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COLLEGE COSTS, PRICES AND THE GREAT RECESSION

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As states and families begin to recover from the effects of the Great Recession, some of the urgency about college affordability may start to ease. The most recent *Trends in College Pricing* report shows tuition rising more slowly than in recent years (Baum and Ma 2013). Growth in Pell grant applications is also expected to slow as income picks back up and many students transition into newly available jobs.

Yet it could all happen again when the next crisis hits. Education budgets could be slashed indiscriminately, tuition could skyrocket just as incomes are falling, and the worst-off states could find themselves least able to keep the college dream alive for students who count on public support. But if we learned anything from the last few years, we can be better prepared. In order not to repeat some of the mistakes of the recession, it will help to understand how the economy, college costs, and college prices interact.

Cost of providing higher education

So what does it cost to provide a college education in the U.S.? On average, in 2011–12, four-year public institutions spent about $14,000 and community colleges about $9,000 per undergraduate student per year on "Education and Related" costs, which includes instruction and student services as well as some other expenses (libraries, facilities maintenance, accounting, college presidents' salaries, etc.). With all types of public higher education put together, such spending averages about $12,000 per full-time student.

The range in costs is broad. Many public universities spend less than $10,000 per student, and some community colleges spend less than $6,000. Some spend much more. At the high end of the spectrum, some state flagship universities spend as much as $15-$25,000 per student. States also vary in how much they spend, with higher education in Florida at the low end spending an average of $8,400 per student and Vermont at the high end spending $19,300. In 37 of the 50 states, however, costs fell somewhere between $10,000 and $14,000 per student. Table 2 at the end of this report lists average state expenditures.

Factors that can make costs higher or lower than the average include:

- Types of programs offered (e.g. engineering costs about twice as much as business, and nursing costs three times as much as liberal arts)
- Instructional approach (larger vs. smaller classes, distance or hybrid vs. classroom-based, tenured faculty vs. lecturers or adjuncts)
- Low- or high-cost location (e.g. Oklahoma is generally less expensive than New Jersey)
- Size (larger institutions usually spend less per student)
- Age of institution (new institutions have start-up costs, older ones may have costly historic buildings to maintain and operate)
- Management philosophy and administrative efficiency

For comparison's sake, private colleges usually, but not always, spend more than their public counterparts. The average private four-year university spends about $22,300 per year per student. Expenditures at the most selective schools—like Princeton, Williams, or Stanford—can run to

$60–$100,000 per student, which is subsidized heavily by income from multi-billion dollar endowments. At the lower end, some four-year private schools spend at rates comparable to public institutions—$12–$20,000 per student.

This is only a partial list of factors that can affect the cost of providing higher education. A more comprehensive discussion of what drives college spending is available from the Delta Project on Postsecondary Costs (Desrochers, Lenihan and Wellman 2010).

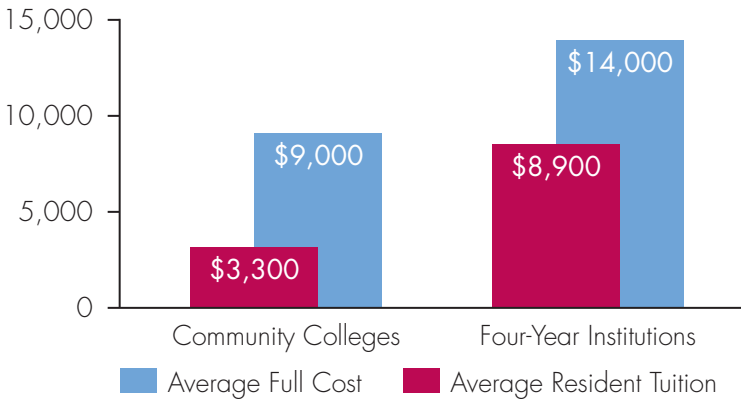
Price of higher education for students

Cost and price are not the same thing when it comes to public higher education. For public college students attending in-state schools—most of the student population—state and local governments provide an invisible "scholarship" in the form of taxpayer subsidies to colleges.

In 2013–14, state resident tuition averaged $8,900 at four-year colleges, and $3,300 at two-year colleges, according to the *Trends in College Pricing* report (Baum and Ma 2013). As Chart 1 shows—even for those who get no direct financial aid—those prices are much lower than $14,000 or $9,000 that average colleges spend on their education. Most of the difference is made up by state and local taxpayers, who provide more than $60 billion annually—an average of about $5,900 per student—to support public colleges (State Higher Education Executive Officers 2013). Overall, that is 53% of total education revenues, down from 77% in 1987.

The cost of these invisible scholarships is several times greater than what states spend on programs labeled as "financial aid"—which averages only about $700 per undergraduate student nationwide (NASSGAP 2013). Yet while students (usually) know if they are getting a Cal Grant or a Georgia Hope Scholarship, they often do not know about the even larger investment states are making in their education, an investment that has a bigger impact on the price they pay for college.

Chart 1
College tuition sticker prices compared to the cost of providing higher education



Sources: Baum and Ma, *Trends in College Pricing 2013*, analysis of IPEDS expenditure data.

While the invisible scholarships do not directly recognize need or merit, they work a little like either form of official financial aid. Subsidies that keep tuition low at highly selective public institutions are, in fact, a form of merit aid, since only students who get in will benefit. Subsidies that keep tuition down at institutions serving large numbers of low-income students—community colleges, for example—function much like need-based aid in terms of their impact on affordability.

Taken together, tuition and government appropriations are the core revenue available for public higher education and the foundation for institutional budgets. Four-year colleges rely almost exclusively on tuition and state appropriations for their instructional budgets. In some states, community (two-year) colleges also get support from local tax districts.

On average, about 53% of core revenue comes from state and local appropriations, while 47% comes from tuition. The trend over many years has been for a larger share to come from tuition (State Higher Education Executive Officers 2013). As recently as 1987, the proportion was less than a quarter (23%), and now it is nearly half. This shift accounts for much of the long-term rise in public college and university prices.

State variations in prices

States vary considerably in the subsidies they provide. These variations in turn are largely responsible for the big differences in tuition rates among states. In Wyoming, where four-year tuition is just $4,400 and two-year tuition is $2,600, the state contributes an average of $14,100 per full-time student to the total cost. In New Hampshire, where four-year tuition is $14,700, and two-year tuition is $6,700, taxpayers contribute just $1,600 per student. It is not surprising that the tuition price tag in New Hampshire comes much closer to the full cost of providing the education. In Wyoming, it is the taxpayers rather than the students who are footing the bill.

Such variation is why it is not always helpful to talk about a single "affordability" problem in U.S. higher education. There are at least 50 different affordability issues (51 including DC). Table 3 at the end of this report shows levels of resident tuition and state appropriations across the country, to illustrate how varied the stories can be.

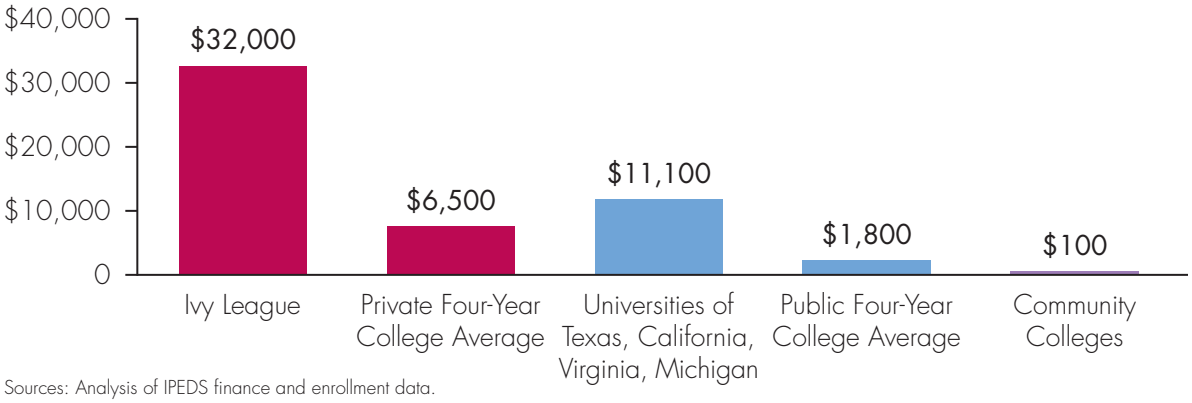
Other funding sources

The idea that colleges could rely more on private philanthropy is appealing to some, but gifts and endowment income tend to go where, at least from low-income students' perspective, there is least need. Unlike private colleges, public institutions do not usually get significant operating income for instructional purposes from donors or endowments. Community colleges, for example, average less than $100 per student in gift and investment income. Four-year public colleges do a little better. They report about $1,800 per student in gifts and investment income each year. But much of that is earmarked by donors for non-instructional purposes—medical research at a university teaching hospital, for example—and so can't really be counted toward the core budget for students. And two-thirds of public four-year colleges get less than $500 per student each year, while a few high profile public universities account for a disproportionate share of the total.

