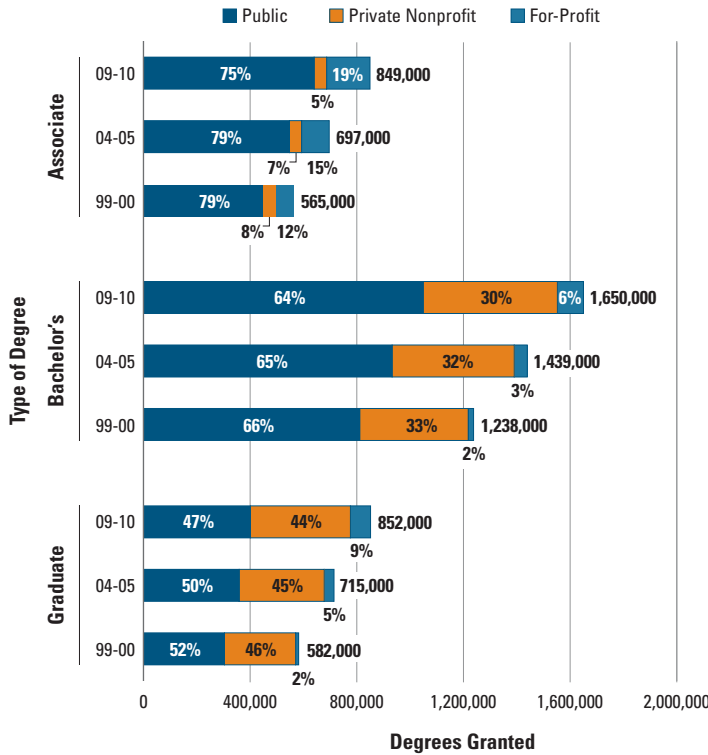
- Most non-degree-granting institutions offer programs of study that are less than two years in duration. Some of them, however, do offer graduate or first-professional certificates, postbaccalaureate certificates, or other certificates that require two or more years of study.
- Students enrolled in non-degree-granting institutions may be eligible for federal student aid if they are working toward certificates at accredited institutions.
- All of the students reported in Figure 19 were enrolled in institutions that participate in federal student aid programs. Additionally, about 600,000–800,000 students were enrolled in the late 2000s in for-profit institutions that do not participate in these programs and are not included in the Department of Education's data. (S. Cellini and C. Goldin, "Does Federal Student Aid Raise Tuition? New Evidence on For-Profit Colleges," NBER Working Paper 17827, www.nber.org/papers/w17827)

NOTE: Percentages on the y-axis represent the enrollment in each sector as a percentage of total enrollment. Non-degree students reported here are those enrolled in institutions that do not award associate, baccalaureate, or graduate degrees. Percentages may not sum to 100 because of rounding.

SOURCE: NCES, IPEDS unpublished data.

# Enrollment and Degrees Granted

**FIGURE 20**  
Distribution of Degrees Granted by Type of Degree and Sector, 1999-2000, 2004-05, and 2009-10



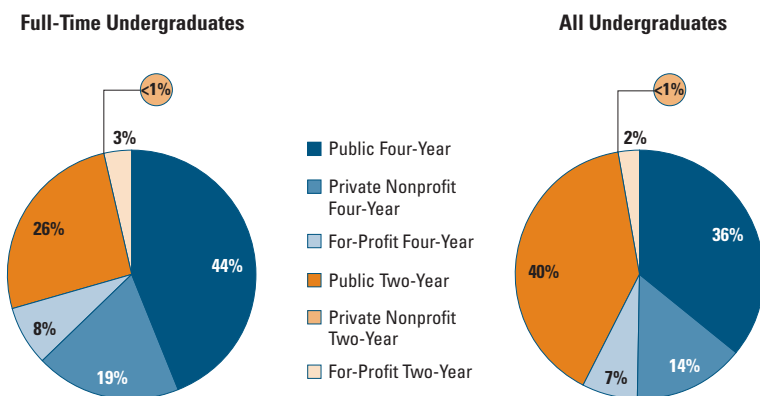
NOTE: Percentages may not sum to 100 because of rounding. Graduate degrees include master's, first-professional, and doctoral degrees.

SOURCES: NCES, *The Condition of Education 2011*, Indicator 42; *Digest of Education Statistics 2011*, Table 291.

The share of degrees awarded by for-profit institutions increased from 4% to 10% between 1999-2000 and 2009-10. In contrast, the percentage of degrees awarded by public and private nonprofit institutions during this 10-year period declined from 66% to 62% and from 30% to 28%, respectively.

- Over the decade from 1999-2000 to 2009-10, the percentage of all associate degrees awarded by for-profit institutions increased from 12% to 19%, the percentage of all bachelor's degrees awarded by for-profit institutions increased from 2% to 6%, and the percentage of all graduate degrees awarded by this sector increased from 2% to 9%.
- Bachelor's degrees declined from 52% of all degrees conferred in 1999-2000 to 49% in 2009-10. Both associate degrees and graduate degrees increased from 24% to 25% of the total over the decade.
- Because 59% of public two-year college students were enrolled part-time in fall 2010, students in this sector represented 40% of all undergraduate students, but only 26% of full-time undergraduate students.
- In fall 2010, 44% of full-time undergraduates — and 36% of all undergraduates — were enrolled in public four-year institutions.

**FIGURE 21**  
Percentage Distribution of Enrollment of Full-Time Undergraduates and All Undergraduates in Degree-Granting Institutions by Sector, Fall 2010



NOTE: Percentages may not sum to 100 because of rounding.

SOURCE: NCES, *IPEDS* unpublished data.

