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Funding Down, Tuition Up

State Cuts to Higher Education Threaten Quality and Affordability at Public Colleges

By Michael Mitchell, Michael Leachman, and Kathleen Masterson¹

Years of cuts in state funding for public colleges and universities have driven up tuition and harmed students' educational experiences by forcing faculty reductions, fewer course offerings, and campus closings. These choices have made college less affordable and less accessible for students who need degrees to succeed in today's economy.

Though some states have begun to restore some of the deep cuts in financial support for public two- and four-year colleges since the recession hit, their support remains far below previous levels. In total, after adjusting for inflation, funding for public two- and four-year colleges is nearly \$10 billion below what it was just prior to the recession.

As states have slashed higher education funding, the price of attending public colleges has risen significantly faster than the growth in median income. For the average student, increases in federal student aid and the availability of tax credits have not kept up, jeopardizing the ability of many to afford the college education that is key to their long-term financial success.

States that renew their commitment to a high-quality, affordable system of public higher education by increasing the revenue these schools receive will help build a stronger middle class and develop the entrepreneurs and skilled workers that are needed in the new century.

Of the states that have finalized their higher education budgets for the current school year, after adjusting for inflation:²

¹ Chelsea Arbury assisted with gathering data for this report.

² This paper uses CPI-U-RS inflation adjustments to measure real changes in costs. Over the past year CPI-U-RS increased by 0.12 percent. We use the CPI-U-RS for the calendar year that begins the fiscal/academic year. Unless noted, all figures in this paper are adjusted for inflation.

- Forty-six states — all except Montana, North Dakota, Wisconsin, and Wyoming — are spending less per student in the 2015-16 school year than they did before the recession.³
- States cut funding deeply after the recession hit. The average state is spending \$1,598, or 18 percent, less per student than before the recession.
- Per-student funding in nine states — Alabama, Arizona, Idaho, Illinois, Kentucky, Louisiana, New Hampshire, Pennsylvania, and South Carolina — is down by more than 30 percent since the start of the recession.
- In 12 states, per-student funding fell over the last year. Of these, four states — Arkansas, Illinois, Kentucky, and Vermont — have cut per-student higher education funding for the last two consecutive years.
- In the last year, 38 states increased funding per student. Per-student funding rose \$199, or 2.8 percent, nationally.

Deep state funding cuts have had major consequences for public colleges and universities. States (and to a lesser extent localities) provide roughly 54 percent of the costs of teaching and instruction at these schools.⁴ Schools have made up the difference with tuition increases, cuts to educational or other services, or both.

Since the recession took hold, higher education institutions have:

- **Increased tuition.** Public colleges and universities across the country have increased tuition to compensate for declining state funding and rising costs. Annual published tuition at four-year public colleges has risen by \$2,333, or 33 percent, since the 2007-08 school year.⁵ In Arizona, published tuition at four-year schools is up nearly 90 percent, while in six other states — Alabama, California, Florida, Georgia, Hawaii, and Louisiana — published tuition is up more than 60 percent.

These sharp tuition increases have accelerated longer-term trends of college becoming less affordable and costs shifting from states to students. Over the last 20 years, the price of attending a four-year public college or university has grown significantly faster than the

³ CBPP calculation using the “Grapevine” higher education appropriations data from Illinois State University, enrollment data from the State Higher Education Executive Officers Association, and the Consumer Price Index, published by the Bureau of Labor Statistics. Since enrollment data is available only through the 2014-15 school year, enrollment for the 2015-16 school year is estimated using data from past years. Kentucky funding data is provided by the Kentucky Center for Economic Policy. Pennsylvania funding data is provided by the Pennsylvania Budget and Policy Center. In the 2013-15 biennial budget, Wisconsin state lawmakers changed the funding model for Wisconsin’s Technical College System, shifting support from the local property tax to state General Purpose Revenue. This change reflects a shift of roughly \$406 million in annual support from the local to state levels in Wisconsin but did not result in an overall increase in support for Wisconsin’s higher education institutions. Excluding this shift, per-student funding fell by \$1,634, or 25.2 percent, over 2008-2016.

⁴ State Higher Education Executive Officers Association, “State Higher Education Finance: FY2015,” April 2016, p. 18, http://www.sheeo.org/sites/default/files/SHEEO_SHEF_FY2015.pdf.

⁵ Calculated from College Board, “Trends in College Pricing 2015: Average Tuition and Fee and Room and Board Charges, 1971-72 to 2015-16 (Enrollment-Weighted),” Table 2, <http://trends.collegeboard.org/college-pricing>.

median income.⁶ Although federal student aid and tax credits have risen, on average they have fallen short of covering the tuition increases.

- **Diminished academic opportunities and student services.** Tuition increases have compensated for only part of the revenue loss resulting from state funding cuts. Over the past several years, public colleges and universities have cut faculty positions, eliminated course offerings, closed campuses, and reduced student services, among other cuts.

A large and growing share of future jobs will require college-educated workers.⁷ Sufficient public investment in higher education to keep quality high and tuition affordable, and to provide financial aid to students who need it most, would help states develop the skilled and diverse workforce they will need to compete for these jobs.

Sufficient public investment can only occur, however, if policymakers make sound tax and budget decisions. State revenues have improved significantly since the depths of the recession but are still only modestly above pre-recession levels.⁸ To make college more affordable and increase access to higher education, many states need to supplement that revenue growth with new revenue to fully make up for years of severe cuts.

But just as the opportunity to invest is emerging, lawmakers in a number of states are jeopardizing it by entertaining tax cuts that in many cases would give the biggest breaks to the wealthiest taxpayers. In recent years, states such as Wisconsin, Louisiana, and Arizona have enacted large-scale tax cuts that limit resources available for higher education. And in Illinois and Pennsylvania ongoing attempts to find necessary resources after large tax cuts threaten current and future higher education funding.

States Have Reversed Some Funding Cuts, but They Must Do Much More

State and local tax revenue is a major source of support for public colleges and universities. Unlike private institutions, which rely more heavily on charitable donations and large endowments to help fund instruction, public two- and four-year colleges typically rely heavily on state and local appropriations. In 2015, state and local dollars constituted 54 percent of the funds these institutions used directly for teaching and instruction.⁹

While states have begun to restore funding, resources are well below what they were in 2008 — 18 percent per student lower — even as state revenues have returned to pre-recession levels. (See Figures 1 and 2.) In the states that have finalized their higher education budgets for the current

⁶ Calculated from “Trends in College Pricing 2015,” Table 2, and the Census Bureau’s “Income, Poverty and Health Insurance Coverage in the United States: 2013,” September 2014, Table A-2, <http://www.census.gov/content/dam/Census/library/publications/2014/demo/p60-249.pdf>.

⁷ Anthony P. Carnevale, Nicole Smith, and Jeff Strohl, “Recovery: Job Growth and Education Requirements through 2020,” Georgetown University Center on Education and the Workforce, June 2013, <https://georgetown.app.box.com/s/tl0zkxt0puz45hu21g6>.

⁸ CBPP calculation using Census Bureau and Bureau of Labor Statistics data, <http://www.census.gov/govs/qtax/>.

⁹ State Higher Education Executive Officers Association, April 2016.

2015-16 school year compared with the 2007-08 school year, when the recession hit, adjusted for inflation:

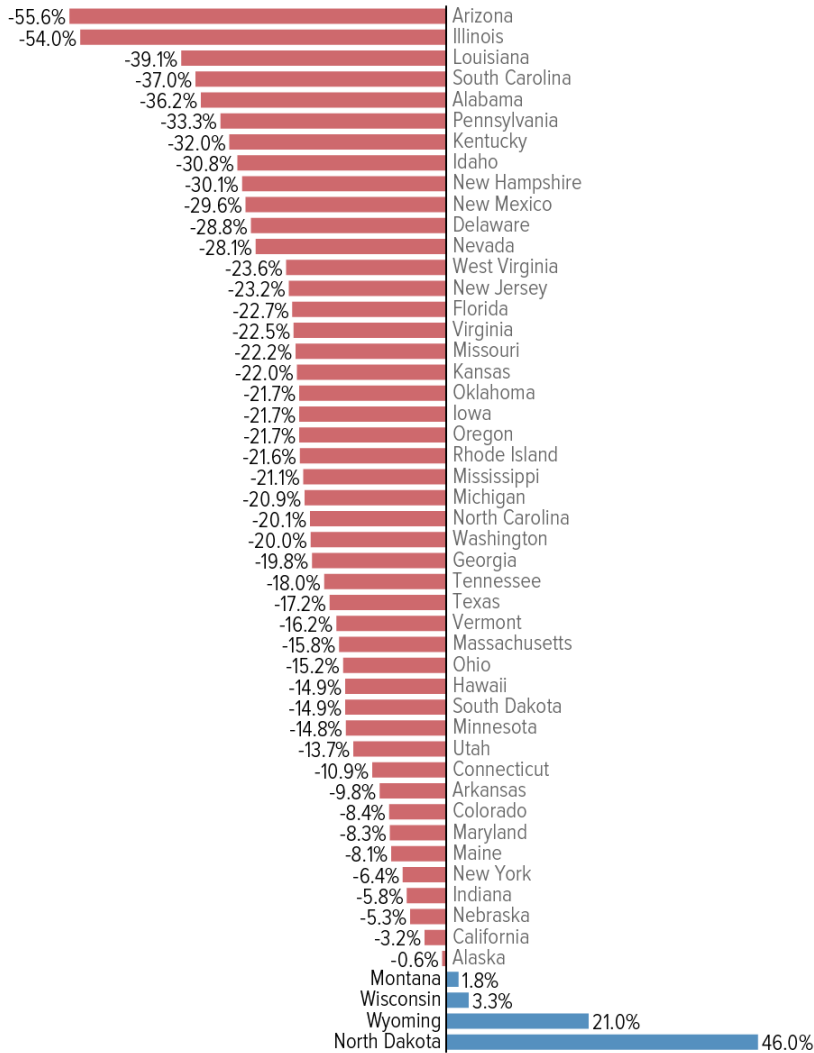
- State spending on higher education nationwide is down an average of \$1,598 per student, or 18 percent.
- In only four states — Montana, North Dakota, Wisconsin, and Wyoming — is per-student funding now above its 2008 pre-recession levels.
- 26 states have cut funding per student by more than 20 percent.
- Nine states have cut funding per student by more than 30 percent.
- Arizona and Illinois have cut funding by more than half.¹⁰