The average private four-year college, by contrast, reports $6,500 per student in gifts and investment income, with many of the elite names topping $30,000 per student.

In short, while it may be possible and worthwhile to create successful campaigns to attract more private philanthropy to colleges that serve low-income students, in the near term taxpayer dollars are likely to remain the primary cushion to protect affordability.

Chart 2
Gift and investment income per full-time student, 2011–2012



Sources: Analysis of IPEDS finance and enrollment data.

Tuition, the Great Recession, and affordability

The biggest reason for surging tuition in the last few years was not increased spending on the part of institutions, but rather the steep decline in state and local government support in the wake of the Great Recession. And just as the recession varied in severity across the country, tuition rose unevenly as well. Unfortunately, the result was often that prices rose fastest in precisely the states where the population could least afford it.

States that hurt the most

All but a small handful of states suffered significant economic harm in the recession. But while the news seemed uniformly bad across the country, the impact of the economic decline varied significantly from state to state. As a simple but useful measure of the impact of the Great Recession on the economies of individual states, they are grouped in Table 1 (next page) by the degree to which their unemployment rates spiked between 2006 and 2012. Those in the "least affected" group experienced an average 2.7 point rise in unemployment rates. By contrast, those in the "most affected" group experienced an average 7 point surge.

Grouping states in this way is helpful for analyzing the effects of the recession, since states in the "most affected" group generally experienced the worst state budget cuts while reduced employment levels cut into families' abilities to pay the cost of higher education on their own.

Table 1
Recession impact by state

Groupings of states "least" to "most" affected by the Great Recession.	State	Change in unemployment rate 2006-2012, (lowest to highest level)
1. Least affected	North Dakota	1.3
	Alaska	1.8
	Nebraska	1.8
	South Dakota	2.1
	Arkansas	2.6
	Iowa	2.6
	Vermont	2.7
	Kansas	3.2
	Maine	3.3
	New Hampshire	3.3
	Oklahoma	3.4
	Texas	3.6
	Montana	3.6
2. Less affected	Minnesota	3.7
	Louisiana	3.9
	Pennsylvania	3.9
	West Virginia	4
	Virginia	4.1
	Massachusetts	4.2
	Wisconsin	4.2
	Maryland	4.3
	New York	4.3
	New Mexico	4.4
	Missouri	4.5
	Mississippi	4.6
	Wyoming	4.6
3. More affected	Connecticut	4.7
	Delaware	4.7
	Colorado	4.8
	Hawaii	4.8
	Kentucky	5
	Ohio	5.1
	Washington	5.1
	New Jersey	5.2
	Utah	5.4
	Georgia	5.6
	Indiana	5.7
	North Carolina	5.8
	Oregon	5.8
4. Most affected	Tennessee	5.9
	Idaho	6
	South Carolina	6.3
	Illinois	6.4
	Rhode Island	6.6
	Michigan	6.9
	Arizona	7
	Alabama	7.1
	California	7.4
	Florida	7.8
	Nevada	9.4

Source: Bureau of Labor Statistics (BLS) Local Area Unemployment Database

Changes in state appropriations

As the recession hit, states faced budget shortfalls and significantly cut expenditures, including those for higher education. But the impact was not uniform. In states classified above as least affected by the recession, inflation-adjusted appropriations for higher education actually rose by more than $600 million between 2007 and 2012. In the states most affected, by contrast, appropriations dropped by about $5.6 billion over the same period (Chart 3). Details by state are included in Table 3 at the end of the report.

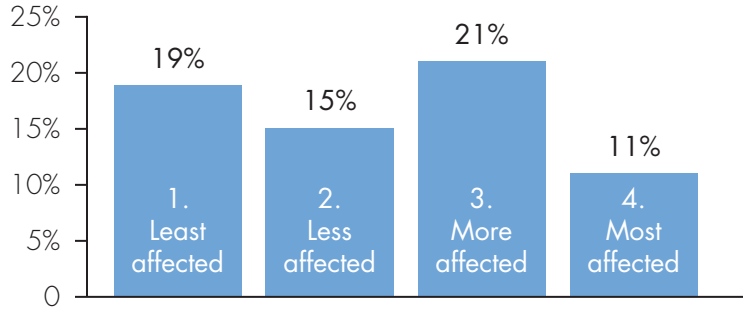
Chart 3
Change in state and local appropriations for higher education, 2007–2012

Source: Analysis of BLS employment and SHEEO State Higher Education Finance Survey data

As appropriations were cut, enrollments swelled, as is typical during recessions. With few good job prospects, students tend to return to or remain longer in college during economic downturns, whether to enhance their employability and or to do something productive with their time. Associate degree and master's-level programs often see the steepest growth, though bachelor's enrollments also go up. On a national basis, this recession produced a major surge in enrollments, though there was no clear pattern among states classified by recession impact (Chart 4). Lower growth in the most affected states may reflect a tipping point. Rather than stay in place and weather out a bad economy by enrolling in community college (or graduate school), some residents of hardest-hit states like California, Michigan, Nevada, and Arizona, may have simply chosen to leave, and some may have ended up in community colleges in different states altogether.

When the enrollment increases are taken into consideration along with the declines in appropriations, even the least-affected states saw a drop in appropriations on a per-student basis, though the decline was much steeper in the harder-hit states (Chart 5). Note also that on college campuses there is a big difference between a situation in which funding per student is declining as enrollment grows, but the total budget is steady or slightly growing, and one in which the total budget is dropping. In the former case, larger classes, higher workloads, strained facilities put pressure on campus

Chart 4
Enrollment growth 2007–2012, by recession impact in states



personnel, but in the latter case, add to all of those issues the effect of pay cuts, layoffs, or furloughs on institutional effectiveness and morale.

Changes in tuition

Declines in state support are closely correlated with increases in tuition across the country. States that were hardest hit by the recession and that cut appropriations to higher education the most also had the highest tuition increases. The worst-off states raised four-year tuition, on average, by $2,800, while those least affected raised it by less than half that amount. At community colleges, tuition increased by $680 in the worst-off states and by $380 in those least affected by recession. Chart 6 shows the group averages and Table 3 at the end of the report includes state-level details.

The geography of affordability in the United States shifted significantly as a result. In 2007-08, four-year tuition in the states in the "most affected" group averaged about $750 less than states in the "least affected" group. By 2012–13, average tuition was $800 higher in the "most affected" states.

While not surprising, the correlation between recession impact and tuition hikes illustrates one of the policy problems associated with state higher education finance. Prices go up exactly where and when citizens are least able to afford the increases. Because of this phenomenon, the effect on affordability is probably worse than it would be if every state simply increased at the national average rate.

