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For What it's Worth...

Welcome to the inaugural issue of *The Swail Letter on Higher Education*, EPI's monthly newsletter devoted to important and timely issues in higher education. Our purpose is to provide solid data for higher education leaders and practitioners so that they can make prudent campus- and system-based decisions with the knowledge that the contents herein are accurate and as unbiased as possible.

This month, we focus on two issues relevant to the current economic conditions. The first is a look at the occupational projections in the United States from 2006 to 2016. The second data essay focuses on state funding for higher education.

Beyond the typical discussion and concerns about declining funds for higher education—forcing states to raise tuition and fee charges for students and parents—there is minimal discussion about the solutions or the containment of the cost explosion in higher education, with the key emphasis on “cost.” We, as a society, get cost and price confused, as the National Commission on the Cost of Higher Education attested back in 1998. We talk about the increases in prices that users (students) must pay, but unless we get a leash on the cost side of the equation, all we do is kick the can down the road for the next generation to take care of, something that elected officials are particularly adept at considering the political structure of American government at the local, state, and national levels.

But as our analysis finds, states have only modestly increased funding over the past decade while the costs of higher education have dramatically increased. The result is more pressure on outside resources to fund the machine—mostly students and parents. Thus, we are caught in a funding and cost vortex from which we are unable to escape, politically and fiscally.

Perhaps the problem is the sheer size of our postsecondary system in the US. With over 2,000 four-year institutions and approximately 1,500 two-year public institutions, the act of changing policy and practice—*let alone structure*—is akin to changing the course of the Titanic in the middle of the frigid North Atlantic. It's difficult at best. This isn't a 3am phone call to the president issue. Unfortunately, it falls just under the radar where no one sees the danger of a system untamed. But our children will ultimately pay the price.

The current economic downturn provides us with a real stimulus to change how we do college in America. As the European

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THIS ISSUE

Linking Jobs and Higher Education **P2**

With record job losses making headlines and expected increases in higher education enrollments, our first essay looks at the projected job growth by the Bureau of Labor Statistics between 2006 and 2016 with specific focus on the level of education required by these jobs. Contrary to public perception, our analysis suggests that we probably don't need as many bachelor's degrees as the rhetoric suggests, and that our schools aren't necessarily producing the bachelor's degrees required by the current or future workforce.

State Budgets for Higher Education **P9**

This essay looks at state expenditures for higher education over a 10-year period, with a focus on FY09 expenditures in light of the current fiscal crisis. Even with the ARRA intervention, state budgets are significantly down with larger cuts expected in FY10. Over the past decade, state expenditures for higher education are up 16.5 percent, but the expenditures per FTE are down 7 percent across the country. This, coupled with higher tuition and fee charges in all states, sets the stage for a serious self-analysis for higher education and state governments. What is the future role of the state in higher education?

ESSAY 1

Linking Jobs and Higher Education

Are we producing enough or too many bachelor's degrees?

Recent news reports have illustrated the challenges facing business and industry around the globe. Record job losses and high unemployment rates continue to splash the front pages and websites of newspapers across the country. In April, the unemployment rate rose to 9.4 percent, the highest since July 1983¹. In May, President Obama acknowledged the current and continuing challenges to the economy: "The concern that we have is that even in a stabilizing situation there is the prospect of higher unemployment for some time to come."²

For higher education, a recession is a double-edged sword. On one side, states traditionally cut higher education budgets during an economic downturn, forcing institutions of higher education to reduce staffing, enlarge class sizes, and increase tuition. Alternatively, more students typically enroll in college when the economy goes sour as many displaced workers return to education to retool for the marketplace. As well, currently employed workers take a more critical look at their future knowing that their livelihood may reside on the bubble and choosing to retool in hopes of either keeping their position or advancing.

The bachelor's degree is a key link to higher income and social status in our society. Not that other levels of education, and certainly occupations not requiring a college degree, don't do well. But the BA is the standard for business and professional levels within the workforce. More than ever, it is the dividing line between blue- and white-collar workers.