**ALSO IMPORTANT:**

- In addition to the 18.1 million undergraduate students enrolled in degree-granting institutions in fall 2010, there were 572,000 undergraduates enrolled in non-degree-granting institutions. Fifty-six percent of these students attended for-profit less-than-two-year institutions. Another 16% attended for-profit two-year institutions; 12% attended public less-than-two-year institutions; and 12% attended public two-year institutions. Many non-degree-seeking students are working toward vocational certificates. (NCES, *IPEDS* unpublished data)

Percentage of Undergraduate Students Enrolled Part-Time in Fall 2010, by Sector

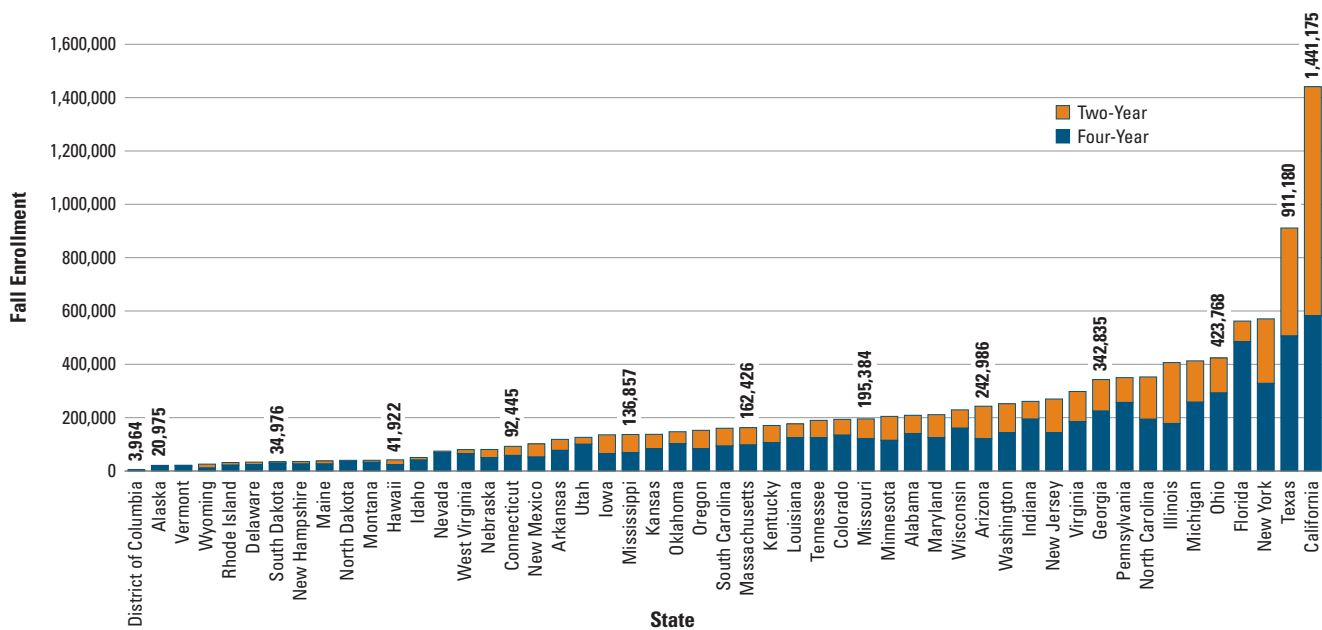
	All Degree-Granting	Public		Private Nonprofit		For-Profit	
		Four-Year	Two-Year	Four-Year	Two-Year	Four-Year	Two-Year
Percentage Enrolled Part-Time	37%	22%	59%	17%	29%	33%	9%

# Enrollment by State

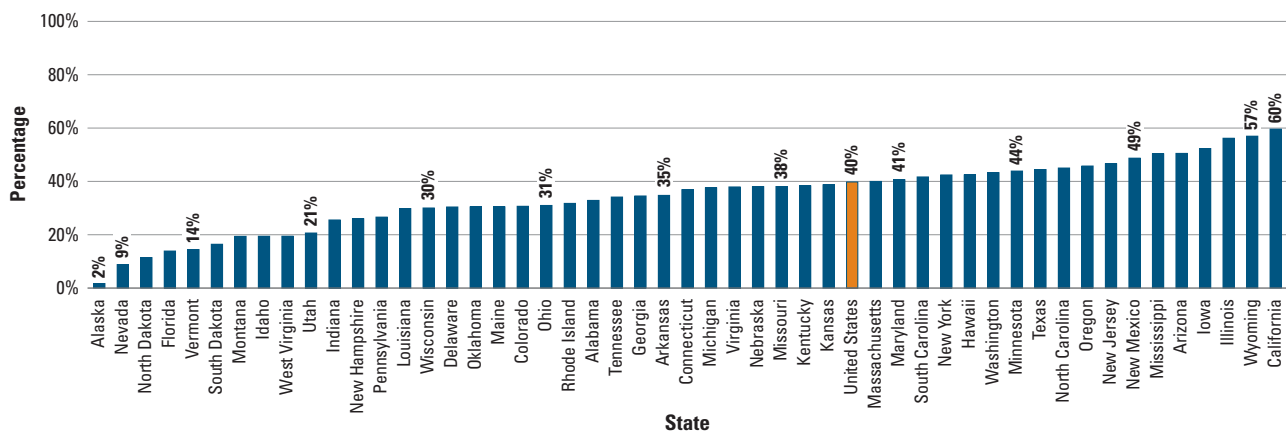
In fall 2010, 13% of all full-time equivalent (FTE) enrollment in degree-granting public institutions in the U.S. was in California colleges and universities. This included 9% of students in public four-year institutions and 20% of those in public two-year colleges.

- Four states — California, Texas, Florida, and New York — enrolled one-third of all FTE students attending public institutions in the United States in fall 2010. These states enrolled 29% of four-year and 36% of two-year public students in the nation.
- Some state public higher education systems rely almost exclusively on four-year institutions, while in other states, many students enroll in community colleges. In fall 2010, 60% of California's public FTE enrollments, but only 2% of Alaska's, were in community colleges.
- In six states, over 50% of public FTE enrollments were in public two-year colleges in 2010. In nine states, that percentage was below 20%.