Chart 5
Change in appropriations per student, 2006–07 to 2011–12

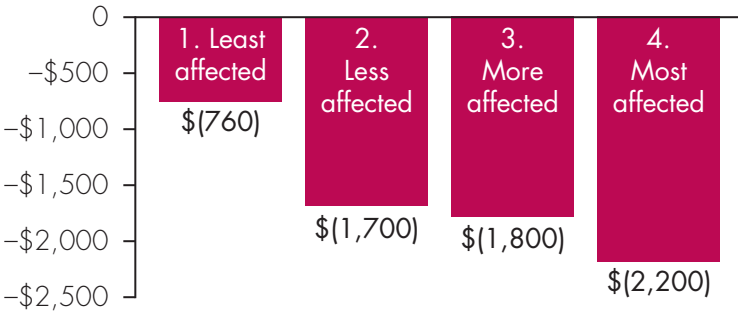
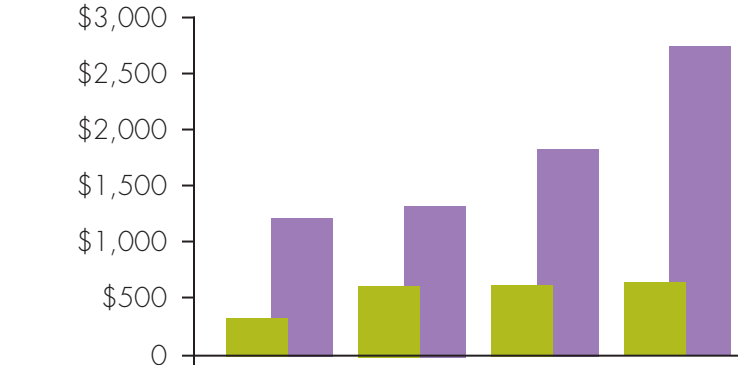


Chart 6
Changes in residential public tuition rates—states most and least affected by recession, 2007–08 to 2012–13



	1. Least affected	2. Less affected	3. More affected	4. Most affected
Two-Year Tuition Increase	$380	$620	$650	$680
Four-Year Tuition Increase	$1,200	$1,300	$1,800	$2,800

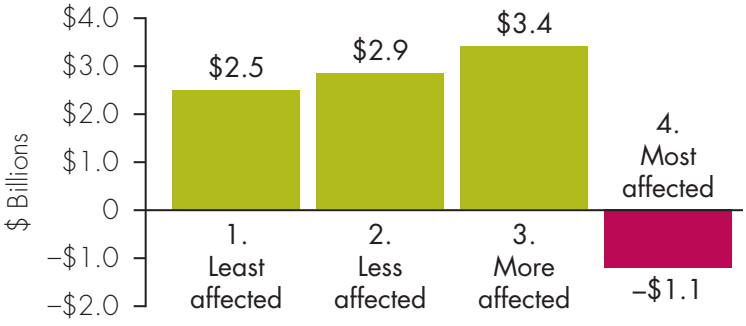
Source: Analysis of BLS Unemployment data and *Trends in College Pricing* 2013

Net effect of tuition and appropriations changes on total education revenues

In addition to increasing tuition rates, recession-driven enrollment growth also brought in more tuition revenue. Together, the combination of increasing prices and increasing enrollments resulted in more additional tuition dollars than had been cut in state appropriations (Chart 7). Only in the most recession-impacted states did overall revenue remain short of where it was in 2006–07. But with so many more students in the system, revenues per student remained well below the pre-recession levels in all groups (Chart 8).

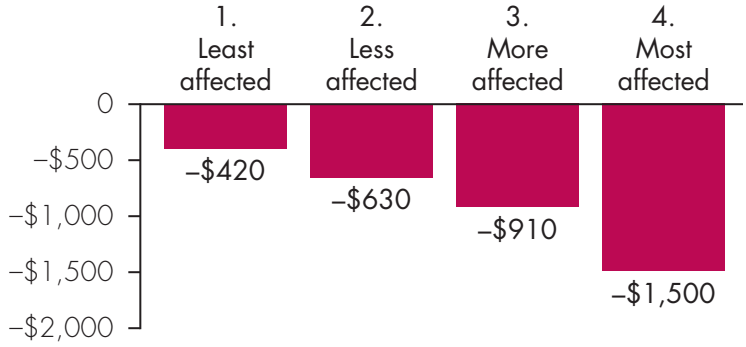
There is a big difference in campus impact between a budget cut in absolute terms and a reduction in funding per student. Reduced funding per student around the country meant almost universally that institutions felt pressure to be more efficient, to find ways to serve more students within the same budget. But with a few exceptions, people did not lose their jobs as they did in other industries. There were actually more total employees and more faculty in public higher education in fall 2011 than before the recession started (Snyder 2013). In states and institutions where budgets dropped in absolute terms, however, many institutions did see employment and faculty ranks shrink (usually by attrition).

Chart 7
Change in total educational revenue, 2006–07 to 2011–12



Source: State Higher Education Finance Survey, 2013

Chart 8
Change in educational revenues (tuition and appropriations) per full-time student, 2006–07 to 2011–12



Source: State Higher Education Finance Survey, 2013

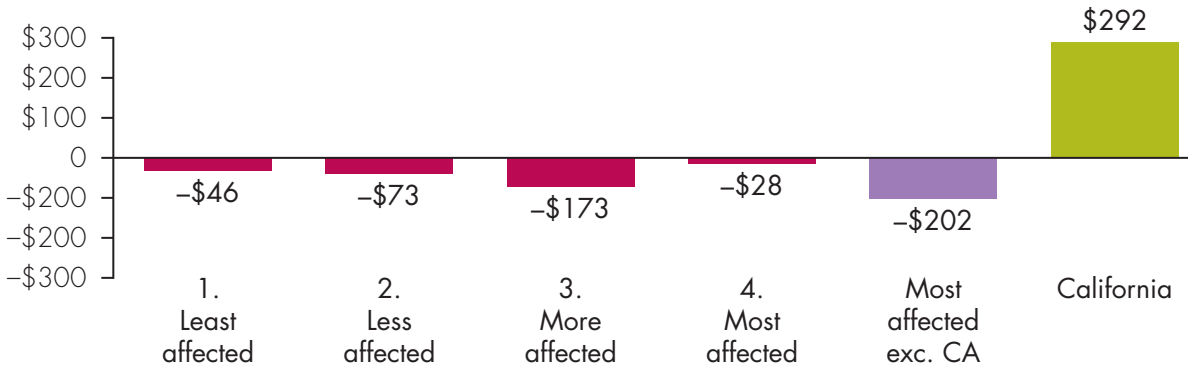
Financial aid and the recession

Since public subsidies—the "invisible scholarships"—keep tuition low for all students, they can be an inefficient way to make college affordable if large proportions of students would be able to afford tuition without them. States and institutions will sometimes attempt to offset the effects of tuition increases by providing additional aid for their low-income students, replacing a costly un-targeted subsidy with a less expensive, targeted one.

In the recent downturn, some states partially compensated for tuition increases with boosts to state aid programs, while others subjected aid programs to the same axe as other appropriations. The net result was about a $490 million constant dollar increase spending on financial aid programs, from 2007–08 to 2011–12. That amounts to about 5% of the revenue generated by tuition increases. And without California's $610 million jump in state aid, the nationwide trend would have been negative. On a per-student basis, state aid declined in 35 of 50 states during the recession, even as tuition was going sharply up and family incomes were falling. Chart 9 and Table 4 at the end of the report, show the change in state aid programs.