On average, the salary of someone with a BA (or higher) is approximately \$17,000 higher than someone with an associate's degree and \$26,000 (or 55 percent) higher than someone with a high school diploma³. Additionally, a BA recipient (or higher) is half as likely to be unemployed than a high school graduate⁴ (4.4 vs. 9.3 percent). With this in mind, those students traditionally

¹Retrieved from the Washington Post, 2009, June 5, 2009 (www.washingtonpost.com/wp-dyn/content/article/2009/06/05/AR2009060502632.html).

²Retrieved from Reuters, May 20, 2009 (www.reuters.com/article/topNews/idUSTRE54J0XP20090520).

³U.S. Census Bureau, Current Population Survey, 2008. Annual Social and Economic Supplement. People between 18 and 65 years old as of March of the following year (www.census.gov/hhes/www/mac-ro/032008/perinc/new04_001.htm).

⁴The April 2009 unemployment rate for high school graduates without any college was 9.3 percent. For BA graduates or higher, the rate was 4.4 percent. SOURCE: Bureau of Labor Statistics, Employment status of the civilian population 25 years and over by educational attainment (www.bls.gov/news.release/empstat.t04.htm).

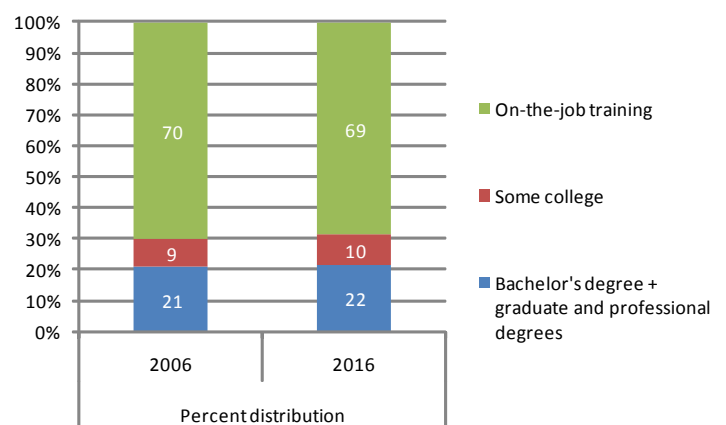
underrepresented in higher education are seeking higher education at a growing pace.

The political rhetoric suggests that we need to dramatically increase the number of bachelor's degrees in the United States in order to be globally competitive. Over 70 percent of Americans believe that we can improve our global competitiveness if only more people could earn college degrees⁵. And a recent study by the National Center for Higher Education Management Systems (NCHEMS) suggests that we need to produce 63 million jobs to match other leading nations in the percentage of college degrees.

But do we? Are these figures realistic and should we drink the Kool-Aid? The problem is complex. If we ignore the rhetoric, we run the risk of being wrong and putting the country into a more serious situation by reducing our competitiveness. If we increase postsecondary outputs, we may meet the need but also expose ourselves to an overabundance of college-educated, unemployed, or under-utilized workers. In an economic sense, a market glut.

Ultimately, we need to know this: how many BAs do we really need? Do we need more, or do we need better?

FIGURE 1. Projected change in employment and total job openings by postsecondary education and training, 2006 and 2016



SOURCE: Bureau of Labor Statistics (<http://www.bls.gov/news.release/ecopro.t09.htm>.)

⁵Kaplan University Education Insights Survey (finance.yahoo.com/news/While-US-is-Falling-behind-in-bw-14437492.html).

TABLE 1. Projected change in employment and total job openings by postsecondary education and training, 2006 and 2016 (in thousands)

	Number (000s)		Percent distribution		Change	
	2006	2016	2006	2016	Number (000s)	Percent
Total, all occupations	150,620	166,220	100	100	15,600	10
First professional degree	1,970	2,247	1	1	277	14
doctoral degree	2,025	2,462	1	1	437	22
master's degree	2,167	2,575	1	2	408	19
Bachelor's or higher degree, plus work experience	6,524	7,117	4	4	593	9
Bachelor's degree	18,585	21,659	12	13	3,074	17
Associate degree	5,812	6,899	4	4	1,087	19
Postsecondary vocational award	7,901	8,973	5	5	1,072	14
Work experience in a related occupation	14,579	15,889	10	10	1,310	9
Long-term on-the-job training	11,489	12,220	8	7	731	6
Moderate-term on-the-job training	27,230	29,248	18	18	2,018	7
Short-term on-the-job training	52,339	56,951	35	34	4,612	9

SOURCE: Bureau of Labor Statistics (<http://www.bls.gov/news.release/ecopro.t04.htm>).