¹⁰ CBPP calculation using the “Grapevine” higher education appropriations data from Illinois State University, enrollment and combined state and local funding data from the State Higher Education Executive Officers Association, and the Consumer Price Index, published by the Bureau of Labor Statistics. Since enrollment data is only available through the 2014-15 school year, we have estimated enrollment for the 2015-16 school year using data from past years. The Illinois system of higher education operated without state appropriations for much of the 2015-16 school year. In April, Illinois lawmakers provided just under \$600 million for state colleges and universities for fiscal year 2016. In June, the legislature approved an additional \$1 billion in higher education funding that could be used for expenses in fiscal year 2016 and the first half of fiscal year 2017. In order to calculate the amount dispersed for 2016 we have spread the additional \$1 billion in funding across the 18-month time period with two-thirds of the funding applied to 2016 and the remaining third to fiscal year 2017, such that the final fiscal year 2016 appropriation totals \$1.255 billion.

FIGURE 1

State Funding for Higher Education Remains Far Below Pre-Recession Levels in Most States

Percent change in state spending per student, inflation adjusted, 2008-2016



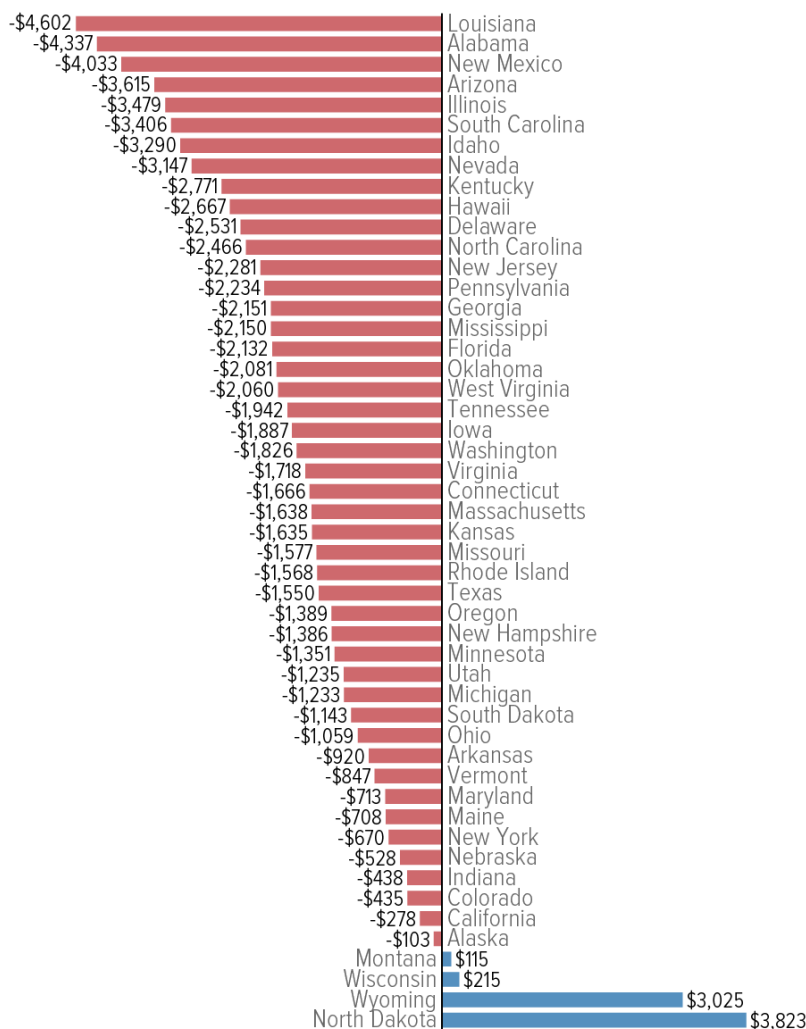
Note: Since enrollment data is only available through the 2014-15 school year, we have estimated enrollment for the 2015-16 school year using data from past years. In the 2013-15 biennial budget, Wisconsin state lawmakers changed the funding model for Wisconsin's Technical College System, shifting support from the local property tax to state General Purpose Revenue. This change reflects a shift of roughly \$406 million in annual support from the local to state levels in Wisconsin but did not result in an overall increase in support for Wisconsin's higher education institutions. Excluding this shift, per-student funding fell by 25.2 percent over 2008-2016.

Source: CBPP calculations using the "Grapevine" higher education appropriations data from Illinois State University, enrollment and combined state and local funding data from the State Higher Education Executive Officers Association, and the Consumer Price Index, published by the Bureau of Labor Statistics. Illinois funding data is provided by the Fiscal Policy Center at Voices for Illinois Children. Kentucky funding data is provided by the Kentucky Center for Economic Policy. Pennsylvania funding data is provided by the Pennsylvania Budget and Policy Center.

FIGURE 2

State Funding for Higher Education Remains Far Below Pre-Recession Levels in Most States

Change in state spending per student, inflation adjusted, 2008-2016



Note: Since enrollment data is only available through the 2014-15 school year, we have estimated enrollment for the 2015-16 school year using data from past years. In the 2013-15 biennial budget, Wisconsin state lawmakers changed the funding model for Wisconsin's Technical College System, shifting support from the local property tax to state General Purpose Revenue. This change reflects a shift of roughly \$406 million in annual support from the local to state levels in Wisconsin but did not result in an overall increase in support for Wisconsin's higher education institutions. Excluding this shift, per-student funding fell by \$1,634 over 2008-2016.

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Over the past year, most states increased per-student funding for their public higher education systems. (See Figures 3 and 4.) Thirty-eight states are investing more per student in the 2015-16 school year than they did in 2014-15.

- Nationally, spending is up an average of \$199 per student, or 2.8 percent.
- The funding increases vary from \$13 per student in Missouri to \$1,730 in Wyoming.¹¹
- 15 states increased per-student funding by more than 5 percent.
- Five states — Colorado, Nevada, Oregon, Washington, and Wyoming — increased funding by more than 10 percent.

But this trend is far from universal. In 12 states, per-student funding *fell* over the last year — declining, on average, 8.8 percent or by more than \$516 per student.¹²

- Funding cuts vary from \$20 per student in New Jersey to \$1,746 in Illinois.
- Six states — Alaska, Arizona, Illinois, Oklahoma, West Virginia, and Wisconsin — cut funding by more than \$250 per student over the past year.
- Four states — Arkansas, Illinois, Kentucky, and Vermont — have cut per-student higher education funding for the last two years.

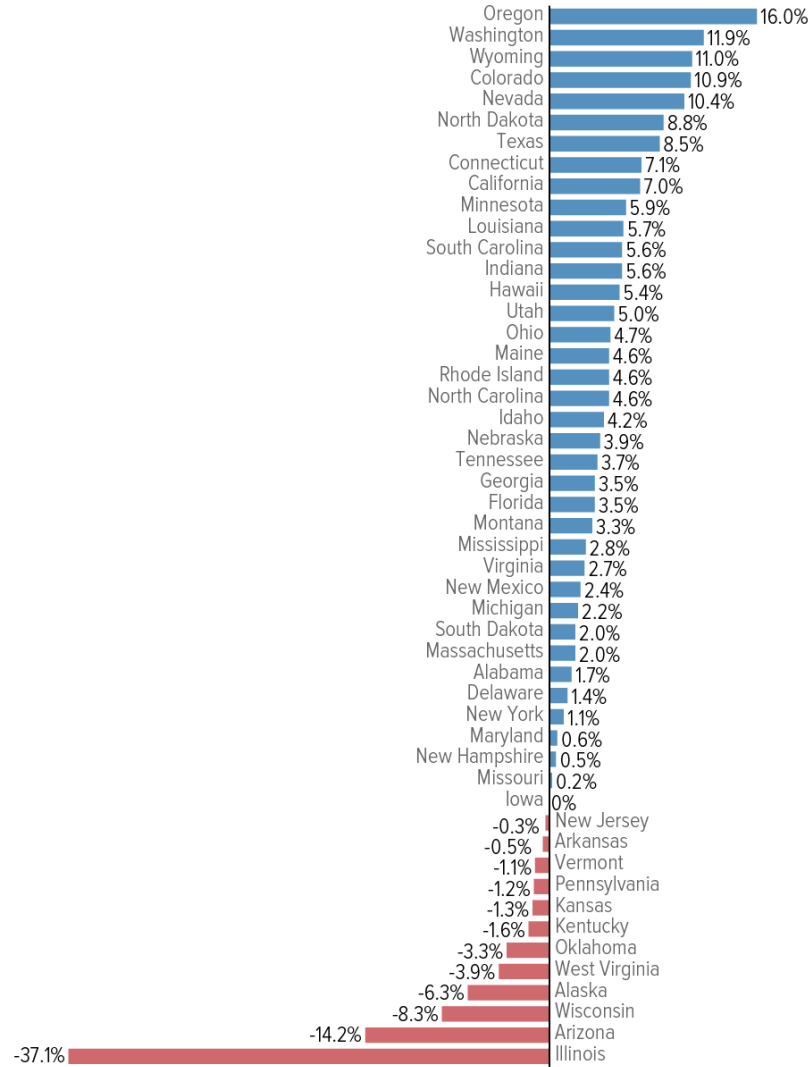
¹¹ Between fiscal years 2015 and 2016 Iowa experienced a \$1 increase in per-student funding after adjusting for inflation.