Chart 9

State grant aid to undergraduates per full-time student—Change from 2007–08 to 2011–2012



Source: National Association of State Student Aid and Grant Programs (NASSGAP) Annual Reports

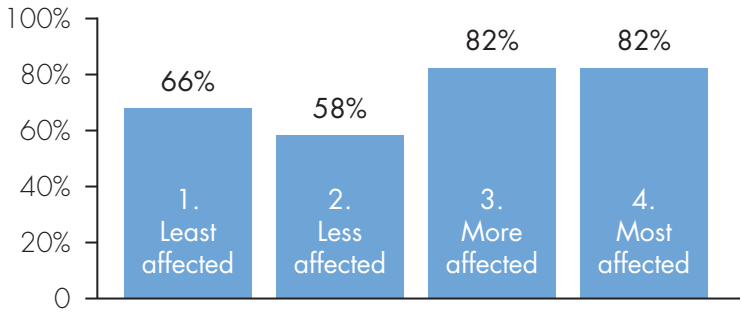
There were some increases in institutional aid as tuition went up. At four-year colleges nationally, need-based institutional aid per student increased by about $360 per undergraduate student from 2007–08 to 2012–13 (Baum and Payea, *Trends in Student Aid* 2013). The public colleges that offer the most institutional aid, unfortunately, are not usually the ones with the most low-income students, which makes relying on institutional aid a problematic strategy at the state or national level, even when institutions individually have the best of intentions. Community colleges, where low-income students are in the majority, generally offer little if any institutional aid, while flagship universities sometimes have relatively generous programs available to relatively small pools of students. It is often the institutions with the greatest need that have the least capacity to raise tuition without negatively affecting affordability.

Importance of Pell grants

Significant increases in the size and number of federal Pell grants during the recession relieved at least some of the affordability pressure for low income students, with a disproportionate share of the benefits going to states hardest hit by recession (Chart 10). Between 2006–07 and 2010–11 the size of the average Pell grant increased by 43% and the number of recipients rose by 80%. The increase

in the size of the maximum grant authorized from $4,050 to $5,550 over that period was more than enough to cover most increases in community college tuition, and covered a significant portion of increases at public four-year institutions as well. Some critics have contended that the availability of more financial aid drives institutions to raise their prices. At public institutions, however, the driving factor is not Pell grants but changing levels of state support.

Chart 10
Increase in number of public college Pell Grant recipients by state recession impact, 2007–08 to 2011–12



The number of participants rose both because eligibility for the program was expanded to cover more students and because falling incomes and rising unemployment caused more students and families to fall within the program's income limitations. In states hardest hit by the recession, the number of newly qualified recipients was even larger.

State and institutional strategies on cost and pricing

The bottom line for public and nonprofit higher education institutions is academic mission. Like most nonprofit institutions, they will generally spend any resources given to them in support of their mission, as they should, and there are always competing priorities on a campus for available funds: faculty and staff compensation, student services, financial aid, new hires, new programs. Constraints on spending tend to happen when imposed from the outside. Many of the innovative ways that colleges have found to operate more efficiently only happened by necessity, when institutions were forced by budget cuts to look closely at their costs and find new ways to get things done. Few efficiency task forces are created in years when budgets increase by 10%.

As long as tuition is seen as an untapped resource, institutions will see raising rates as an option to compensate for cuts in public support. Some public four-year institutions could probably continue to increase their tuition significantly without hurting their overall enrollments and with only modest effects on affordability. Others may already be finding limits to how much tuition can go up and what cash-strapped families can bear.

State policy, rather than market pressure, has often been the limitation on tuition increases at public colleges. During the recession, many states were forced to abandon old policies limiting tuition. Some held the line or found new ways to constrain institutional tuition increases. These were generally states where the recession impact was not as profound and cuts in public support to colleges not as deep.

Following is a selection of examples of how states managed tuition policy during the recession. Table 3 provides more detail on how much and where tuition increased during the recession, from 2007–08 to 2012–13. All figures cited below are in constant (inflation-adjusted) dollars.

Less affected states

States with moderate recession impact were sometimes able to contain price increases through official policy limitations.

In **Iowa**, for example, tuition and fees rose modestly and consistently. The Board of Regents, which sets policy for the three four-year universities in the state, allowed increases slightly above the rate of inflation, but far lower than other states experienced. There was only modest differentiation among the three institutions, with increases of $800–$1100 bringing full-time tuition to $7,600–$8,000, just slightly below the national average, by 2012–13.

At locally governed community colleges, tuition generally rose $500–$800 above the rate of inflation, bringing the total to $4,000–$5,000 by 2013. Two-year tuition was already well above the national average in 2007–08 and remained there after the increases.

In 2013–14, Iowa froze tuition at its four-year institutions and is considering continuing the freeze in 2014–15 (Regents 2013). Such a reaction is politically and fiscally understandable, but runs against the cycle of student need. When students can least afford it, tuition goes up. When unemployment drops and students are more likely to be better off, tuition is frozen.

Maine froze tuition at its community colleges so that, on an inflation-adjusted basis, prices actually went down during the recession (Koenig 2012). The system went from having the second highest average two-year tuition in the country in the late 1990s to being 23rd in 2012. Maine's example is distinctive because it continued the tuition freeze during a major recession, rather than just when the state budget was healthy, which is typical in many other states.

Maryland has kept tuition increases in check for several years. Once ranked near the top in average tuition, Maryland has come closer to the national average as other states have risen to its level. During the recession, average tuition increases were just about at the level of CPI inflation, rising to $8,900 at UM College Park, the flagship, and $2,500–$3,500 at most community colleges. Maintaining low tuition has been a stated policy of Governor O'Malley and of the university chancellor Brit Kirwan, both of whom were in office throughout the recession (Kiehl 2008).

While Maryland's example may be appealing for some states, it had one of the lowest reductions in state appropriations from 2007–08 to 2011–12, losing just 2% of state funding in inflation-adjusted dollars (and declining 20% in state appropriations per FTE). Maryland was aided during the recession by the presence of the federal government, which was not constrained to balance its budget and which continued to expand even as other sectors around the country took big hits. As a result, the overall budget impact in the state was not as high. Maintaining tuition could be more difficult in states where appropriations are cut more deeply or where tuition isn't already at or above the national average.

New York walked a line between freezing tuition and total deregulation with an approach

described as "rational tuition policy" that permitted predictable, steady increases in tuition over several years. The total increase in the SUNY and CUNY systems between 2007–08 and 2012–13 was substantial, at approximately $1,000 in excess of inflation, but was phased in over a number of years, with advance notice given to students.

"Rational Tuition" was adopted by the SUNY Board of Trustees in 2008, tying increases to a multiple of inflation. In 2011, the state legislature adopted a similar tuition model for both CUNY and SUNY systems, replacing the inflation index with a fixed dollar amount. Increases of up to $300 per year are permitted through 2016. The state commits implicitly not to offset tuition increases with cuts in taxpayer support, and the universities agree to invest new tuition dollars in ways that directly benefit students.

As in Maryland, cuts in state support in New York were relatively small compared to other states, declining just 1% in inflation-adjusted terms from 2007–08 to 2012–13 (down 14% on a per student basis). With the tuition increase taken into account, total funding for the system increased during the recession (but declined on a per-student basis).

States with worse recessions

The picture was quite different in states that experienced worse recessions, where unemployment rates surged 5–9% in a brief period of time. In many of these states, tuition increases were abrupt and large, but with rapidly declining state support and dwindling numbers of faculty, the increases often meant students were paying more and getting less.

In **Washington**, tuition at several four-year institutions rose between $2,500 and $5,300, lifting average tuition in the state from near the national average to well above it. The gap between the lower-cost four-year institutions and the higher-tuition ones also widened. Tuition at two-year institutions also rose by more than $1,000 at many schools. The result was that total revenues remained flat, even as the state slashed its investment by 23%.

The state did protect its relatively generous need-based aid program from cuts during this time, but demand for the program grew much faster than the state could fund it, as more students qualified for need-based aid and tuition costs skyrocketed.

Alabama saw tuition increases of $2–$3,000 at its four-year institutions and $800–$1,200 at community colleges (where tuition was already higher than average). There was also widening variation among institutions in tuition charged. Given that Alabama is a relatively low-income state, increases were especially significant.