**FIGURE 22A** Full-Time Equivalent (FTE) Enrollment in Public Degree-Granting Institutions by State, Fall 2010



**FIGURE 22B** Percentage of All Public Full-Time Equivalent (FTE) Enrollment in Two-Year Colleges, by State, Fall 2010



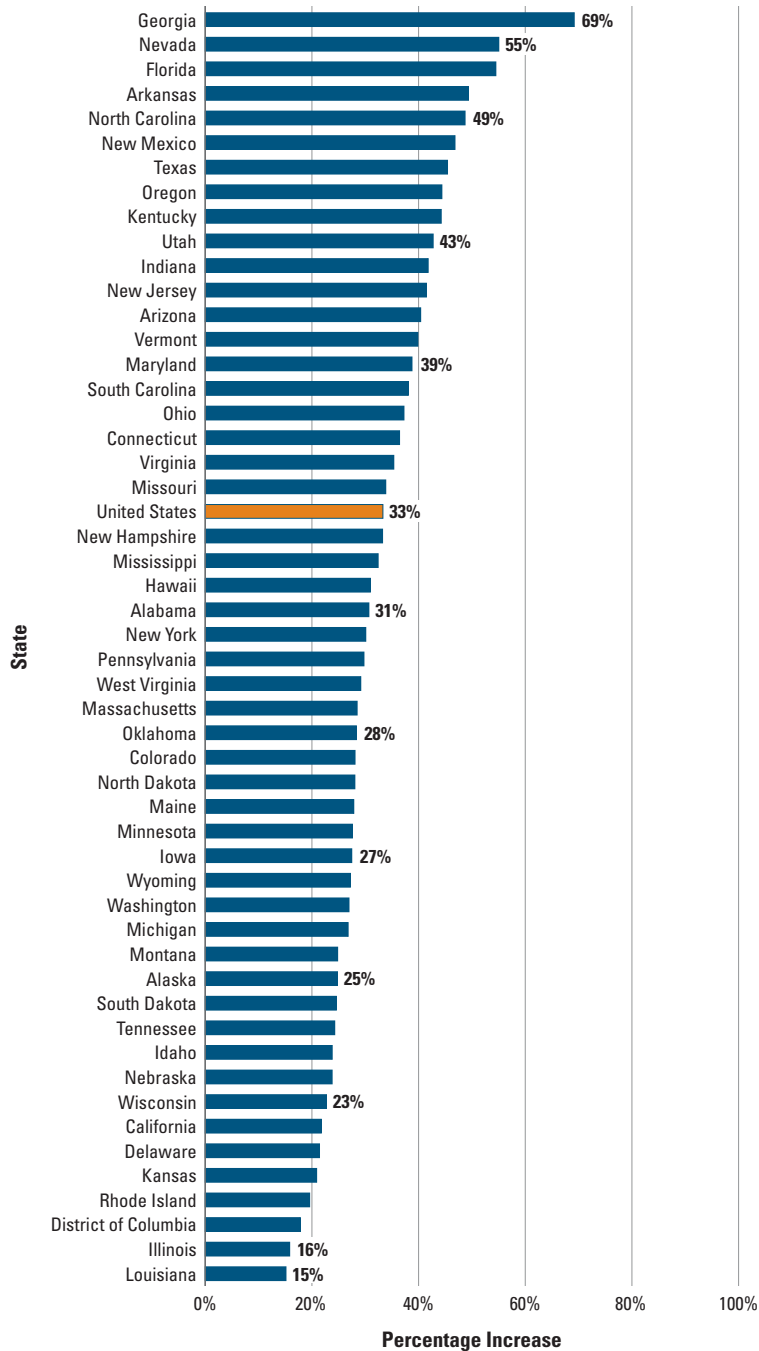
NOTE: All of the students not included in the percentages reported in Figure 22B are enrolled in public four-year colleges and universities.

SOURCE: NCES, *Digest of Education Statistics 2011*, Table 224.

# Changes in Enrollment by State

**FIGURE 23**

Percentage Increases in Total Full-Time Equivalent (FTE) Enrollment in Public Degree-Granting Institutions Between Fall 2000 and Fall 2010, by State



Over the decade from fall 2000 to fall 2010, total full-time equivalent (FTE) enrollment in public two-year and four-year institutions grew by 69% (from 202,600 to 342,800) in Georgia and by 55% (from 48,100 to 74,600) in Nevada. The lowest growth rates were 15% in Louisiana (from 153,500 to 176,700) and 16% in Illinois (from 351,100 to 406,700).

- Of the 2.75 million new FTE enrollments in public institutions in the United States between 2000 and 2010, 19% were in Texas, 9% were in California, and 7% were in Florida. Georgia and New York each contributed 5%.

#### ALSO IMPORTANT:

- The balance between two-year and four-year college enrollments changed markedly over the decade in some states. In Indiana, Kentucky, Maine, and West Virginia, where enrollment in public two-year institutions more than doubled over the decade, growth in public four-year enrollment was below the national average. In Maine and West Virginia, growth in the four-year sector was slow enough that the total public enrollment grew more slowly than the national average.
- FTE enrollments in public two-year colleges declined over the decade in Alaska, Florida, Nevada, North Dakota, and Washington, all of which had higher than average growth in the public four-year sector. With the exception of Alaska, all of these states saw some public two-year institutions being reclassified as public four-year institutions between 2000 and 2010.

SOURCE: NCES, *Digest of Education Statistics 2011*, Table 228.