¹² This is skewed heavily by the drastic reduction in state support in Illinois, where funding fell by more than 37 percent between 2015 and 2016 or roughly \$1,750 per student. The median decline in state funding in these 12 states was 2.4 percent and \$173 per student.

FIGURE 3

Most States Increased Higher Education Funding Over Last School Year, but Some States Are Still Cutting

Percent change in state spending per student, inflation adjusted, 2015-2016



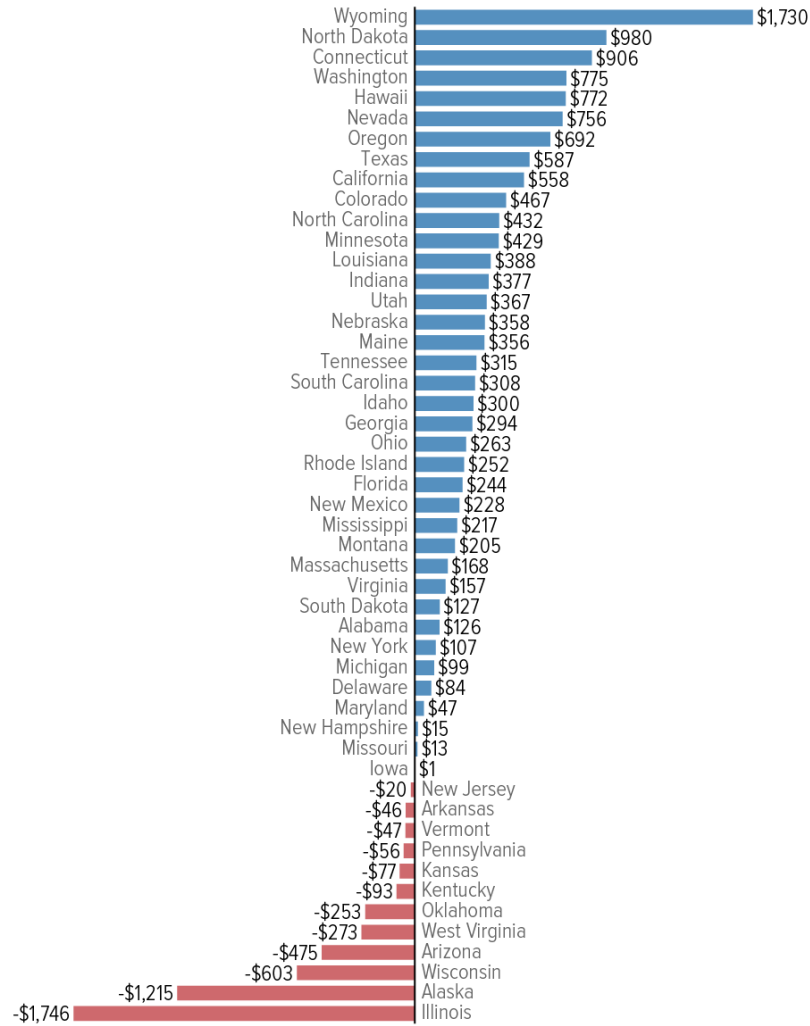
Note: Iowa essentially had flat funding between FY2015 and FY2016.

Source: CBPP calculations using data from Illinois State University's annual Grapevine Report and the State Higher Education Executive Officers Association. Because enrollment data is only available through the 2015 school year, enrollment for the 2015-16 school year is estimated using data from past years. Years are fiscal years. Illinois funding data is provided by the Fiscal Policy Center at Voices for Illinois Children. Kentucky funding data is provided by the Kentucky Center for Economic Policy. Pennsylvania funding data is provided by the Pennsylvania Budget and Policy Center.

FIGURE 4

Most States Increased Higher Education Funding Over Last School Year, but Some States Are Still Cutting

Change in state spending per student, inflation adjusted, 2015-2016



Source: CBPP calculations using data from Illinois State University's annual Grapevine Report and the State Higher Education Executive Officers Association. Because enrollment data is only available through the 2015 school year, enrollment for the 2015-16 school year is estimated using data from past years. Years are fiscal years. Illinois funding data is provided by the Fiscal Policy Center at Voices for Illinois Children. Kentucky funding data is provided by the Kentucky Center for Economic Policy. Pennsylvania funding data is provided by the Pennsylvania Budget and Policy Center.

After the Recession, States Cut Higher Education Funding as Enrollment Rose

Reductions in support for public colleges reflect in part the strategy that many states chose during the deep national recession and slow recovery.

- **State tax revenues fell sharply during the Great Recession.** The recession of 2007-09 led to record-breaking declines in state revenues, and the slow recovery continues to affect them. High unemployment and a slow recovery in housing values left people with less income and less purchasing power. As a result, states took in less from income tax and sales tax, their main sources of revenue for funding education and other services. By the fourth quarter of 2015, eight years after the recession hit, total state tax revenues were just 6.4 percent greater than they were at the start of the recession after adjusting for inflation.¹³
- **Many states chose to close their budget deficits through sizeable budget cuts rather than a more balanced mix of spending reductions and revenue increases.** States relied disproportionately on damaging cuts to deal with declining revenue over the course of the recession. Between fiscal years 2008 and 2012, states made up 45 percent of the loss in revenue through reducing support for public services — and only 16 percent through increases in taxes and fees. (They closed the remainder of their shortfalls with federal aid, reserves, and various other measures.) States would have lessened the deep cuts to higher education if they had been more willing to raise additional revenue.
- **Meanwhile, college enrollment has risen.** Public higher education institutions must educate more students, raising costs. Enrollment in public higher education was up by nearly 900,000 full-time-equivalent students, or 8.6 percent, between the beginning of the recession and the 2013-14 academic year (the latest year for which there are actual data).¹⁴

The recession played a large role in swelling enrollment numbers, particularly at community colleges, as many high school graduates chose college over dim employment prospects and older workers returned to retool and gain new skills.¹⁵

Other areas of state budgets also are under pressure. For example, an estimated 803,000 more K-12 students are enrolled in the current school year than in 2008.¹⁶ Long-term growth in state prison populations — with state facilities now housing nearly 1.56 million inmates — also continues to put pressure on state spending.¹⁷

¹³ CBPP analysis of Census quarterly state and local tax revenue, <http://www.census.gov/govs/qtax/>.

¹⁴ State Higher Education Executive Officers Association, April 2016. Note: while full-time-equivalent enrollment at public two- and four-year institutions is up since fiscal year 2008, between fiscal years 2014 and 2015 it remained relatively flat after a slight decline in 2013.

¹⁵ See, for example, “National Postsecondary Enrollment Trends: Before, During and After the Great Recession,” National Student Clearinghouse Research Center, July 2011, p. 6, <http://pas.indiana.edu/pdf/National%20Postsecondary%20Enrollment%20Trends.pdf>. A survey conducted by the American Association of Community Colleges indicated that increases in Fall 2009 enrollment at community colleges were, in part, due to workforce training opportunities; see Christopher M. Mullin, “Community College Enrollment Surge: An Analysis of Estimated Fall 2009 Headcount Enrollments at Community Colleges,” AACC, December 2009, <http://files.eric.ed.gov/fulltext/ED511056.pdf>.

¹⁶ National Center for Education Statistics, Enrollment in public elementary and secondary schools, by level and grade: Selected years, fall 1980 through fall 2024, Table 203.10, http://nces.ed.gov/programs/digest/d14/tables/dt14_203.10.asp.

¹⁷ CBPP analysis of data from U.S. Department of Justice, Bureau of Justice Statistics.

State Cuts Have Helped Drive Up Tuition

In recent years states have modestly increased investment in two- and four-year colleges from their recession lows. As such, tuition hikes have been much smaller than they were in the worst years of the recession.¹⁸ Published tuition — the “sticker price” — at public four-year institutions increased in 34 states over the past year, but only modestly. Average tuition increased \$254, or 2.8 percent.¹⁹ Between last year and this year:

- Louisiana increased average tuition across its four-year institutions more than any other state, hiking it by more than 7 percent, or roughly \$540.
- Nine states raised average tuition by more than 5 percent.
- In Washington State, tuition actually fell by nearly 4 percent.²⁰

Nevertheless, tuition remains much higher than it was before the recession in most states. Since the 2007-08 school year, average annual published tuition has risen by \$2,333 nationally, or 33 percent.²¹ (See Figures 5 and 6.) Steep tuition increases have been widespread, and average tuition at public four-year institutions, has increased by:

- more than 60 percent in seven states;
- more than 40 percent in 14 states; and
- more than 20 percent in 39 states.

In Arizona, the state with the greatest tuition increases since the recession hit, tuition has risen 87.8 percent, or \$4,978 per student. Average tuition at a four-year Arizona public university is now \$10,646 a year.²²

¹⁸ Costs reported above include both published tuition and fees. Average tuition and fee prices are weighted by full-time enrollment.

¹⁹ As noted earlier, this and other figures in this report have been adjusted for inflation.

²⁰ CBPP analysis using College Board “Trends in College Pricing 2015,” <http://trends.collegeboard.org/sites/default/files/trends-college-pricing-web-final-508-2.pdf>. See appendix for fiscal year 2015-16 change in average tuition at public four-year colleges.