California raised tuition by about $2,500 at comprehensive four-year California State University institutions and by nearly $5,000 at the flagship University of California institutions. At community colleges, tuition rose by $500–$700, but remained among the lowest in the nation, with full-time tuition and fees running roughly $1,200 per year. Yet while community colleges charging the national average of about $3,000 in tuition can offer a limited number of courses (usually taught by adjuncts) with no additional assistance from the state, $1,200 is too low to support even general education or remedial courses without additional public subsidy. As a result, many institutions complained that they were unable to provide enough sections to meet demand, and the volume of courses taught at

California two-year institutions did not rise nearly as fast as it did in some other states hit hard by the recession.

Arizona also permitted huge tuition increases at its four-year institutions—equivalent to 8% of the state's median income—while keeping community college tuition rates among the lowest in the country. One of the fastest-growing community colleges was Rio Salado, which greatly expanded the delivery of low-cost online courses during the recession. One reason community colleges were able to avoid major tuition increases was that they receive significant revenue from local taxing districts, funding that actually increased during the recession as state appropriations fell.

Institutional responses to budget cuts

Institutions affected by budget cuts face difficult choices. Do they attempt to maintain the current level of overall spending by raising tuition? Do they attempt to cut costs and keep tuition moderate? Or can they make up the lost revenue by enrolling more tuition-paying students, even if it means larger classes or more frequent use of adjunct faculty?

Often institutional tuition policy is determined by states, which either set tuition levels or set limits that colleges cannot exceed. But where institutions have discretion, some have deliberately chosen to maintain low tuition, whether out of philosophical conviction, economic reality, or both. These have often been institutions with high proportions of low-income students, where the strategy of raising tuition and offsetting it with more financial aid makes little sense, since virtually everyone would need more aid.

In states with deep recessions, rapid enrollment growth has also provided a source of revenue that some institutions used to mitigate the need for tuition increases. Chart A-1 at the end of the report shows that institutions with higher enrollment growth had lower tuition increases, even with cuts in state appropriations taken into account. (It is not clear what is cause and what is effect, however.) Selective institutions are sometimes reluctant to pursue aggressive enrollment growth and end up raising tuition rates faster instead.

Following are examples of institutions that did not follow the trend within their own states, that found ways to manage costs other than to raise tuition. Table 6 shows trends in appropriations, enrollment growth, and tuition for these and a small handful of other institutions that illustrate the diversity of institutional responses to the recession.

At **Austin Peay University**, in Tennessee, tuition rose at a lower rate than at other four-year colleges in the state. Additional revenue from enrollment growth helped cover operating costs. The growth was not exclusively from enrolling new students, though. Successful efforts to improve retention rates at the college meant more tuition-paying students continued on to upper level courses. These students also generated more state support relative to other institutions in the state's unique outcomes-based funding formula.

At **Valencia College**, in Florida, institutional leaders maintained a commitment to minimal tuition increases even as peer institutions' tuition rose faster (Traynor 2013). Valencia is a former Florida community college that now offers a limited number of bachelor degrees but remains primarily focused on associate-level education and transfer. With tuition near the national average

for community colleges, rapid enrollment growth at Valencia generated the minimal tuition revenue necessary to expand enrollments without additional support from the state.

Columbus State Community College in Ohio also kept tuition increases below the rates of other two-year institutions in the state, also supporting enrollment growth with the minimal revenue from tuition alone (Pyle 2013). (The president of Columbus State during this period was a former senior administrator at Valencia.)

In North Carolina, **UNC Pembroke** had among the lowest rates of tuition increase during the recession (UNC Pembroke Board of Trustees 2011). While the institution struggled with the impact of reduced state appropriations on its operations, more than half of its students were low-income and would be less able to manage tuition increases than students at other public colleges in the state.

Data notes

Education and related spending per student was calculated from IPEDS finance data. Included are all Instruction and Student Services expenses, plus a pro-rated share of Academic and Institutional Support. That share is based on the proportion of total spending on the academic mission that goes to instruction and student services (as opposed to research and public service). For many colleges, the share is 100%, while for research universities it can be much lower. Not included are activities unrelated to the cost of providing education, such as housing, food service, hospitals, athletics, etc. The number of students is based on estimated annual full-time equivalent enrollment (FTE). Graduate FTE enrollments were weighted double, based on the higher cost of education at that level (Conger, Bell and Stanley 2009).

The extra weighting for graduate enrollments is the only departure from the Delta Cost Project's methodology, although IPEDS has changed its format for collecting expenditure data and allocating indirect costs from interest and plant operations. Together, these changes make the numbers cited in this brief difficult to compare precisely with past Delta Project reports, so they should not be used for trend analysis.

Gift and investment income per student was calculated from IPEDS finance data, also using a weighted FTE measure.

Pell grant recipient and amount data were calculated from IPEDS financial aid reports.

Education revenues and state appropriations were taken from the State Higher Education Executive Officers' State Higher Education Finance survey database. These represent values reported to SHEEO by state agencies for the purpose of the survey. They are more reliable for state-level totals than IPEDS data, but are not disaggregated by two- and four-year sector. Amounts were adjusted for inflation using SHEEO's Higher Education Cost Index.

State and national average tuition data was taken from College Board's Trends in College Pricing 2013 report. **Institutional tuition pricing data** is from IPEDS. Both are adjusted for inflation using the Consumer Price Index.

State aid program data is from the National Association of State Student Grant and Aid Program annual report, adjusted for inflation using the Consumer Price Index.

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Table 2
Cost of higher education, 2011–12

	Education and Related Spending	Undergrad Enrollment (Full-Time Equivalent)	Graduate Enrollment (Full-Time Equivalent)	Spending per Full-Time Equivalent Student*
US Average	***$ 150,603,637,950***	***10,611,030***	***936,477***	***$ 12,064***
Florida	$ 5,882,575,625	603,853	46,694	$ 8,437
Georgia	$ 3,713,148,033	325,309	38,586	$ 9,226
New Mexico	$ 1,045,237,214	95,157	8,394	$ 9,337
Utah	$ 1,305,113,467	120,674	9,238	$ 9,379
Idaho	$ 594,874,246	53,649	4,583	$ 9,470
Arkansas	$ 1,412,971,566	116,460	10,647	$ 10,257
Louisiana	$ 1,978,946,530	162,061	14,698	$ 10,336
Arizona	$ 2,915,368,983	243,663	18,765	$ 10,368
Mississippi	$ 1,581,346,487	129,279	10,890	$ 10,468
Missouri	$ 2,248,666,889	179,813	15,727	$ 10,644
South Dakota	$ 401,362,949	31,749	2,960	$ 10,655
Colorado	$ 2,468,109,501	187,916	19,608	$ 10,866
Montana	$ 485,988,502	38,810	2,692	$ 10,997
Virginia	$ 3,944,434,780	289,095	33,590	$ 11,071
Rhode Island	$ 396,693,808	30,524	2,338	$ 11,270
Oklahoma	$ 1,838,501,292	134,798	14,158	$ 11,271
North Carolina	$ 4,912,835,189	372,229	29,036	$ 11,417
Texas	$ 12,434,628,047	897,935	93,895	$ 11,453
Nebraska	$ 1,076,456,278	75,824	8,736	$ 11,538
Alabama	$ 2,788,068,858	190,852	24,205	$ 11,653
Kansas	$ 1,805,315,249	128,865	12,880	$ 11,675
Ohio	$ 5,691,310,308	396,146	45,181	$ 11,698
Nevada	$ 911,174,506	67,332	5,110	$ 11,749
West Virginia	$ 1,007,640,115	70,398	7,468	$ 11,808
South Carolina	$ 2,232,737,329	161,910	13,462	$ 11,824
Indiana	$ 3,614,384,726	240,901	32,145	$ 11,843
Iowa	$ 1,744,190,827	130,603	7,915	$ 11,911
New Hampshire	$ 484,104,270	34,205	3,060	$ 12,005
Kentucky	$ 2,087,435,983	146,865	13,369	$ 12,024
Illinois	$ 5,857,576,612	404,040	38,349	$ 12,185
Washington	$ 3,569,739,043	255,039	17,012	$ 12,349
Tennessee	$ 2,514,214,632	170,808	16,285	$ 12,362
Oregon	$ 2,192,943,277	149,448	13,230	$ 12,466
Maine	$ 493,013,945	34,332	2,394	$ 12,603
Maryland	$ 3,184,086,013	199,401	25,238	$ 12,743
Minnesota	$ 2,703,130,039	189,438	10,288	$ 12,871
New Jersey	$ 3,875,068,863	256,252	21,979	$ 12,908
Michigan	$ 6,108,468,145	384,190	40,293	$ 13,143
North Dakota	$ 582,453,468	36,419	3,630	$ 13,335
Massachusetts	$ 2 ,488,106,298	155,000	15,734	$ 13,343
California	$ 21,059,747,451	1,412,903	76,270	$ 13,453
Wisconsin	$ 3,289,831,429	213,572	14,165	$ 13,600
Pennsylvania	$ 5,781,432,625	330,625	31,021	$ 14,724
New York	$ 9,407,954,479	542,396	42,368	$ 15,002
Wyoming	$ 430,261,436	23,967	1,462	$ 16,000
Connecticut	$ 1,646,782,465	83,947	7,954	$ 16,492
Hawaii	$ 728,521,517	36,907	2,904	$ 17,055
Delaware	$ 684,839,171	31,855	2,300	$ 18,786
Alaska	$ 456,546,482	19,457	2,228	$ 19,092
Vermont	$ 440,611,519	20,460	1,198	$ 19,278
District of Columbia	$ 104,687,486	3,699	145	$ 26,244