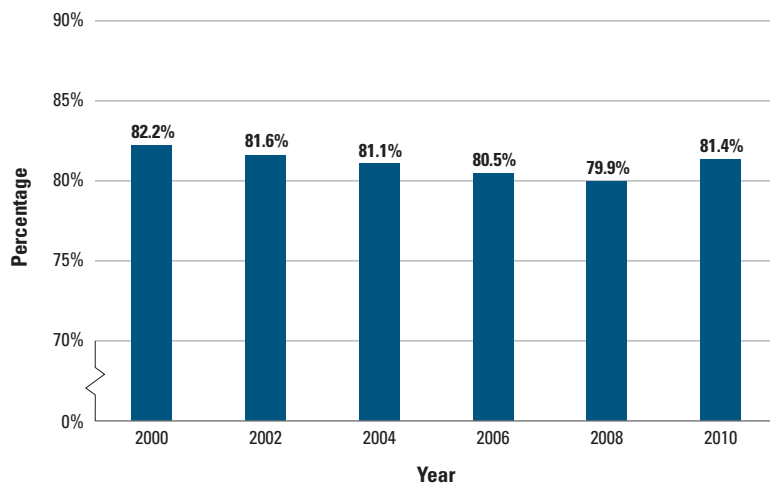


# Migration

The percentage of first-time undergraduate students (including international students) who were enrolled in institutions in their state of residence declined from 82.2% in fall 2000 to 81.1% in 2004 and 79.9% in 2008. The percentage rose to 81.4% in 2010.

**FIGURE 24A**

Percentage of First-Time First-Year Students in U.S. Degree-Granting Institutions Who Were from the State Where They Enrolled, Fall 2000 to Fall 2010



SOURCES: NCES, *Digest of Education Statistics 2011*, Table 232; 2009, Table 222; 2008, Table 223; 2005, Table 202; 2004, Table 203; 2003, Table 206.

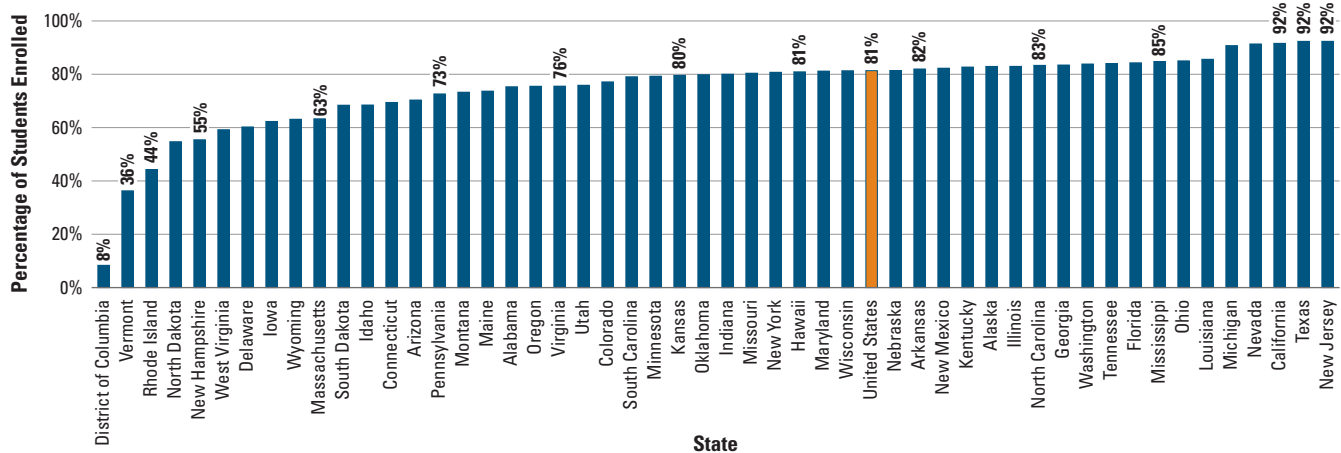
- In fall 2010, when 81% of U.S. students were enrolled in their state of residence, the same was true for only 36% of students enrolled in Vermont and 44% in Rhode Island. In contrast, 92% of students enrolled in California, Texas, and New Jersey were state residents.

### ALSO IMPORTANT:

- Some states have high levels of net in-migration of students. For example, in fall 2010, 39,500 out-of-state residents came to Pennsylvania to begin college and about half of that number of state residents (19,300) went elsewhere to study. In West Virginia, 9,300 out-of-state residents enrolled and only 22% as many (2,000) left the state.
- Other states have high levels of net out-migration of students. For example, in fall 2010, 35,000 New Jersey residents left the state to begin college — over six times as many as the 5,500 who came to New Jersey to study.
- Only 53% of Vermont residents beginning college in fall 2010 stayed in Vermont for college, compared to 93% of Utah residents.

**FIGURE 24B**

Percentage of First-Time First-Year Students in Degree-Granting Institutions Who Were from the State Where They Enrolled, by State, Fall 2010



NOTE: Includes first-time undergraduate students enrolled in all degree-granting institutions.

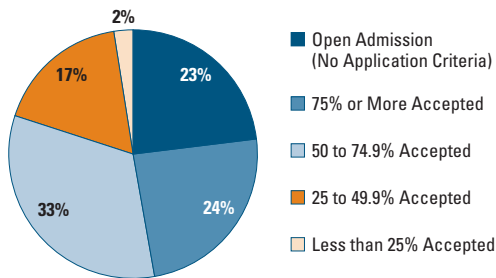
SOURCE: NCES, *Digest of Education Statistics 2011*, Table 232.

*The gap between the percentages reported in Figure 24B and 100% corresponds to the percentage of students enrolled in the state who are residents of other states or other countries. These figures do not necessarily correspond to the percentage of state residents who stay in the state to study.*



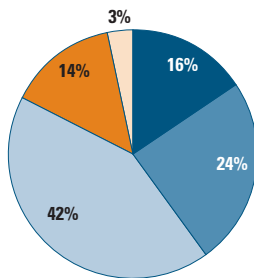
# Selectivity and Completion

**FIGURE 25A**  
Percentage Distribution of Four-Year Degree-Granting Undergraduate Institutions by Acceptance Rate, Fall 2010



SOURCE: NCES, *The Condition of Education 2012*, Indicator A-36-2.