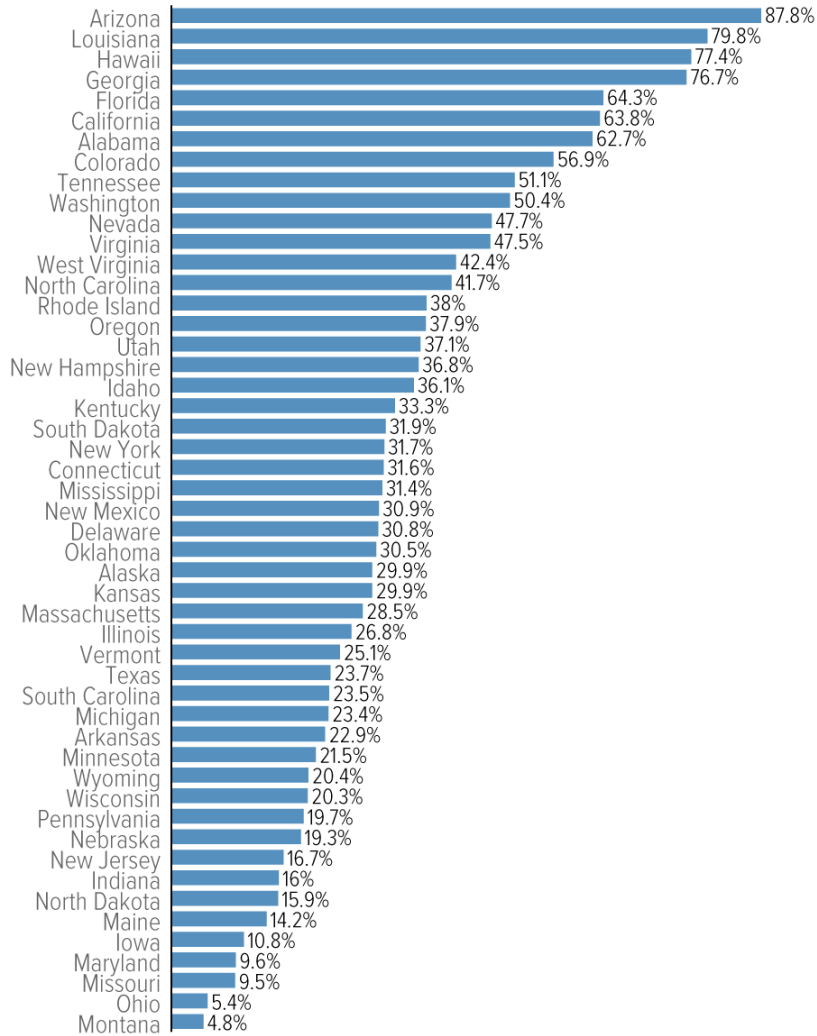
²¹ CBPP analysis using College Board “Trends in College Pricing 2015,” <http://trends.collegeboard.org/sites/default/files/trends-college-pricing-web-final-508-2.pdf>. Note: in non-inflation-adjusted terms, average tuition is up \$3,219 over this time period.

²² *Ibid.*

FIGURE 5

Tuition Has Increased Sharply at Public Colleges and Universities

Percent change in average tuition at public, four-year colleges, inflation adjusted, 2008 - 2016

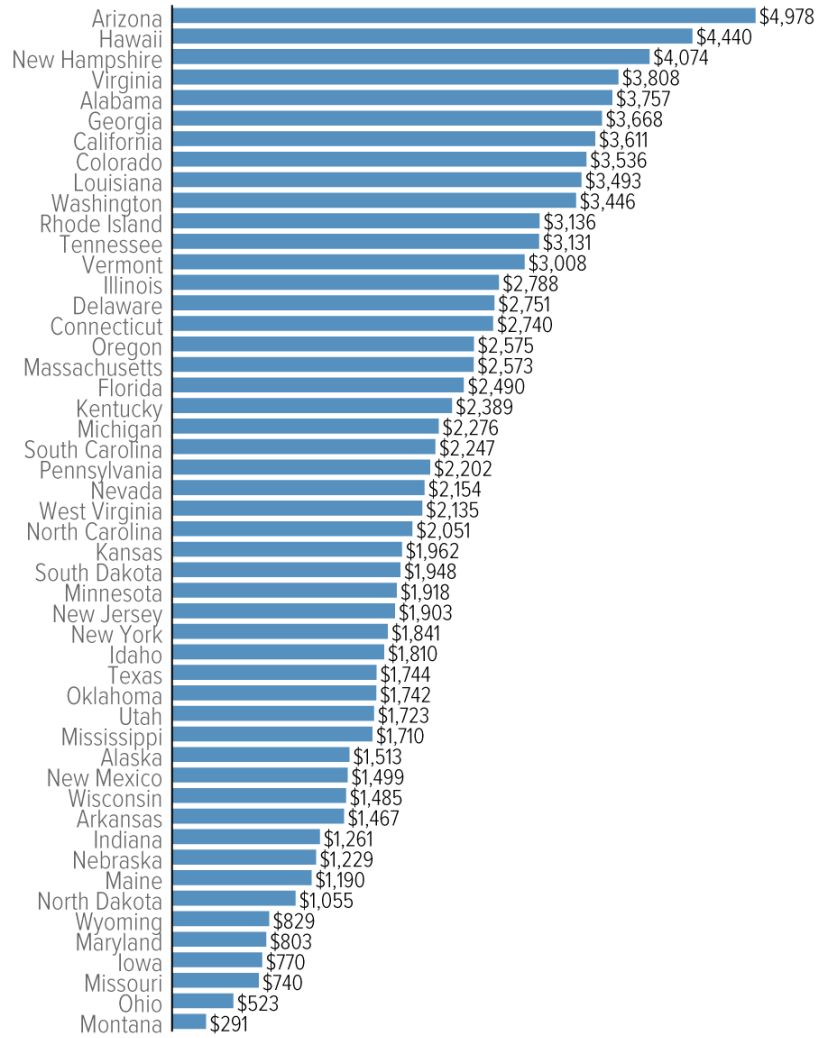


Source: College Board, "Trends in College Pricing," 2015. Years are fiscal years.

FIGURE 6

Tuition Has Increased Sharply at Public Colleges and Universities

Change in average tuition at public, four-year colleges, inflation adjusted, 2008 - 2016



Source: College Board, "Trends in College Pricing," 2015. Years are fiscal years.

Public Colleges and Universities Also Have Cut Staff and Eliminated Programs

Tuition increases, while substantial in most states, have fallen far short nationally of fully replacing the per-student support that public colleges and universities have lost due to state funding cuts. In nearly half of the states, tuition increases between 2008 and 2015 have not fully offset cuts to state higher education funding.²³

Because tuition increases have not fully compensated for the loss of state funding, and because most public schools do not have significant endowments or other sources of funding, many public colleges and universities have simultaneously reduced course offerings, student services, and other campus amenities.

Data on spending at public institutions of higher learning in recent years are incomplete, but considerable evidence suggests that these actions by many public colleges and universities likely reduced the quality and availability of their academic offerings. For example, since the start of the recession, colleges and university systems in some states have eliminated administrative and faculty positions (in some instances replacing them with non-tenure-track staff), cut courses or increased class sizes, and in some cases, consolidated or eliminated whole programs, departments, or schools.²⁴

Public colleges and universities continue to make these types of cuts, even as states have begun to reinvest in higher education. For example:

- The University of Alaska Fairbanks eliminated six degree offerings — including engineering management, science management, and philosophy.²⁵
- The University of Arizona cut 320 positions from its budget including layoffs, firings, and resignations, and increased class sizes for core undergraduate courses.²⁶
- In addition to laying off over 200 employees the University of Akron in Ohio eliminated its school baseball team.²⁷
- Facing large state funding cuts, the University of Wisconsin-Madison laid off or reduced staff and faculty vacancies by 400 slots and held faculty salaries level.²⁸

²³ CBPP calculations data from State Higher Education Executive Officers.

²⁴ For a more detailed account of university cuts see: Michael Mitchell, Vincent Palacios, and Michael Leachman, “States Are Still Funding Higher Education Below Pre-Recession Levels,” Center on Budget and Policy Priorities, May 1, 2014, <http://www.cbpp.org/cms/?fa=view&id=4135>.

²⁵ Jeff Richardson, “University of Alaska Fairbanks announces program cuts,” *Fairbanks Daily News-Miner*, April 22, 2015, http://www.newsminer.com/news/local_news/university-of-alaska-fairbanks-announces-program-cuts/article_a2da5062-e946-11e4-8de1-bf06696e789a.html.

²⁶ Sebastian Laguna, “320 jobs cut at UA due to updated budget,” *The Daily Wildcat*, October 1, 2015, <http://www.wildcat.arizona.edu/article/2015/10/320-jobs-cut-at-ua-due-to-updated-budget>.

²⁷ Mark Urycki, “University of Akron and Others Look to Cut Costs,” *WCPN*, July 10, 2015, <http://www.ideastream.org/stateimpact/2015/07/10/university-of-akron-and-others-look-to-cut-costs>.

²⁸ Meg Jones, “University of Wisconsin Regents enact budget reflecting state cuts,” *Milwaukee Journal Sentinel*, July 9, 2015, <http://www.jsonline.com/news/education/university-of-wisconsin-regents-enact-budget-reflecting-state-cuts-b99534871z1-312964111.html>.