This essay attempts to look beyond the rhetoric and utilize data from the Bureau of Labor Statistics to examine the level of education that current and future jobs in the United States require.

Occupational Outlook

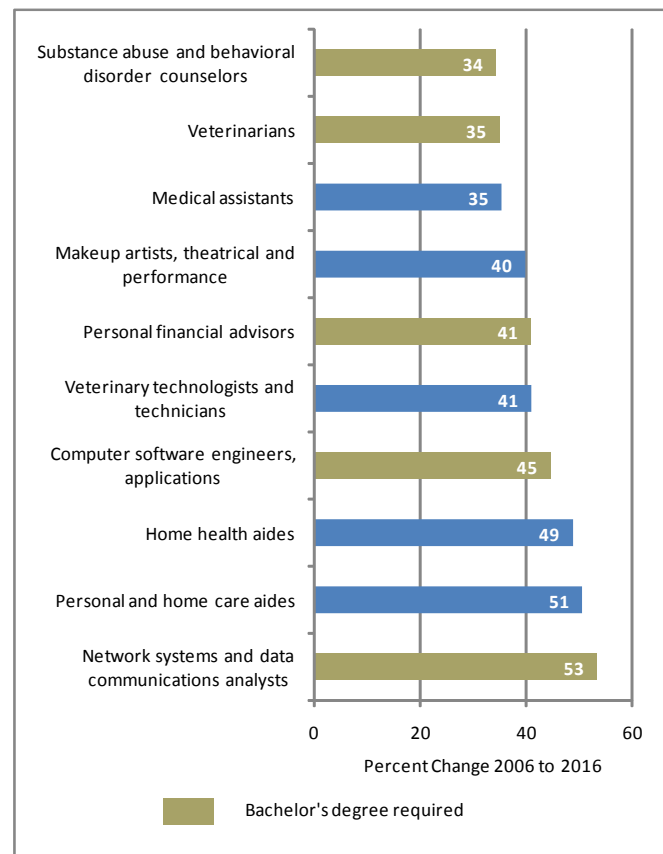
In 2006, over two-thirds of jobs in the US, representing over 150 million workers, were held by individuals who had on-the-job training as their highest level of education. Comparatively, 30 percent of jobs were held by individuals with some college, of which 21 percent had a bachelor's degree or higher⁶. According to the Bureau of Labor Statistics, these ratios will change little by 2016, when the percent of bachelor's degrees increases 1 percent to 22 percent of total occupations (see Figure 1). Thus, according to the US Bureau of Labor Statistics, the tsunami of required BAs in the United States isn't coming anytime soon.

Table 1 breaks out the change in employment by degree type. Overall, 15 million jobs are expected to be created by 2016, bringing total employment to 166 million, or a 10 percent increase. This, of course, doesn't take into account the current economic conditions, but 2016 is a considerable time horizon for the US economy time to rebound.

Between 2006 and 2016, the percentage of BAs in the workforce is expected to increase by 15 percent, or 5 million jobs, while occupations requiring 'some' college will increase by 16 percent (2 million jobs). On-the-job training will increase at half that rate, a

⁶ Bureau of Labor Statistics (<http://www.bls.gov/news.release/ecopro.t04.htm>).

FIGURE 2. Ten fastest-growing occupations, 2006-16



SOURCE: Bureau of Labor Statistics (<http://www.bls.gov/news.release/ecopro.t04.htm>).

modest 8 percent. That figure, however, results in an increase of over 8 million jobs, twice those of BAs.

The largest percentage increase by degree level is for doctoral degrees (22 percent), followed by master’s and associate’s degrees (19 percent). Still, all told, the number of jobs in those three categories still falls under 2 million—across a country with a population of over 330 million. Not a sea change in requirements by any means.