**FIGURE 25B**  
Percentage Distribution of Full-Time Equivalent (FTE) Undergraduate Enrollment at Four-Year Degree-Granting Institutions by Acceptance Rate, Fall 2010

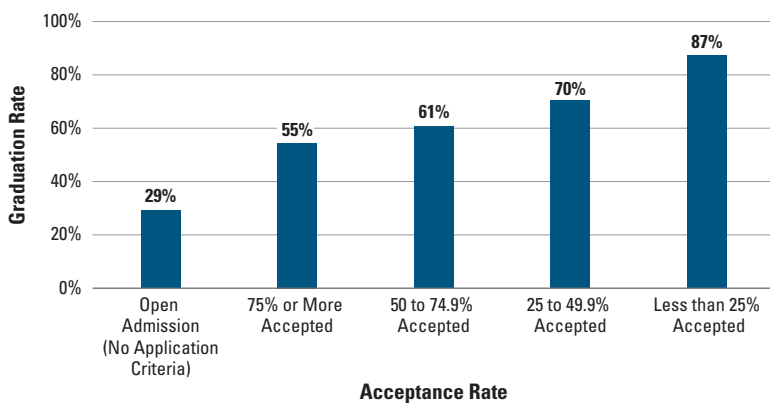


SOURCES: NCES, *IPEDS Enrollment Data*, Fall 2010; calculations by the authors.

In 2010, only 2% of four-year degree-granting colleges and universities in the U.S. (60 out of 2,421) accepted less than 25% of their applicants. Three percent of FTE undergraduate students were enrolled at these institutions. The 47% of four-year institutions that were open admission or accepted at least 75% of their applicants accounted for 40% of all FTE enrollments.

- Part-time students are disproportionately enrolled in open-admission institutions, which enrolled 35% of all part-time undergraduates in four-year institutions in fall 2010, compared to 16% of full-time students.
- Institutional selectivity is highly correlated with graduation rates. Only 29% of full-time students who began at open-admission institutions in 2004 and 55% of those who began at institutions accepting at least 75% of their applicants earned degrees at their first institution within six years.
- At the most selective four-year institutions, where students have strong academic preparation, 87% of full-time students who began their studies in 2004 had completed four-year degrees at their first institution by fall 2010.

**FIGURE 25C**  
Overall 6-Year Graduation Rate (by Fall 2010) of 2004 Cohort at Four-Year Institutions by Acceptance Rate of Institution



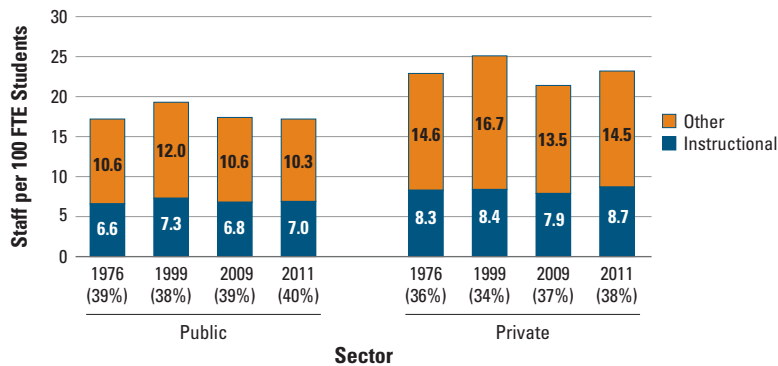
SOURCE: NCES, *The Condition of Education 2012*, Indicator A-36-2.

**ALSO IMPORTANT:**

- The graduation rates reported here are from the *IPEDS* data, which measure degree completion of only first-time full-time students at the institution in which they first enrolled. Part-time and returning students are excluded. Students who transfer to other institutions are not counted as graduates.
- In fall 2010, there were 1,628 two-year degree-granting institutions in the U.S., including 977 in the public two-year sector, 80 in the private nonprofit sector, and 571 in the for-profit sector. Among full-time students who began their studies at these institutions in fall 2007, 20%, 51%, and 60% had earned associate degrees or short-term certificates by 2010 at their original institution in the three sectors, respectively. (NCES, *The Condition of Education 2012*, Table A-36-2)

# Faculty and Staff

**FIGURE 26A**  
 Number of Full-Time Equivalent (FTE) Staff per 100 FTE Students in Degree-Granting Institutions (with Instructional Staff as a Percentage of Total Staff), Fall 1976, Fall 1999, Fall 2009, and Fall 2011



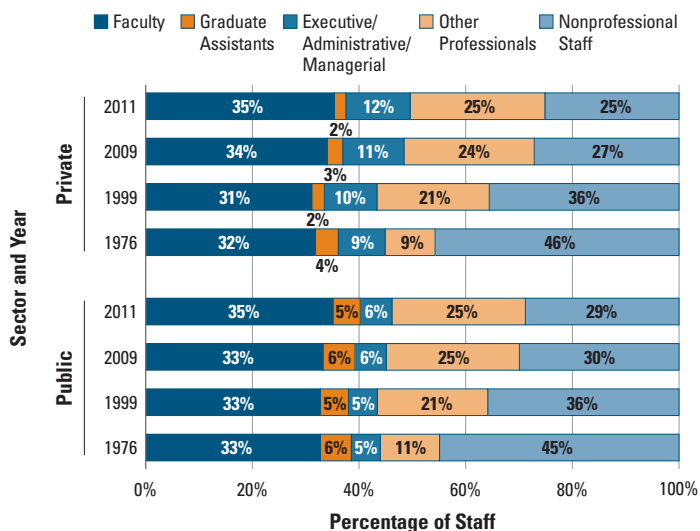
NOTE: Public sector numbers comprise two-year and four-year institutions; private sector numbers include nonprofit and for-profit institutions. Numbers in parentheses on the horizontal axis indicate instructional staff as a percentage of total staff. Instructional staff includes faculty and graduate assistants.