Nationwide, employment at public colleges and universities has grown modestly since the start of the recession, but proportionally less than the growth in the number of students. Between 2008 and 2014, the number of full-time-equivalent instructional staff at public colleges and universities grew by about 7 percent, while the number of students at these institutions grew by 8.6 percent. In other words, the number of students per faculty member rose nationwide.²⁹

Funding Cuts and Tuition Increases Have Shifted Costs from States to Students

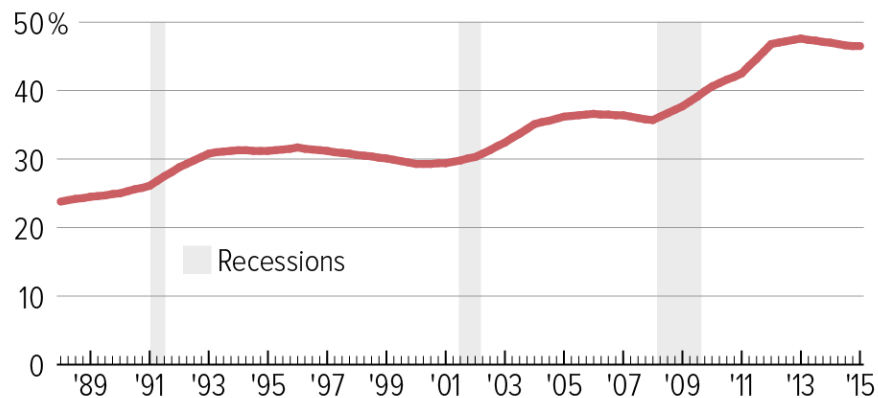
Over time, students have assumed much greater responsibility for paying for public higher education. That’s because during and immediately following recessions, state and local funding for higher education has tended to fall, while tuition has tended to grow more quickly. During periods of economic growth, funding has tended to recover somewhat while tuition has stabilized at a higher level as a share of total higher educational funding.³⁰ (See Figure 7.)

In 1988, public colleges and universities received 3.2 times as much revenue from state and local governments as they did from students. They now receive about 1.2 times as much from states and localities as from students.

FIGURE 7

Students Funding Larger Share of Education Funds After Recessions

Tuition as a percent of “total educational revenue,” 1988 -2015



Source: State Higher Education Financing FY2015, State Higher Education Executive Officers Association. Total educational revenue is the sum of educational appropriations and net tuition revenue excluding any tuition revenue used for capital and debt service. It measures the amount of revenue available to public institutions to support instruction (excluding medical students).

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²⁹ CBPP analysis of employment data from the National Center for Education Statistics and enrollment data from the State Higher Education Executive Officers Association.

³⁰ State Higher Education Executive Officers Association, “State Higher Education Finance: FY2013,” 2014, p. 22, Figure 4, http://www.shceo.org/sites/default/files/publications/SHEF_FY13_04252014.pdf.

Nearly every state has shifted costs to students over the last 25 years — with the most drastic shift occurring since the onset of the Great Recession. In 1988, average tuition amounts were larger than per-student state expenditures in only two states, New Hampshire and Vermont. By 2008, that number had grown to ten states. In 2015 (the latest year for which there is data), tuition revenue was greater than state and local government funding for higher education in 22 states, with six — Colorado, Delaware, Michigan, New Hampshire, Pennsylvania, and Vermont — requiring students and families to shoulder higher education costs by a ratio of at least 2-to-1.³¹

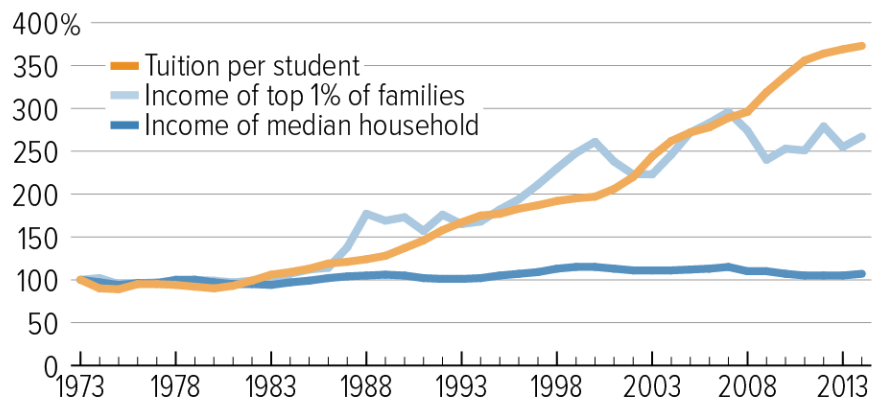
Families Have Been Hard-Pressed to Absorb Rising Tuition Costs

The cost shift from states to students has happened over a period when absorbing additional expenses has been difficult for many families because their incomes have been stagnant or declining. In the 1970s and early- to mid-1980s, tuition and incomes both grew modestly faster than inflation; by the late 1980s, tuition began to rise much faster than incomes. (See Figure 8.)

FIGURE 8

Tuition Growth Has Vastly Outpaced Income Gains

Inflation-adjusted average tuition and fees at public four-year institutions and income for select groups (1973 = 100%)



Source: Center on Budget and Policy Priorities based on the College Board and Census Bureau. Tuition per student and income levels, adjusted for inflation, as a percentage of 1973-1974 price levels. Years shown and income data are for the calendar year. Tuition data cover the school year beginning in the calendar year.

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- Since 1973, average inflation-adjusted public college tuition has increased by 274 percent while median household income has grown by only 7 percent.
- Over the past 40 years, the incomes of the top 1 percent of families have grown by almost 170 percent. This means that public college tuition has outpaced income growth for even the highest earners.

³¹ State Higher Education Executive Officers Association, April 2016; government funding includes dollars from both state and local funding sources.

- The sharp tuition increases states have imposed since the recession have exacerbated the longer-term trend. Tuition jumped nearly 30 percent between the 2007-08 and 2014-15 school years, while real median income fell roughly 6.5 percent over the same time period.

Cost Shift Harms Students and Families, Especially Those With Low Incomes

Rapidly rising tuition at a time of weak or declining income growth has damaging consequences for families, students, and the national economy.

- **Tuition costs deter some students from enrolling in college.** While the recession encouraged many students to enroll in higher education, the large tuition increases of the past few years may have prevented further enrollment gains. Rapidly rising tuition makes it less likely that students will attend college. Research has consistently found that college price increases result in declining enrollment.³² While many universities and the federal government provide financial aid to help students bear the price, research suggests that a high sticker price can dissuade students from enrolling even if the net price, including aid, doesn't rise.
- **Rising tuition may be harming students of color and reducing campus diversity.** New research finds that rising tuition and fees jeopardize campus diversity at public four-year colleges as students of color are less likely to enroll as the cost of tuition goes up. "All else equal, a \$1,000 tuition increase for full-time undergraduate students is associated with a drop in campus diversity of almost 6 percent," New York University researchers found in a 2015 study.³³ Another study, which examined tuition policy changes in Texas in the early 2000s, concluded that rising tuition rates limited enrollment gains for Hispanic students in the state.³⁴ The share of students coming from communities of color at public two- and four-year colleges had risen significantly in the years leading up to these tuition increases.³⁵ State cuts to higher education, made up for with higher tuition rates, jeopardize this trend.
- **Tuition increases likely deter low-income students, in particular, from enrolling.** College cost increases have the biggest impact on students from low-income families, research further shows. For example, a 1995 study by Harvard University researcher Thomas Kane concluded that states with the largest tuition increases during the 1980s and early 1990s "saw the greatest widening of the gaps in enrollment between high- and low-income youth."³⁶ The

³² See, for example, Steven W. Hemelt and Dave E. Marcotte, "The Impact of Tuition Increases on Enrollment at Public Colleges and Universities," *Educational Evaluation and Policy Analysis*, September 2011; Donald E. Heller, "Student Price Response in Higher Education: An Update to Leslie and Brinkman," *The Journal of Higher Education*, Vol. 68, No. 6 (November-December 1997), pp. 624-659.

³³ Drew Allen and Gregory C. Wolniak, "Exploring the Effects of Tuition Increases on Racial/Ethnic Diversity at Public Colleges and Universities," New York University, 2015, p. 30, <http://www.aera.net/Portals/38/Newsroom%20-%20Recent%20Research/Exploring%20the%20Effects%20of%20Tuition%20Increases%20on%20Racial-Ethnic%20Diversity%20at.pdf>.

³⁴ Stella Flores and Justin Shepard, "Pricing Out the Disadvantaged? The Effect of Tuition Deregulation in Texas Public Four-Year Institutions," *The ANNALS of the American Academy of Political and Social Science*, 2014, Vol.655, pp. 99-122.

³⁵ National Center for Education Statistics, "Total fall enrollment in degree-granting postsecondary institutions, by level and control of institution and race/ethnicity of student: Selected years, 1976 through 2013," Table 306.20, http://nces.ed.gov/programs/digest/d14/tables/dt14_306.20.asp.

³⁶ Thomas J. Kane, "Rising Public College Tuition and College Entry: How Well Do Public Subsidies Promote Access to College?" National Bureau of Economic Research, 1995, http://www.nber.org/papers/w5164.pdf?new_window=1.

relative lack of knowledge among low-income families about the admissions and financial aid process may exacerbate these damaging effects. Students from families that struggle to get by — including those who live in communities with lower shares of college-educated adults and attend high schools that have higher student-to-counselor ratios — tend to overestimate the true cost of higher education more than students from wealthier households in part because they are less aware of the financial aid for which they are eligible.³⁷

These effects are particularly concerning because gaps in college enrollment between higher- and lower-income youth are *already* pronounced. In 2012, just over half of recent high school graduates from families with income in the lowest 20 percent enrolled in some form of postsecondary education, as opposed to 82 percent of students from the top 20 percent.³⁸ Significant enrollment gaps based on income exist even among prospective students with similar academic records and test scores.³⁹ Rapidly rising costs at public colleges and universities may widen these gaps further.