*Source:Integrated Postsecondary Education Data System (IPEDS). Graduate enrollments are weighted double, based on the higher cost. See appendix for methodology.

Table 3
Tuition, state appropriations and recession severity in the United States

	Two-Year In-State Tuition		Four-Year In-State Tuition		Appropriations per Student	
	2012–13	Change from 2007–08 (constant dollars)	2012–13	Change from 2007–08 (constant dollars)	FY 2011–12 Approps/Full-Time Student	Change from 2006–07 (constant dollars)
1 Least affected state average	**$ 2,709**	**$ 382**	**$ 8,127**	**$ 1,193**	**$ 6,216**	**–$ 760**
Alaska	$ 4,073	$ 828	$ 5,898	$ 936	$ 14,891	–$ 432
Arkansas	$ 2,849	$ 451	$ 7,132	$ 853	$ 5,635	–$ 1,084
Iowa	$ 4,334	$ 599	$ 7,985	$ 1,011	$ 4,784	–$ 1,853
Kansas	$ 2,566	$ 404	$ 7,423	$ 979	$ 5,184	–$ 1,387
Maine	$ 3,398	($ 101)	$ 9,547	$ 1,322	$ 6,252	–$ 712
Montana	$ 3,155	$ 48	$ 6,276	$ 330	$ 4,468	–$ 280
Nebraska	$ 2,652	$ 235	$ 7,325	$ 1,066	$ 7,385	–$ 740
New Hampshire	$ 6,868	$ 578	$ 14,902	$ 4,026	$ 1,835	–$ 1,888
North Dakota	$ 4,047	$ 172	$ 7,143	$ 636	$ 7,192	$ 1,691
Oklahoma	$ 3,225	$ 437	$ 6,529	$ 929	$ 5,834	–$ 1,559
South Dakota	$ 5,575	$ 1,543	$ 7,533	$ 1,541	$ 4,347	–$ 1,030
Texas	$ 2,188	$ 339	$ 8,508	$ 1,274	$ 6,749	–$ 441
Vermont	$ 6,923	$ 755	$ 13,790	$ 2,032	$ 2,925	–$ 531
2 Less affected state average	**$ 4,006**	**$ 622**	**$ 8,735**	**$ 1,348**	**$ 5,914**	**–$ 1,718**
Louisiana	$ 3,060	$ 912	$ 5,990	$ 1,695	$ 5,243	–$ 2,093
Maryland	$ 3,962	$ 315	$ 8,371	$ 169	$ 6,596	–$ 1,624
Massachusetts	$ 5,214	$ 1,072	$ 10,858	$ 2,013	$ 6,332	–$ 2,720
Minnesota	$ 5,474	$ 488	$ 10,564	$ 1,819	$ 4,817	–$ 1,796
Mississippi	$ 2,309	$ 393	$ 6,280	$ 945	$ 4,887	–$ 1,391
Missouri	$ 2,945	$ 135	$ 8,101	$ 425	$ 5,244	–$ 1,914
New Mexico	$ 1,624	$ 342	$ 5,789	$ 1,025	$ 7,272	–$ 2,142
New York	$ 4,540	$ 563	$ 6,691	$ 998	$ 8,105	–$ 1,355
Pennsylvania	$ 4,282	$ 656	$ 12,620	$ 1,639	$ 4,368	–$ 2,027
Virginia	$ 4,274	$ 1,402	$ 10,095	$ 2,236	$ 4,269	–$ 2,231
West Virginia	$ 2,980	$ 351	$ 6,000	$ 1,059	$ 4,902	–$ 178
Wisconsin	$ 4,109	$ 442	$ 8,860	$ 1,669	$ 5,907	–$ 1,013
Wyoming	$ 2,488	$ 332	$ 4,362	$ 376	$ 12,337	–$ 1,694
3 More affected state average	**$ 3,690**	**$ 654**	**$ 8,939**	**$ 1,826**	**$ 5,702**	**–$ 1,777**
Colorado	$ 3,647	$ 890	$ 8,607	$ 2,511	$ 3,069	–$ 1,306
Connecticut	$ 3,669	$ 497	$ 9,824	$ 1,330	$ 9,016	–$ 2,115
Delaware	$ 3,174	$ 458	$ 11,122	$ 2,366	$ 5,813	–$ 2,028
Georgia	$ 3,380	$ 1,003	$ 7,687	$ 2,998	$ 6,277	–$ 2,646
Hawaii	$ 3,158	$ 975	$ 8,782	$ 3,156	$ 10,358	–$ 3,116
Indiana	$ 3,732	$ 364	$ 8,886	$ 1,176	$ 4,869	–$ 1,055
Kentucky	$ 4,283	$ 414	$ 8,628	$ 1,586	$ 6,269	–$ 1,485
New Jersey	$ 4,242	$ 443	$ 12,660	$ 1,475	$ 6,794	–$ 1,980
North Carolina	$ 2,204	$ 701	$ 6,323	$ 1,494	$ 8,163	–$ 1,165
Ohio	$ 4,291	$ 349	$ 9,960	$ 470	$ 3,965	–$ 1,444
Oregon	$ 4,305	$ 691	$ 8,475	$ 1,807	$ 3,911	–$ 1,839
Utah	$ 3,211	$ 470	$ 5,722	$ 1,170	$ 5,116	–$ 1,858
Washington	$ 4,326	$ 1,098	$ 10,988	$ 4,275	$ 4,874	–$ 2,604
4 Most affected state average	**$ 2,329**	**$ 680**	**$ 8,934**	**$ 2,751**	**$ 5,902**	**–$ 2,210**
Alabama	$ 4,168	$ 1,018	$ 8,905	$ 3,024	$ 5,195	–$ 2,140
Arizona	$ 2,247	$ 356	$ 9,919	$ 4,358	$ 4,929	–$ 2,655
California	$ 1,447	$ 737	$ 9,162	$ 3,610	$ 6,542	–$ 2,339
Florida	$ 3,152	$ 874	$ 6,357	$ 2,560	$ 4,834	–$ 3,316
Idaho	$ 3,175	$ 829	$ 6,106	$ 1,192	$ 5,434	–$ 3,427
Illinois	$ 3,313	$ 576	$ 12,407	$ 2,203	$ 8,591	$ 722
Michigan	$ 3,102	$ 490	$ 11,412	$ 1,881	$ 4,608	–$ 2,036
Nevada	$ 2,753	$ 776	$ 6,515	$ 2,088	$ 6,426	–$ 3,064
Rhode Island	$ 4,027	$ 836	$ 11,135	$ 3,037	$ 5,819	–$ 1,415
South Carolina	$ 4,331	$ 703	$ 10,955	$ 1,567	$ 4,095	–$ 2,562
Tennessee	$ 3,731	$ 779	$ 7,827	$ 1,810	$ 5,245	–$ 2,408

Sources: *Trends in College Pricing* 2013 (tuition), State Higher Education Finance survey (appropriations) and Bureau of Labor Statistics Local Area Unemployment data (recession impact).