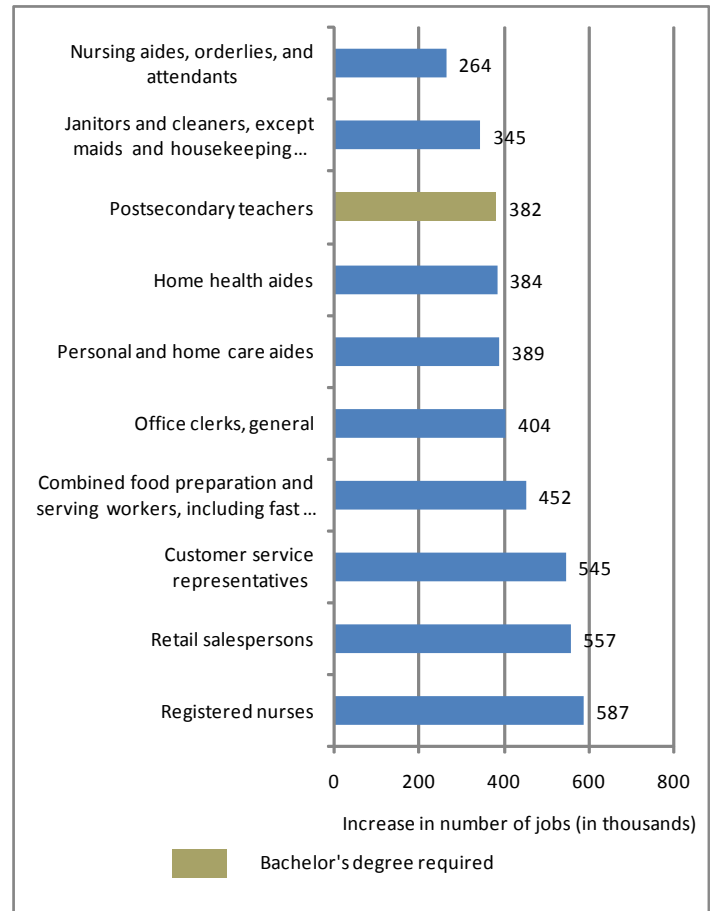
Using the same dataset, we ranked occupations by the percentage growth between 2006 and 2016 (Figure 2; Table 2). The main finding is that 7 of the fastest-growing fields require at least some postsecondary education and 5 require a bachelor’s degree. In total, these top 10 occupations are projected to grow by at least a third by 2016. The fastest growth area, network systems analysts, will increase by 53 percent. Occupations in the top 10 requiring a BA include network systems analyst, computer software engineer, financial advisor, veterinarian, and substance abuse counselor. Other, non-BA occupations include personal and home care aides, home health aides, veterinary techs, makeup artists, and medical assistants.

A review of the top 30 fastest-growing jobs (Table 2) illustrates that half of the jobs require a bachelor’s degree while 22 will require at least some postsecondary education. Taken alone, this is an impressive statistic. It seems that postsecondary matters to workforce growth. However, the number of jobs created by these 15 BAs amounts to slightly less than 1 million, or only 7 percent of the total jobs created between 2006 and 2016, albeit 42 percent of the jobs to be created by the top 30 fastest-growing occupations. The fastest-growing non-BA occupation, the home care aides, account for almost 800,000 jobs alone.

Our next analysis moves from fastest growth to largest growth occupations (Figure 3; Table 3). The take away here is that fastest growing does not equate with largest-job growth. Compared to the 2.3 million jobs created by the 30 fastest-growing occupations, the top 30 largest growth occupations account for over 8 million jobs. And while 5 of the top 10 fastest-growing jobs required a BA, only 1 of the top 10 largest job-growth occupations requires a BA (and a doctorate, at that), and only 3 require a postsecondary education award. Of the top 30 largest growth occupations, only 7 require a BA or higher and 9 require some postsecondary. These 7 BAs account for a total of 1.5 million jobs of the 8 million total jobs created by the 30 largest growth occupations. The two additional postsecondary occupations add over 800,000 jobs, bringing the total to 2.3 million. Still only a fraction (29 percent) of total job growth.

A cursory review of the non-BA jobs listed in the top 10 include registered nurses (almost 600,000 new jobs), retail salespersons,

FIGURE 3. Ten largest--growth occupations, 2006-16



SOURCE: Bureau of Labor Statistics (<http://www.bls.gov/news.release/ecopro.t04.htm>).

customer service reps, food preparation service workers, office clerks, personal home aids, janitors, and nursing aides.