- **Tuition increases may be pushing lower-income students toward less-selective public institutions, reducing their future earnings.** Perhaps just as important as a student’s decision to enroll in higher education is the choice of which college to attend. A large share of high-achieving students from struggling families fail to apply to any selective colleges or universities, a 2013 Brookings Institution study found.⁴⁰ Even here, research indicates that financial constraints and concerns about cost push lower-income students to narrow their list of potential schools and ultimately enroll in less-selective institutions.⁴¹ Another 2013 study found evidence that some high-achieving, low-income students are more likely to “undermatch” in their college choice in part due to financial constraints.⁴²

Where a student decides to go to college has broad economic implications, especially for economically disadvantaged students and students of color. Students who had parents with less education, as well as African American and Latino students, experienced higher postgraduate earnings by attending more elite colleges relative to similar students who

³⁷ Eric P. Bettinger *et al.*, “The Role of Simplification and Information in College Decisions: Results from the H&R Block FAFSA Experiment,” National Bureau of Economic Research, 2009, <http://www.nber.org/papers/w15361.pdf>. For details on the disparity in access to counseling for low-income students see “Course, Counselor, and Teacher Gaps: Addressing the College Readiness Challenge in High-Poverty High Schools,” Center for Law and Social Policy, June 2015, <http://www.clasp.org/resources-and-publications/publication-1/CollegeReadinessPaperFINALJune.pdf>.

³⁸ College Board, “Education Pays: 2013,” <http://trends.collegeboard.org/sites/default/files/education-pays-2013-full-report-022714.pdf>.

³⁹ In a 2008 piece, Georgetown University scholar Anthony Carnevale pointed out that “among the most highly qualified students (the top testing 25 percent), the kids from the top socioeconomic group go to four-year colleges at almost twice the rate of equally qualified kids from the bottom socioeconomic quartile.” Anthony P. Carnevale, “A Real Analysis of Real Education,” *Liberal Education*, Fall 2008, p. 57.

⁴⁰ Christopher Avery and Caroline M. Hoxby, “The Missing ‘One Offs’: The Hidden Supply of High-Achieving, Low-Income Students,” National Bureau for Economic Research, Working Paper 18586, 2012, http://www.brookings.edu/~media/projects/bpea/spring-2013/2013a_hoxby.pdf.

⁴¹ Patrick T. Terenzini, Alberto F. Cabrera, and Elena M. Bernal, “Swimming Against the Tide,” College Board, 2001, http://www.collegeboard.com/research/pdf/rdreport200_3918.pdf.

⁴² Eleanor W. Dillon and Jeffrey A. Smith, “The Determinants of Mismatch Between Students and Colleges,” National Bureau of Economic Research, August 2013, <http://www.nber.org/papers/w19286>. Additionally, other studies have found that undermatching is more likely to occur for students of color. In 2009 Bowen, Chingos, and McPherson found that undermatching was more prevalent for black students — especially black women — relative to comparable white students.

attended less-selective universities, a 2011 study by Stanford University and Mathematica Policy Research found.⁴³

Federal Financial Aid Is Up Since the Recession but State Aid Is Down

As tuition soared after the recession, federal financial aid also increased. The Federal Pell Grant Program — the nation’s primary source of student grant aid — increased the amount of aid it distributed by just over 80 percent between the 2007-08 and 2014-15 school years. This substantial boost has enabled the program not only to reach more students — 2.7 million more students received Pell support last year than in 2008 — but also to provide the average recipient with more support. The average grant rose by 21 percent — to \$3,673 from \$3,028.⁴⁴

The increase in federal financial aid has helped many students and families cover recent tuition hikes. The College Board calculates that the annual value of grant aid and higher education tax benefits for students at four-year public colleges nationally has risen by an average of \$1,410 in real terms since the 2007-08 school year, offsetting about 61 percent of the average \$2,320 tuition increase. For community colleges, increases in student aid have more than made up the difference, leading to a drop in net tuition for the average student.⁴⁵

Since the sticker-price increases have varied so much from state to state while federal grant and tax-credit amounts are uniform across the country, students in states with large tuition increases — such as Arizona, Georgia, and Louisiana — likely still experienced substantial increases in their net tuition and fees, while the net cost for students in states with smaller tuition increases may have fallen.

Financial aid provided by *states*, however — which was far less than federal aid even before the recession — has *fallen* on average. In the 2007-2008 school year, state grant dollars equaled \$740 per student. By 2014, the latest year for which full data is available, that number had fallen to \$710, a drop of roughly 4 percent.⁴⁶

Low-Income Students Still Struggle with Debt

Federal financial aid has certainly lessened the impact of tuition and fee increases on students from families with low incomes. However, the overall average cost of attending college has risen for these students, because room and board costs have increased, too. As a result, the net cost of attendance at four-year public institutions for low-income students increased 12 percent from 2008

⁴³ Stacey Dale and Alan Krueger, “Estimating the Return to College Selectivity Over the Career Using Administrative Earning Data.” Mathematica Policy Research and Princeton University, February 2011, <http://www.mathematica-mpr.com/publications/PDFs/education/returntocollege.pdf>.

⁴⁴ College Board, “Trends in Student Aid 2015,” October 2015, Figure 25, <http://trends.collegeboard.org/sites/default/files/trends-student-aid-web-final-508-2.pdf>.

⁴⁵ CBPP calculation using “Trends in College Pricing 2015,” October 2015, Table 7, <http://trends.collegeboard.org/sites/default/files/trends-student-aid-web-final-508-2.pdf>.

⁴⁶ College Board, “Trends in Student Aid 2015,” October 2015, Figure 28A, <http://trends.collegeboard.org/sites/default/files/trends-student-aid-web-final-508-2.pdf>.

to 2012. For those at public community colleges, the increase over the same time period was 4 percent.⁴⁷

Because grants and tax credits rarely cover the full cost of college attendance, most students — students of color and low-income students in particular — borrow money. In 2012, 79 percent of students from families whose incomes are in the lowest 25 percent graduating with a bachelor's degree had student loans (compared with 55 percent of graduating students from families whose incomes are in the higher 25 percent).⁴⁸ In the same year, more than four of every five African American students borrowed at public institutions (compared with 64 percent of graduating students overall).⁴⁹

Further, the overall share of students graduating with debt has risen since the start of the recession. Between the 2007-08 and 2013-14 school years, the share of students graduating with debt from a public four-year institution increased from 55 percent to 60 percent. At the same time, the average amount of debt incurred by the average bachelor's degree recipient with loans at a public four-year institution grew to \$25,500 from \$21,200 (in 2014 dollars), an increase of \$4,300, or 18 percent. By contrast, the average level of debt incurred had risen only about 1 percent in the six years prior to the recession.⁵⁰

In short, at public four-year institutions, a greater share of students are taking on larger amounts of debt. By the fourth quarter of 2015, students held \$1.23 trillion in student debt — more than car loans and credit card debt combined.⁵¹

Yet, while college loan burdens have increased significantly for students at public four-year institutions, the significant run-up in debt levels has been driven in large part by a growing share of students attending private for-profit institutions — such as Corinthian and the University of Phoenix — and two-year community colleges. In 2000, borrowers entering repayment on student loans from for-profit and two-year institutions made up roughly 30 percent of all borrowers overall, a study from the U.S. Treasury Department and Stanford University researchers found. By 2011, these borrowers represented nearly half of all federal student loan borrowers entering repayment. In fact, for-profit institutions have been such a driving force that in 2014, eight of the top ten and 13 of the top 25 institutions whose students owe (collectively) the most in federal student loan debt were

⁴⁷ College Board, “Net Tuition and Fees, Net Room and Board and Other Costs, and Total Grant Aid in 2011 Dollars by Family Income, Full-Time Dependent Students at Public Institutions, 1999-2000, 2003-04, 2007-08, and 2011-12,” October 2014, <http://trends.collegeboard.org/sites/default/files/trends-college-pricing-web-final-508-2.pdf>.

⁴⁸ College Board, “Trends in Student Aid, 2015: Median Debt Levels of 2007-08 Bachelor's Degree Recipients by Income Level,” October 2015, 2014_14b, <http://trends.collegeboard.org/sites/default/files/trends-student-aid-web-final-508-2.pdf> Low-income dependent students are defined as students from families earning less than \$30,000 annually, while high-income students come from families earning more than \$106,000.

⁴⁹ Mark Huelsman, “The Debt Divide: The Racial and Class Bias Behind the ‘New Normal’ of Student Borrowing,” May 2015, [http://www.demos.org/sites/default/files/publications/Mark-Debt%20divide%20Final%20\(SE\).pdf](http://www.demos.org/sites/default/files/publications/Mark-Debt%20divide%20Final%20(SE).pdf). Hispanic or Latino students generally borrow at levels equal to the national average. African American students are also more likely to take on student debt to finance education at two-year colleges.

⁵⁰ College Board “Trends in Student Aid,” Figure 15, <http://trends.collegeboard.org/sites/default/files/trends-student-aid-web-final-508-2.pdf>.