SOURCES: NCES, *Digest of Education Statistics 2011*, Table 258; NCES, *Employees in Postsecondary Institutions, Fall 2011 and Student Financial Aid, Academic Year 2010-11*, Table 1.

In both public and private colleges and universities, the percentage of employees who were instructional staff members was slightly higher in 2011 than in 1976, 1999, and 2009.

- The numbers of both instructional and other staff per 100 FTE students declined between 1999 and 2009 in both public and private colleges and universities. Between 2009 and 2011, the staff-to-student ratio increased in the private sector, but not in the public sector.
- Between 1976 and 1999, the staff-to-student ratios increased in both public and private institutions and the percentage of all staff devoted to instruction decreased, but these trends did not continue in the following decade.

**FIGURE 26B**  
 Composition of FTE Staff in Degree-Granting Institutions, Fall 1976, Fall 1999, Fall 2009, and Fall 2011



NOTE: Percentages may not sum to 100 because of rounding.

SOURCES: NCES, *Digest of Education Statistics 2011*, Table 258; NCES, *Employees in Postsecondary Institutions, Fall 2011 and Student Financial Aid, Academic Year 2010-11*, Table 1.

- The percentage of FTE staff classified as nonprofessional, noninstructional declined from 45% in 1976 to 29% in 2011 in public institutions, and from 46% to 25% in private institutions. The percentage classified as “other” professional staff increased commensurately, without major changes in the share of employees who were in either the executive/administrative/managerial or instructional categories.

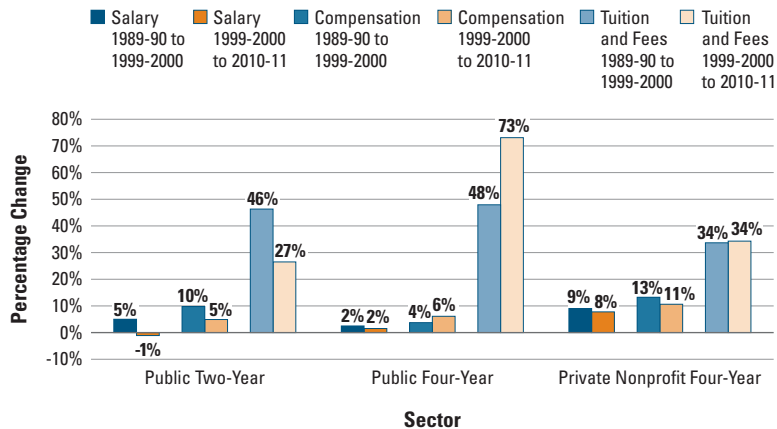
- The growing “other professionals” category includes student, academic, and institutional support functions that require a bachelor’s degree or comparable experience. Examples of the many job titles in this category include human resources specialists, accountants and auditors, computer specialists, counselors, librarians, and coaches.

- Graduate assistants constituted 6% of the FTE instructional staff in private institutions in 2011 (2% of total staff, with faculty at 35%) compared to 13% of the FTE instructional staff in public institutions (5% of total staff, with faculty at 35%). In both sectors, the number of graduate assistants is low by historical standards.

# Faculty and Staff

**FIGURE 27A**

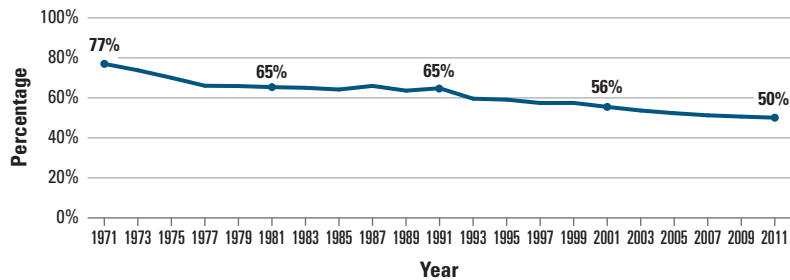
Percentage Changes in Inflation-Adjusted Average Full-Time Faculty Salary, Average Total Compensation, and Average Published Tuition and Fees, by Sector, 1989-90 to 1999-2000 and 1999-2000 to 2010-11



SOURCES: NCES, *The Condition of Education 2012*, Tables A-44-1 and A-44-2; The College Board, *Trends in College Pricing 2012*, Table 2; calculations by the authors.

**FIGURE 27B**

Percentage of Instructional Faculty in Degree-Granting Postsecondary Institutions Employed Full-Time, Fall 1971 to Fall 2011



NOTE: Graduate student teaching assistants are not included. For years through 1995, the definition of higher education institutions is slightly different from the definition in later years.

SOURCES: NCES, *Digest of Education Statistics 2011*, Table 263; NCES, *Employees in Postsecondary Institutions, Fall 2010*, and *Salaries of Full-time Instructional Staff, 2010-11*, Table 1.

Percentage of Instructional Faculty in Degree-Granting Postsecondary Institutions Employed Full-Time, Fall 2011

Fall 2011	Percentage of Faculty Full-Time	Percentage of Faculty Plus Graduate Assistants Full-Time
All	50%	41%
Public Four-Year	66%	45%
Public Two-Year	30%	30%
Private Nonprofit Four-Year	56%	48%
For-Profit Four-Year	14%	14%
For-Profit Two-Year	44%	44%

Between 1999-2000 and 2010-11, while published tuition and fees rose rapidly, average salaries for full-time faculty at public two-year colleges declined by 1% in constant dollars. Average salaries rose by 2% at public four-year institutions and by 8% (a rate of 0.8% per year) at private nonprofit four-year institutions.