Table 4
State grant aid, 2007–08 to 2011–12

State/recession severity	State grant aid to undergraduates (millions)		State grant aid per FTE	
	2011–12	Change from 2007–08	2011–12	Change from 2007–08
US Total	**$ 10,003**	**$ 491**	**$ 716**	**($ 77)**
1 Least affected	**$ 1,028**	**$ 93**	**$ 497**	**($ 46)**
Alaska	$ 14	($ 64)	$ 630	($ 3,692)
Arkansas	$ 151	$ 112	$ 1,165	$ 810
Iowa	$ 58	($ 12)	$ 221	($ 174)
Kansas	$ 20	($ 1)	$ 141	($ 27)
Maine	$ 16	($ 5)	$ 320	($ 127)
Montana	$ 7	$ 2	$ 175	$ 21
Nebraska	$ 16	$ 2	$ 168	$ 7
New Hampshire	$ 0	($ 4)	$ 0	($ 80)
North Dakota	$ 13	$ 9	$ 333	$ 223
Oklahoma	$ 93	$ 11	$ 549	$ 9
South Dakota	$ 4	$ 1	$ 107	$ 30
Texas	$ 617	$ 44	$ 621	($ 78)
Vermont	$ 18	($ 3)	$ 568	($ 124)
2 Less affected	**$ 2,892**	**$ 70**	**$ 772**	**($ 73)**
Louisiana	$ 197	$ 49	$ 1,039	$ 149
Maryland	$ 91	($ 21)	$ 402	($ 162)
Massachusetts	$ 131	($ 3)	$ 407	($ 51)
Minnesota	$ 249	($ 87)	$ 989	($ 454)
Mississippi	$ 28	($ 3)	$ 206	($ 50)
Missouri	$ 97	($ 22)	$ 334	($ 160)
New Mexico	$ 99	$ 18	$ 989	($ 4)
New York	$ 969	$ 73	$ 1,064	($ 23)
Pennsylvania	$ 476	($ 46)	$ 851	($ 140)
Virginia	$ 310	$ 88	$ 830	$ 108
West Virginia	$ 129	$ 20	$ 1,290	$ 27
Wisconsin	$ 115	$ 4	$ 443	($ 28)
Wyoming	$ 0	($ 0)	$ 0	($ 8)
3 More affected	**$ 2,695**	**($ 51)**	**$ 831**	**($ 173)**
Colorado	$ 99	($ 0)	$ 420	($ 56)
Connecticut	$ 140	$ 70	$ 1,008	$ 444
Delaware	$ 20	$ 2	$ 525	($ 17)
Georgia	$ 563	$ 14	$ 1,423	($ 306)
Hawaii	$ 4	$ 4	$ 88	$ 77
Indiana	$ 274	$ 12	$ 851	($ 136)
Kentucky	$ 196	($ 10)	$ 1,002	($ 179)
New Jersey	$ 582	($ 52)	$ 1,836	($ 491)
North Carolina	$ 347	$ 14	$ 866	($ 90)
Ohio	$ 109	($ 166)	$ 211	($ 400)
Oregon	$ 44	$ 6	$ 251	($ 35)
Utah	$ 9	($ 3)	$ 47	($ 39)
Washington	$ 307	$ 58	$ 1,137	$ 57
4 Most affected	**$ 3,388**	**$ 380**	**$ 689**	**($ 28)**
Alabama	$ 19	($ 3)	$ 86	($ 24)
Arizona	$ 16	($ 2)	$ 29	($ 16)
California	$ 1,492	$ 612	$ 875	$ 292
Florida	$ 562	($ 127)	$ 719	($ 409)
Idaho	$ 6	($ 1)	$ 95	($ 31)
Illinois	$ 432	($ 25)	$ 784	($ 102)
Michigan	$ 88	($ 152)	$ 197	($ 395)
Nevada	$ 67	$ 12	$ 877	$ 89
Rhode Island	$ 13	($ 4)	$ 193	($ 71)
South Carolina	$ 325	$ 5	$ 1,711	($ 307)
Tennessee	$ 368	$ 64	$ 1,414	$ 39