⁵¹ Federal Reserve Bank of New York “Quarterly Report on Household Debt and Credit,” February 2016, https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/HHDC_2015Q4.pdf.

for-profit institutions. (See Table 1.) In 2000, only one for-profit made the top 25 (the rest were either four-year public or private non-profit institutions).⁵²

TABLE 1

For-profit Institutions Drive Student Debt Loads

2000			2014		
Rank	Institution	Total student debt	Rank	Institution	Total student debt
1	New York University	\$2.2B	1	University of Phoenix – Phoenix Campus	\$35.5B
2	University of Phoenix – Phoenix Campus	\$2.1B	2	Walden University	\$9.8B
3	Nova Southeastern University	\$1.7B	3	Nova Southeastern University	\$8.7B
4	Pennsylvania State University	\$1.7B	4	DeVry University – Illinois	\$8.2B
5	University of Southern California	\$1.6B	5	Capella University	\$1.6B
6	Ohio State University – Main Campus	\$1.5B	6	Strayer University – Global Region	\$1.5B
7	Temple University	\$1.5B	7	Kaplan University – Davenport Campus	\$1.5B
8	Arizona State University	\$1.4B	8	New York University	\$1.4B
9	Michigan State University	\$1.3B	9	Argosy University – Chicago	\$1.3B
10	University of Minnesota – Twin Cities	\$1.3B	10	Ashford University	\$1.3B

Note: For-profit institutions are shaded gray.

Source: Adam Looney and Constantine Yannelis, “A Crisis in Student Loans? How Changes in the Characteristics of Borrowers and in the Institutions They Attend Contributed to Rising Loan Defaults,” Brookings Papers on Economic Activity, Fall 2015, Table 5. <http://www.brookings.edu/~media/projects/bpea/fall-2015/looneytextfallbpea.pdf>

Funding Cuts and Tuition Increases Jeopardize Students’ and States’ Economic Futures

The reduced college access and graduation rates that research finds likely result from decreased state support for college hurt more than just students, because college attainment has grown increasingly important to long-term state and national economic outcomes.

⁵²Adam Looney and Constantine Yannelis, “A Crisis in Student Loans? How Changes in the Characteristics of Borrowers and in the Institutions They Attended Contributed to Rising Loan Defaults,” Brookings Institution, BPEA Conference Draft, September 10, 2015, http://www.brookings.edu/~media/projects/bpea/fall-2015_embargoed/conferencedraft_looneyannelis_studentloandefaults.pdf.

A college degree is increasingly a pre-requisite for professional success and for entry into the middle class or beyond. A young college graduate earns \$12,000 a year more than someone who did not attend college.⁵³

The benefits of academic attainment extend *beyond* those who receive a degree. Entire communities benefit when more residents have college degrees. For instance, higher educational attainment has been connected with lower rates of crime, greater levels of civic participation, and better health.⁵⁴ Areas with highly educated residents tend to attract strong employers who pay their employees competitive wages. Those employees, in turn, buy goods and services from others in the community, broadly benefitting the area's economy. As a result, the wages of workers at *all* levels of education are higher in metropolitan areas with high concentrations of college-educated residents, economist Enrico Moretti of the University of California at Berkeley finds.⁵⁵ This implies that — even though not all good jobs require a college degree — having a highly educated workforce can boost an area's economic success.

The economic importance of higher education will continue to grow. In a 2013 report, researchers from the Georgetown University Center on Education and the Workforce projected that by 2020, nearly two-thirds of all jobs will require at least some college education, up from 59 percent in 2007.⁵⁶

The Georgetown Center further projects that, based on current trends — without significant new investment in capacity — the nation's education system will not keep pace with the rising demand for educated workers. By 2020, the country's system of higher education will produce 5 million fewer college graduates than the labor market will need.⁵⁷

The increase in student debt in recent years also has important implications for the broader economy, most explicitly for students who incur the college debt but do not graduate.⁵⁸ While debt is a crucial tool for financing higher education, excessive debt can impose considerable costs on both students and society as a whole. Research finds that higher student debt levels are associated with lower rates of homeownership among young adults; can create stresses that reduce the probability of graduation, particularly for students from lower-income families; and reduce the

⁵³ Michael Greenstone and Adam Looney, "Regardless of the Cost, College Still Matters," The Hamilton Project, October 5, 2012, <http://www.brookings.edu/blogs/jobs/posts/2012/10/05-jobs-greenstone-looney>.

⁵⁴ See for example Hill *et al.*, "The Value of Higher Education: Individual and Societal Benefits," October 2005, <http://www.asu.edu/president/p3/Reports/EdValue.pdf> and College Board, "Education Pays 2013," October 2013, <http://trends.collegeboard.org/sites/default/files/education-pays-2013-full-report-022714.pdf> for summaries of social benefits of higher levels of educational attainment.

⁵⁵ Enrico Moretti, "Estimating the Social Return to Higher Education: Evidence from Longitudinal and Repeated Cross-Sectional Data," *Journal of Econometrics*, Vol. 121, 2004, pp. 175-212.

⁵⁶ See Anthony P. Carnevale, Nicole Smith, and Jeff Strohl, "Recovery: Job Growth and Education Requirements through 2020," Georgetown University Center on Education and the Workforce, June 2013, <https://georgetown.app.box.com/s/tl0zkxt0puz45hu21g6>.

⁵⁷ *Ibid.*

⁵⁸ Beth Akers, "Higher education debt is worth it, but isn't risk free," Brookings Institution, January 12, 2016, <http://www.brookings.edu/research/opinions/2016/01/12-higher-education-debt-akers>.

likelihood that graduates with majors in science, technology, engineering, and mathematics will go on to the further academic study that is often needed to obtain advanced positions in those fields.⁵⁹

There is also growing concern that rising debt levels may be preventing some young adults from starting businesses. Many entrepreneurs rely heavily on personal debt to help launch their small businesses, and rising levels of student loan debt may make it more difficult to obtain loans or other lines of credit necessary for launching a startup. Looking at the period from 2000 to 2010, researchers from the Federal Reserve Bank of Philadelphia found that as student loan debt rose, net business formation of the smallest businesses — those employing four or fewer people — fell.⁶⁰

These findings mean states should strive to expand college access and increase college graduation rates to help build a strong middle class and develop the entrepreneurs and skilled workers needed to compete in today's global economy. They suggest further that the severe higher education funding cuts that states have made since the start of the recession will make it more difficult to achieve those goals.

States' Budget Choices Will Determine Whether They Can Rebuild Their Higher Education Systems

Most states have begun to reinvest in higher education in the past several years. To sustain this trend, they will need to reject calls for costly and ineffective tax cuts, and many will need to raise additional revenue.

Every year, state lawmakers face the challenge of adequately funding a host of important public priorities. Elementary and secondary education, like higher education, has been cut in most states in recent years.⁶¹ Health care services require states' continued support, given an aging population and rising health costs. The nation's system of roads and bridges and other infrastructure is deteriorating and in need of new public investments.⁶² Human services that reduce poverty and help families make it into the middle class remain crucial at a time of stagnant wage growth and high levels of child poverty. And while states can achieve savings through corrections reforms, much of those savings will be needed for drug treatment and other services that help people avoid crime in the

⁵⁹ For impacts of debt on homeownership, see Jennifer M. Shand, "The Impact of Early-Life Debt on the Homeownership Rates of Young Households: An Empirical Investigation," November 2007, http://www.fdic.gov/bank/analytical/cfr/2008/jan/CFR_SS_2008Shand.pdf. For the relationship between debt and graduation, see for example, Rachel E. Dwyer, Laura McCloud, and Randy Hodson, "Debt and Graduation from American Universities," *Social Forces*, June 15, 2012, <http://sf.oxfordjournals.org/content/90/4/1133>. For information on graduate enrollment, see for example Lindsey E. Malcolm and Alicia C. Dowd, "The Impact of Undergraduate Debt on the Graduate School Enrollment of STEM Baccalaureates," *The Review of Higher Education*, Volume 35, Number 2, Winter 2012, pp. 265-305.

⁶⁰ Brent W. Ambrose, Larry Cordell, and Shuwei Ma, "The Impact of Student Loan Debt on Small Business Formation," March 29, 2014, <http://dx.doi.org/10.2139/ssrn.2417676>.

⁶¹ Michael Leachman *et al.*, "Most States Have Cut School Funding, and Some Continue Cutting," Center on Budget and Policy Priorities, January 25, 2016, <http://www.cbpp.org/research/state-budget-and-tax/most-states-have-cut-school-funding-and-some-continue-cutting>.

⁶² Elizabeth McNichol, "It's Time for States to Invest in Infrastructure," Center on Budget and Policy Priorities, February 23, 2016, <http://www.cbpp.org/research/state-budget-and-tax/its-time-for-states-to-invest-in-infrastructure>.

future. Those areas account for more than 70 percent of state and local government funding; the rest of state budgets pay for environmental protection, the court system, and other essential areas.⁶³

This means that to make significant progress in renewing state investment in higher education, and to prevent investment from sliding even further, states need to reject calls for tax cuts and may need to consider options for new revenues. These revenues could come, for example, from repealing ineffective tax deductions, exemptions, and credits; rolling back past years' tax cuts; or raising certain tax rates.⁶⁴

The need for additional revenue is particularly urgent in states that in recent years enacted tax cuts or are struggling with low energy prices that reduce the revenue from taxes on natural resource extraction.⁶⁵ For example, last spring Wisconsin enacted a two-year budget that included a \$250 million cut to the University of Wisconsin system — producing harmful ripple effects on many of the system's campuses.⁶⁶ In the same budget, Wisconsin lawmakers agreed on more than \$300 million in tax cuts through the property tax, personal income tax, and the state's alternative minimum tax.⁶⁷ These cuts came on top of nearly \$2 billion of cumulative tax cuts — largely benefitting the state's wealthiest households — between 2012 and 2015.⁶⁸

Tax cuts are often sold as a recipe for economic growth. But to the extent that tax cuts prevent investments in higher education that would increase access to college, improve graduation rates, and reduce student debt, their net effect could be a drag on the economy.