- Because the cost of fringe benefits such as health insurance, retirement plans, medical/dental plans, and group life insurance has grown much more rapidly than salaries, average total compensation increased more than average salaries in each sector over the time periods shown in Figure 27A.
- The percentage of instructional faculty in degree-granting institutions employed full-time declined from 77% in 1971 to 65% in 1981 (a decade of considerable growth in the public two-year sector) and remained at about the same level through 1991. By 2001, the percentage of faculty employed full-time had declined to 56% and by 2011, it was down to 50%.
- In 2011-12, 50% of faculty in all degree-granting institutions were employed full-time, with the percentage ranging from 14% in for-profit four-year institutions to 30% in public two-year colleges and 66% in public four-year universities.
- Because all graduate assistants are part-time, including graduate assistants reduces the percentage of instructors employed full-time from 66% to 45% in public four-year institutions and from 56% to 48% in private nonprofit four-year institutions.

## ALSO IMPORTANT:

- In 2009-10, instructional salaries and wages accounted for 17% of total expenditures at public four-year universities and 25% of total expenditures at public two-year colleges. (NCES, *Digest of Education Statistics 2011*, Table 377)



# Notes and Sources

## THE ANNUAL SURVEY OF COLLEGES

Prices described in this report are based on data reported to the College Board by colleges and universities in the *Annual Survey of Colleges*. Data for 2012-13 are from an online questionnaire distributed in October 2011, with data collected and reviewed through early September 2012. Tuition and fee figures are based on charges to full-time students over the course of a nine-month academic year of 30 semester hours or 45 quarter hours. For those institutions with tuition and fees that vary by year of study, weighted average undergraduate tuition levels are used in the analysis. We are not able to estimate differences in tuition and fees by program, but rely on average prices reported by institutions.

## ENROLLMENT-WEIGHTED AND UNWEIGHTED DATA

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

As a snapshot, neither set of averages is more or less correct than the other; they 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 the unweighted averages useful in studying longitudinal trends and evaluating a particular institution's practices against a larger set. Thus, the College Board computes both weighted and unweighted averages. Tables reporting unweighted tuition data can be found online at [trends.collegeboard.org](http://trends.collegeboard.org).

The most recent enrollment data available are for fall 2011. For 2011-12 and earlier years, prices are weighted by same-year enrollments. For 2012-13, prices are weighted by fall 2011 enrollments. In other words, the percentage changes reported in Tables 1A and 1B reflect only price changes, not changes in enrollment patterns. In contrast, the historical data on changes in enrollment-weighted prices reported in Tables 2A and 2B reflect changes in both prices and in the distribution of full-time students across institutions.

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 on out-of-state students receiving a waiver of some or all of the tuition premium are not available.
- Resident room and board are weighted by the number of undergraduates living in campus housing at each institution.
- Out-of-district charges for public two-year college students are not accounted for in the average prices reported here.
- Estimated other student budget components are weighted as follows:
  - Books and supplies are weighted by full-time undergraduate enrollment.
  - Resident transportation and other resident costs are weighted by the number of undergraduates living in campus housing.
  - Commuter room and board, commuter transportation, and other commuter costs are weighted by the number of commuting undergraduates at each institution, reflecting the expenses of commuters.

## INSTITUTIONS INCLUDED IN CALCULATIONS

Out of the 3,775 public two-year, public four-year, private nonprofit four-year, and for-profit institutions that were surveyed in both 2011 and 2012, 3,125 were included in this year's analysis, including over 97% of the surveyed schools in the public and private nonprofit sectors and 39% of those in the for-profit sector. Our imputation process allows us to include schools for which we are missing one year of data. We exclude from our calculations military academies and other institutions that report zero tuition. Tables A1A and A1B describe the institutions that were included in this analysis, by sector and Carnegie classification, respectively.

**TABLE A1A** Institutions Included in Tuition and Fees (T&F) Analysis in Table 1A

Sector	Number of Institutions Surveyed in Both 2011 and 2012	Institutions Included in T&F Analysis		Institutions in Analysis with Projected/Imputed T&F for Either Year	
Public Two-Year	1,008	997	99%	21	2%
Public Four-Year	582	571	98%	17	3%
Private Nonprofit Four-Year	1,224	1,182	97%	12	1%
For-Profit	961	375	39%	31	8%
Total	3,775	3,125	83%	81	3%

**TABLE A1B** Institutions Included in Tuition and Fees (T&F) Analysis in Table 1B

Carnegie Classification	Number of Institutions Surveyed in Both 2011 and 2012	Institutions Included in T&F Analysis		Institutions in Analysis with Projected/Imputed T&F for Either Year	
Public Doctoral In-State	175	175	100%	3	2%
Public Master's In-State	266	265	100%	10	4%
Public Bachelor's In-State	134	128	96%	1	1%
Private Doctoral	104	103	99%	0	0%
Private Master's	360	354	98%	3	1%
Private Bachelor's	508	498	98%	4	1%

## REVISION OF BASE-YEAR VALUES

The prices for 2011-12 used in this analysis differ somewhat from the 2011-12 averages reported last year. One factor contributing to the revision is the reweighting of the prices, shifting from fall 2010 to fall 2011 full-time enrollment figures. The base-year numbers also shift because several hundred institutions submit revised tuition figures for the previous year. The recomputed average for 2011-12 tuition and fees at public four-year institutions is \$12 higher than the level we reported last year for in-state students and \$53 higher for out-of-state students. The recomputed average for 2011-12 tuition and fees is \$4 lower than the level we reported last year for public two-year institutions.

This year, we have included additional institutions in the private nonprofit four-year sector in our analysis. These institutions tend to be small and charge lower-than-average tuition and fees. As a result, the recomputed average for 2011-12 tuition and fees is \$617 lower than the level we reported last year for the private nonprofit four-year sector. Our estimate of the average 2011-12 price for for-profit students is \$250 higher than it was last year because of changes in full-time enrollment and changes in the number of institutions included in the calculations.

## LONGITUDINAL DATA

In Tables 2A and 2B, tuition averages from years prior to 1987-88 are extracted from the *Integrated Postsecondary Education Data System (IPEDS)*. The two data sets, *IPEDS* and the College Board's *Annual Survey of Colleges*, track very closely, but *IPEDS* averages are weighted by full-time equivalent enrollments, while the *Annual Survey of Colleges* prices are weighted by full-time enrollments. Annual historical data are available online at [trends.collegeboard.org](http://trends.collegeboard.org).