Table 5
Family income and tuition, 2007–12

	2012 Income		Two-Year In-State Tuition			Four-Year In-State Tuition		
	Median	Bottom 20%	2012–13	Increase from 2007–08 (constant $)	Increase as % of bottom 20% income	2012–13	Increase from 2007–08 (constant $)	Increase as % of median income
Mississippi	$ 47,003	$ 8,269	$ 2,309	$ 393	5%	$ 6,280	$ 945	2%
Arkansas	$ 49,212	$ 9,398	$ 2,849	$ 451	5%	$ 7,132	$ 853	2%
West Virginia	$ 50,295	$ 9,193	$ 2,980	$ 351	4%	$ 6,000	$ 1,059	2%
Kentucky	$ 52,123	$ 9,307	$ 4,283	$ 414	4%	$ 8,628	$ 1,586	3%
Alabama	$ 52,664	$ 9,146	$ 4,168	$ 1,018	11%	$ 8,905	$ 3,024	6%
Tennessee	$ 52,889	$ 9,907	$ 3,731	$ 779	8%	$ 7,827	$ 1,810	3%
New Mexico	$ 53,054	$ 9,465	$ 1,624	$ 342	4%	$ 5,789	$ 1,025	2%
South Carolina	$ 53,345	$ 9,721	$ 4,331	$ 703	7%	$ 10,955	$ 1,567	3%
Idaho	$ 53,805	$ 11,743	$ 3,175	$ 829	7%	$ 6,106	$ 1,192	2%
Oklahoma	$ 54,263	$ 10,509	$ 3,225	$ 437	4%	$ 6,529	$ 929	2%
Louisiana	$ 54,730	$ 9,171	$ 3,060	$ 912	10%	$ 5,990	$ 1,695	3%
Florida	$ 55,043	$ 10,754	$ 3,152	$ 874	8%	$ 6,357	$ 2,560	5%
North Carolina	$ 55,338	$ 10,310	$ 2,204	$ 701	7%	$ 6,323	$ 1,494	3%
Montana	$ 56,895	$ 11,584	$ 3,155	$ 48	0%	$ 6,276	$ 330	1%
Georgia	$ 57,018	$ 10,008	$ 3,380	$ 1,003	10%	$ 7,687	$ 2,998	5%
Arizona	$ 57,477	$ 11,100	$ 2,247	$ 356	3%	$ 9,919	$ 4,358	8%
Missouri	$ 57,917	$ 10,912	$ 2,945	$ 135	1%	$ 8,101	$ 425	1%
Indiana	$ 57,996	$ 11,415	$ 3,732	$ 364	3%	$ 8,886	$ 1,176	2%
Michigan	$ 58,632	$ 10,700	$ 3,102	$ 490 5	%	$ 11,412	$ 1,881	3%
Texas	$ 58,929	$ 11,470	$ 2,188	$ 339	3%	$ 8,508	$ 1,274	2%
Ohio	$ 59,193	$ 10,708	$ 4,291	$ 349	3%	$ 9,960	$ 470	1%
Oregon	$ 59,494	$ 11,206	$ 4,305	$ 691	6%	$ 8,475	$ 1,807	3%
Maine	$ 59,547	$ 11,653	$ 3,398	($ 101)	-1%	$ 9,547	$ 1,322	2%
Nevada	$ 60,964	$ 12,373	$ 2,753	$ 776	6%	$ 6,515	$ 2,088	3%
South Dakota	$ 61,794	$ 12,274	$ 5,575	$ 1,543	13%	$ 7,533	$ 1,541	2%
Kansas	$ 63,317	$ 12,494	$ 2,566	$ 404	3%	$ 7,423	$ 979	2%
Iowa	$ 63,433	$ 12,693	$ 4,334	$ 599	5%	$ 7,985	$ 1,011	2%
Nebraska	$ 63,618	$ 12,803	$ 2,652	$ 235	2%	$ 7,325	$ 1,066	2%
Utah	$ 64,095	$ 14,747	$ 3,211	$ 470	3%	$ 5,722	$ 1,170	2%
Pennsylvania	$ 64,331	$ 11,859	$ 4,282	$ 656	6%	$ 12,620	$ 1,639	3%
Wisconsin	$ 64,492	$ 12,799	$ 4,109	$ 442	3%	$ 8,860	$ 1,669	3%
Vermont	$ 65,959	$ 13,072	$ 6,923	$ 755	6%	$ 13,790	$ 2,032	3%
North Dakota	$ 67,126	$ 12,336	$ 4,047	$ 172	1%	$ 7,143	$ 636	1%
California	$ 67,745	$ 12,970	$ 1,447	$ 737	6%	$ 9,162	$ 3,610	5%
Illinois	$ 67,892	$ 12,203	$ 3,313	$ 576	5%	$ 12,407	$ 2,203	3%
New York	$ 68,161	$ 11,411	$ 4,540	$ 563	5%	$ 6,691	$ 998	1%
Wyoming	$ 68,694	$ 14,418	$ 2,488	$ 332	2%	$ 4,362	$ 376	1%
Washington	$ 69,979	$ 13,551	$ 4,326	$ 1,098	8%	$ 10,988	$ 4,275	6%
Delaware	$ 70,218	$ 14,149	$ 3,174	$ 458	3%	$ 11,122	$ 2,366	3%
Rhode Island	$ 70,360	$ 11,244	$ 4,027	$ 836	7%	$ 11,135	$ 3,037	4%
Colorado	$ 70,461	$ 13,198	$ 3,647	$ 890	7%	$ 8,607	$ 2,511	4%
Minnesota	$ 71,826	$ 13,937	$ 5,474	$ 488	4%	$ 10,564	$ 1,819	3%
Virginia	$ 74,766	$ 14,209	$ 4,274	$ 1,402	10%	$ 10,095	$ 2,236	3%
New Hampshire	$ 77,178	$ 15,931	$ 6,868	$ 578	4%	$ 14,902	$ 4,026	5%
Hawaii	$ 77,385	$ 14,648	$ 3,158	$ 975	7%	$ 8,782	$ 3,156	4%
Alaska	$ 79,617	$ 17,261	$ 4,073	$ 828	5%	$ 5,898	$ 936	1%
Massachusetts	$ 82,009	$ 12,748	$ 5,214	$ 1,072	8%	$ 10,858	$ 2,013	2%
Connecticut	$ 84,558	$ 14,266	$ 3,669	$ 497	3%	$ 9,824	$ 1,330	2%
New Jersey	$ 85,005	$ 14,998	$ 4,242	$ 443	3%	$ 12,660	$ 1,475	2%
Maryland	$ 86,056	$ 16,151	$ 3,962	$ 315	2%	$ 8,371	$ 169	0%

Sources: *Trends in College Pricing* (2013) and American Community Survey (income levels)

Table 6
Changes in state support, tuition and enrollment growth: Selected institutional examples

Four-Year Colleges	State	Tuition and fees increase 2007–08 to 2012–13	Change in appropriations 2007–08 to 2011–12	Change in undergrad enrollment 2007–08 to 2011–12
Biggest cuts in appropriations				
Highest enrollment growth				
Arizona State University	AZ	$ 4,245	–25%	20%
Georgia State University	GA	$ 2,112	–24%	18%
Thomas Edison State College	NJ	$ 662	–69%	23%
Shrinking or stable enrollment				
California State Univ.-Long Beach	CA	$ 2 ,617	–24%	–9%
Florida State University	FL	$ 2 ,704	–22%	2%
Smaller than average appropriations cuts				
High enrollment growth				
Austin Peay State University	TN	$ 875	–8%	15%
Small or no appropriations cuts				
Shrinking or stable enrollment				
University of Southern Indiana	IN	$ 1 ,411	–5%	3%
SUNY College at Plattsburgh	NY	$ 868	–3%	2%
Highest enrollment growth				
Indiana University-East	IN	$ 663	–7%	61%
Granite State College	NH	$ 977	–6%	45%
University of California-Merced	CA	$ 5,191	132%	177%
Two-Year Colleges				
Biggest cuts in appropriations				
Shrinking or stable enrollment				
Jefferson Davis Community College	AL	$ 863	–36%	–9%
Fresno City College	CA	$ 580	–24%	–7%
Oakland Community College	MI	$ 235	–21%	–21%
Mt Hood Community College	OR	$ 1 ,008	–40%	0%
Highest enrollment growth				
Delgado Community College	LA	$ 845	–20%	55%
Central Oregon Community College	OR	$ (65)	–23%	87%
Portland Community College	OR	$ 291	–25%	57%
Bigger than average cuts in appropriations				
Highest enrollment growth				
Valencia College	FL	$ 63	–15%	36%
Columbus State Comm. College	OH	$ 12	–9%	36%
Tidewater Community College	VA	$ 828	–15%	35%
Smaller than average appropriations cuts				
High enrollment growth				
Rio Salado College	AZ	$ 101	–2%	17%
Highest enrollment growth				
CUNY Bronx Community College	NY	$ 833	–7%	30%
Central Maine Community College	ME	$ (133)	–4%	41%
Small or no appropriations cuts				
Highest enrollment growth				
Hagerstown Community College	MD	$ 163	2%	33%
Houston Community College	TX	$ 152	4%	40%

Source: IPEDS finance and enrollment files.

Table 6–A
Quartile ranges for groupings used in institutional analysis

Quartile ranges for cuts in state and local appropriations, 2007-08 to 2011-12, adjusted for inflation

Four-Year Colleges and Universities	
1 Biggest cuts in appropriations	Cut more than 21%
2 Bigger than average cuts in appropriations	Cut 14–21%
3 Smaller than average appropriations cuts	Cut 8–13%
4 Small or no appropriations cuts	Cut less than 8%
Two-Year Colleges	
1 Biggest cuts in appropriations	Cut more than 17%
2 Bigger than average cuts in appropriations	Cut 9–17%
3 Smaller than average appropriations cuts	Cut 2–8%
4 Small or no appropriations cuts	Cut less than 2%

Quartile ranges for cuts in state and local appropriations, 2007-08 to 2011-12, adjusted for inflation

Four-Year Colleges and Universities	
1 Shrinking or stable enrollment	Grew less than 3%
2 Modest enrollment growth	Grew 3–8%
3 High enrollment growth	Grew 9–17%
4 Highest enrollment growth	Grew more than 17%
Two-Year Colleges	
1 Shrinking or stable enrollment	Grew less than 6%
2 Modest enrollment growth	Grew 6–16%
3 High enrollment growth	Grew 17–30%
4 Highest enrollment growth	Grew more than 30%

Quartile ranges for tuition increasess, 2007-08 to 2011-12, adjusted for inflation

Four-Year Colleges and Universities	
1 Lowest	Increased less than $817
2 Next lowest	Increased $817–1,237
3 Next highest	Increased $1,238–1,961
4 Highest	Increased more than $1,961
Two-Year Colleges	
1 Lowest	Increased less than $281
2 Next lowest	Increased $281–$511
3 Next highest	Increased $512–744
4 Highest	Increased more than $744

Chart A–1

Appropriations, enrollment growth, and tuition at four-year universities