Conclusion

States have cut higher education funding deeply since the start of the recession. These cuts were in part the result of decisions made to deal with a revenue collapse caused by the economic downturn. State policymakers relied overwhelmingly on spending cuts to make up for lost revenues. A more balanced mix of spending cuts and revenue increases could have lessened the need for higher education funding cuts.

These reductions in support have hurt states' higher education systems. Public colleges have both steeply increased tuition and pared back academic opportunities, often in ways that may compromise the quality of education and jeopardize student success. Students are paying more through increased tuition and by taking on greater levels of debt.

⁶³ CBPP calculations, data from the National Association of State Budget Officers.

⁶⁴ Nicholas Johnson and Michael Leachman, "Four Big Threats to State Finances Could Undermine Future U.S. Prosperity," Center on Budget and Policy Priorities, February 14, 2013, <http://www.cbpp.org/research/four-big-threats-to-state-finances-could-undermine-future-us-prosperity>.

⁶⁵ See for example: Erica Williams, "Short-Sighted Tax Cuts Hurting Energy States," Center on Budget and Policy Priorities, February 29, 2016, <http://www.cbpp.org/blog/short-sighted-tax-cuts-hurting-energy-states>.

⁶⁶ For details see: "Widespread Effect of Making Deep Cuts to the University of Wisconsin System," Wisconsin Budget Project, May 20, 2015, <http://www.wisconsinbudgetproject.org/the-widespread-effects-of-making-deep-cuts-to-the-university-of-wisconsin-system>.

⁶⁷ Tamarine Cornelius, "A Summary of Tax and Revenue Changes in the Wisconsin Budget," Wisconsin Budget Project, July 14, 2015, <http://www.wisconsinbudgetproject.org/a-summary-of-tax-and-revenue-changes-in-the-wisconsin-budget>; see also "Costs Adds Up for Tax Cuts Included in the Budget," July 16, 2015, <http://www.wisconsinbudgetproject.org/cost-adds-up-for-tax-cuts-included-in-the-budget>.

⁶⁸ "Tax Law Changes Since January 2011," Legislative Fiscal Bureau memo, April 30, 2014, https://docs.legis.wisconsin.gov/misc/lfb/misc/135_tax_law_changes_since_january_2011_4_30_14.pdf.

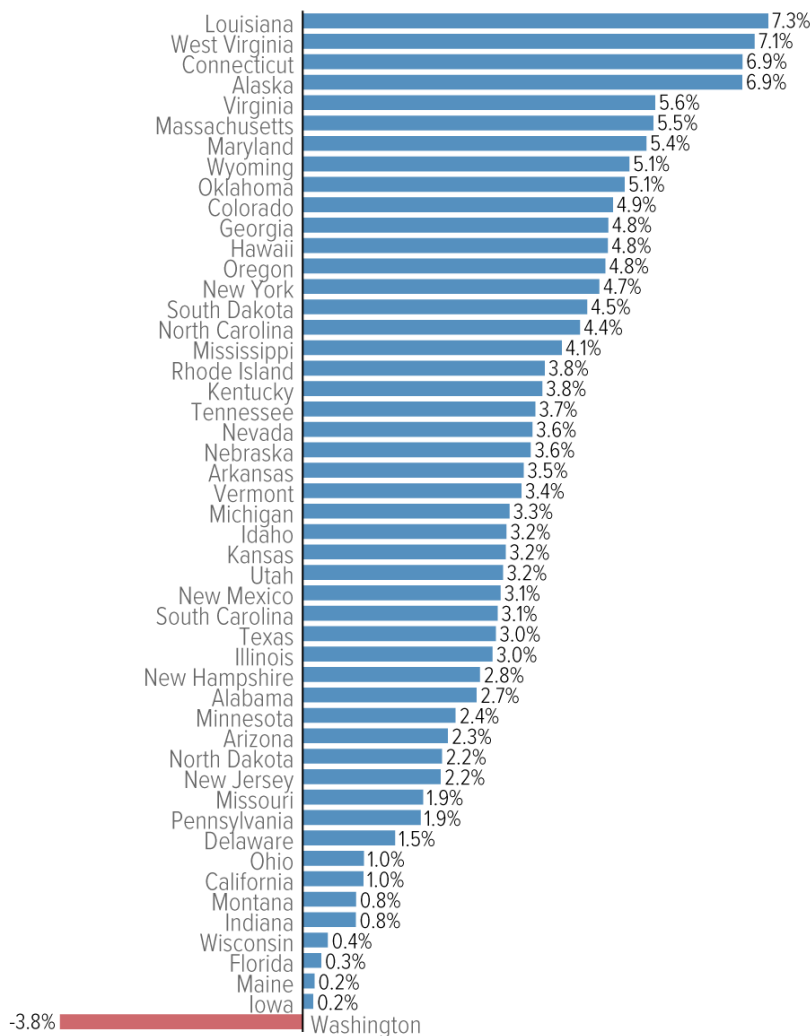
Now is the time to renew investment in higher education to promote college affordability and quality. This will require state policymakers to make tax and budget choices over the coming years that recognize the importance of investing in human capital and quality education. A slow economic recovery and the need to reinvest in other services that also have been cut deeply means that many states will need to raise revenue to rebuild their higher education systems. At the very least, states must avoid shortsighted tax cuts that would make it much harder for them to invest in higher education, strengthen the skills of their workforce, and compete for — or even create — the jobs of the future.

Appendix

APPENDIX FIGURE 1

Most States Modestly Increased Tuition Over Last School Year

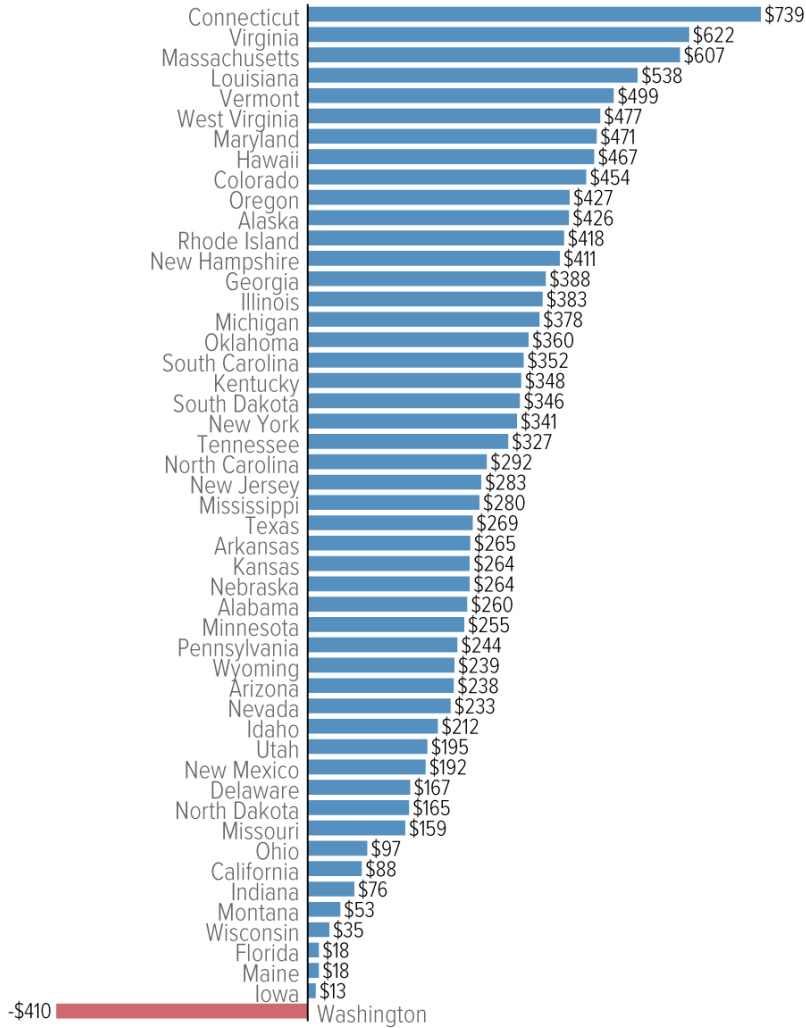
Percent change in average tuition at public, four-year colleges, inflation adjusted, 2015-2016



Source: College Board, "Trends in College Pricing," 2015. Years are fiscal years.

Most States Modestly Increased Tuition Over Last School Year

Change in average tuition at public, four-year colleges, inflation adjusted, 2015-2016



Source: College Board, "Trends in College Pricing," 2015. Years are fiscal years.

Appendix Table 1

Change in State Higher Education Appropriations, Enrollment, and Appropriations Per Student, 2007-08 School Year to 2015-16 School Year

	2007 - 2008	2015 - 2016	Change	Percent Change
State Appropriations for Higher Education	\$90,910,557,133	\$80,963,865,495	-9,946,691,638	-10.9%
Full-Time-Equivalent Enrollment at Public Colleges and Universities	10,254,148	11,144,157	890,009	8.67%
State Appropriations Per Full-Time-Enrolled Student	\$8,866	7,267	-1,598	-18.03%

Note: As of the release of this paper Illinois has not enacted a complete higher education budget for the 2016 fiscal year and is not included in this analysis.

Sources: Education appropriations data comes from the Grapevine survey conducted by Illinois State University, enrollment data comes from the State Higher Education Executive Officers Association. Kentucky funding data is provided by the Kentucky Center for Economic Policy. Pennsylvania funding data is provided by the Pennsylvania Budget and Policy Center. Since enrollment data is only available through the 2014-2015 school year, enrollment data for 2015-16 is an estimate based on data from past years. Dollar figures adjusted for inflation using the consumer price index.