## NET PRICE CALCULATIONS

The calculations of average net price in Figures 9 and 10 for full-time undergraduate students are a best approximation and are based on the aggregate amounts of each type of aid reported in *Trends in Student Aid 2012* 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, and 2008 *National Postsecondary Student Aid Study (NPSAS)* data. The distribution of aid for 2009-10 and after was modified to account for the large increase in Pell Grants in 2009-10. Because financial aid data for 2012-13 are not yet available, amounts for that year are estimated based on past years and information about changes in grant policies. 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 2011 because some figures have been updated.

Net price and grant totals in Figures 9 and 10 are not comparable to those in Figures 11A and 11B, which are based on the *IPEDS* Delta Cost Data and focus on institutional revenues rather than prices. While Figures 9 and 10 focus on full-time undergraduate students, Figures 11A and 11B cover revenues paid by all students — full-time and part-time, in-state and out-of-state, graduate and undergraduate. Furthermore, Figures 9 and 10 include grants from private sources and federal tax benefits, while Figures 11A and 11B do not.

## INSTITUTIONAL REVENUES AND EXPENDITURES

Figures 11A–B, 14A–C, and 15A–B are based on data from the *IPEDS* Delta Cost Data. Delta data combine *IPEDS* data with information from the Financial Institution Shared Assessment Program database beginning in 1994. Further details and the entire database are available at [nces.ed.gov/ipeds/deltacostproject/](http://nces.ed.gov/ipeds/deltacostproject/).

## ENDOWMENTS

Data on endowments are from the National Association of College and University Business Officers (NACUBO) and Commonfund Institute, supplemented by data from *IPEDS* for institutions for which NACUBO or Commonfund data are not available. Public university foundation endowment assets are included.

## INFLATION ADJUSTMENT

The Consumer Price Index for all urban consumers (CPI-U) is used to adjust for inflation. We use the CPI-U in July of the year in which the academic year begins. See [ftp://ftp.bls.gov/pub/special.requests/cpi/cpiat.txt](http://ftp.bls.gov/pub/special.requests/cpi/cpiat.txt) for changes in the CPI-U over time. Table A2 provides CPI data for 2002 through 2012. Additional historical data are available online. The Factor column provides the user with a multiplication factor equal to that of CPI (base year, say 2012) divided by CPI (current year). A simple multiplication of a current-year figure by the associated factor will yield a constant-dollar result.

**TABLE A2** Consumer Price Index-All Urban Consumers, Not Seasonally Adjusted, All Items, U.S. City Average, 1982-84=100

Academic Year	CPI (as of July at the beginning of the Academic Year)	Factor Used to Convert to 2012 Dollars
2002-03	180.1	1.2721
2003-04	183.9	1.2458
2004-05	189.4	1.2096
2005-06	195.4	1.1725
2006-07	203.5	1.1258
2007-08	208.3	1.0999
2008-09	220.0	1.0416
2009-10	215.4	1.0639
2010-11	218.0	1.0509
2011-12	225.9	1.0141
2012-13	229.1	1.0000

## CARNEGIE CLASSIFICATION 2010: BASIC CLASSIFICATION

This year, we updated our Carnegie Classification with the 2010 update. For the past few years, we had been using the 2005 edition. The number of institutions in each Carnegie Classification changed slightly from 2005 to the 2010 update, although the classification structure of the 2010 update is the same as that for the 2005 edition.

“Doctoral universities” include institutions that award at least 20 doctoral degrees per 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 degrees per year; “bachelor’s colleges” include institutions where bachelor’s degrees represent at least 10% of all undergraduate degrees and that award fewer than 50 master’s degrees or fewer than 20 doctoral degrees per year. All of the categories above exclude “special focus institutions” and “tribal colleges.”

*Trends in College Pricing* was authored by College Board independent policy analysts Sandy Baum and Jennifer Ma, with invaluable assistance from Charles Kurose.

### Contact Information for the Authors

Sandy Baum, [sbaum@skidmore.edu](mailto:sbaum@skidmore.edu)  
Jennifer Ma, [jma@collegeboard.org](mailto:jma@collegeboard.org)

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

Hard copies may be ordered by contacting [cbadvocacy@collegeboard.org](mailto:cbadvocacy@collegeboard.org).

Tables, graphs, and data in this report or excerpts thereof may be reproduced or cited, for noncommercial purposes only, provided that the following attribution is included:

Source: *Trends in College Pricing*.

© 2012 The College Board.

[www.collegeboard.org](http://www.collegeboard.org)

## ACKNOWLEDGMENTS

This publication benefited from comments by Kathleen Little, Kathleen Payea, and Anne Sturtevant. The publication would not have been possible without the cooperation and support of many people at the College Board, including Stan Bernstein and the *Annual Survey of Colleges* staff, Marilyn Cushman, Tara Goldman, Carly Lindauer, Annika Many, Christen Pollock, Tom Rudin, and Leanne Snoeck. We are very grateful to Alicia Broadway, Patti Gildersleeve, Martha Hoeper, Barbara Kridl, and Leslie Retallick at MPR Associates for their expert graphic design work.

We thank all of those who contributed to the data collection for this publication, including institutional research department staff and campus administrators who provided us with invaluable data through the *Annual Survey of Colleges*. We thank Samuel Barbett of the U.S. Department of Education for providing us with unpublished *IPEDS* data. We also thank Kenneth Redd of NACUBO for providing us with the NACUBO endowment data.

## DEFINING TERMS

According to the 1997 National Commission on the Cost of Higher Education, defining “cost,” “price,” and “subsidy” is critical to clarifying the issues in financing postsecondary education.

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

“Prices” are the expenses that students and parents face.

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

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

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



[www.collegeboard.org](http://www.collegeboard.org)  
[advocacy.collegeboard.org](http://advocacy.collegeboard.org)