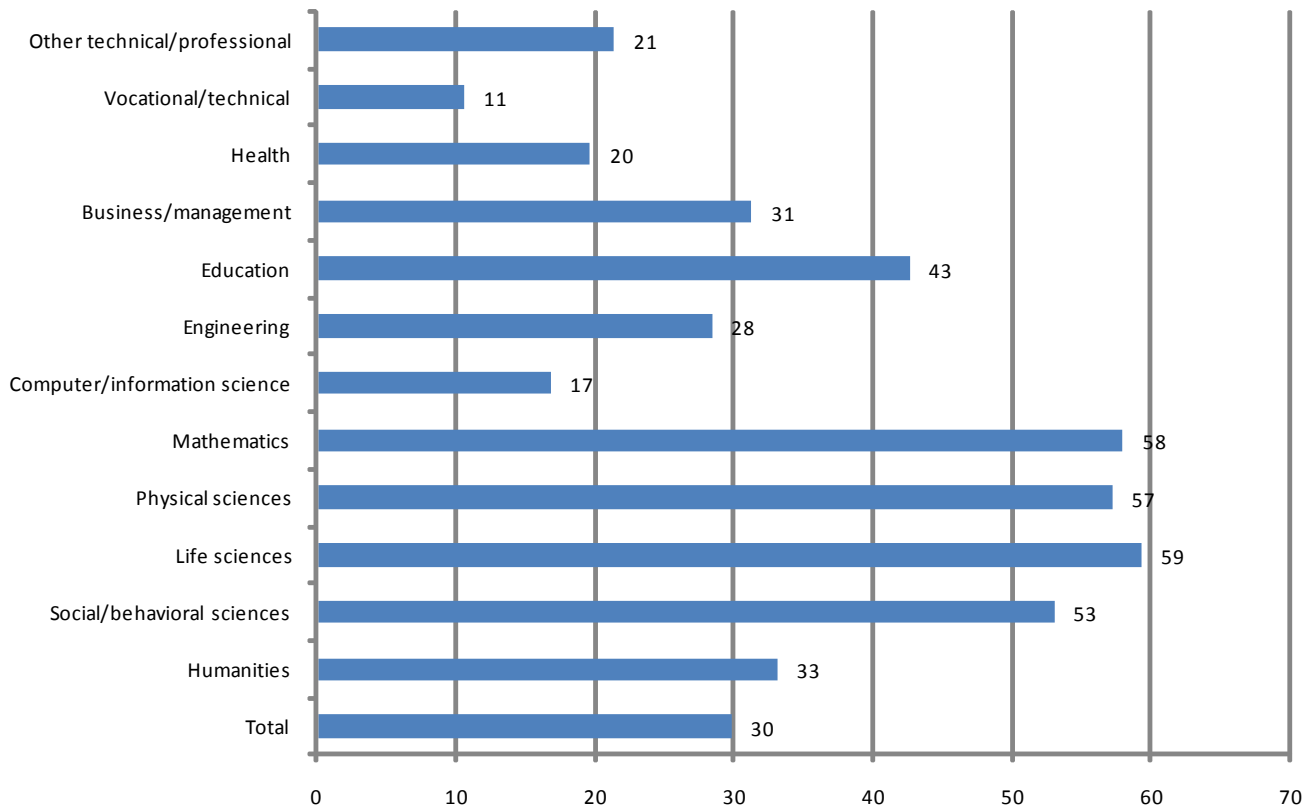
The Role of Higher Education

Given this information, where lay the nexus between business, industry, and higher education? Governors, policymakers, and certainly postsecondary advocates argue for more funding and development in higher education to meet the competitive needs of the economy (which is very interesting considering the recent cuts to higher education in most states; see our next essay).

As suggested by the data analyzed for this essay, there is no tsunami of BA needs in our society. By 2016, we will need less than 5 million additional BA graduates in our system. Each year, the US produces approximately 1.5 million bachelor’s degrees⁷. Thus, over the 10 years from 2006 to 2016, an additional 15 million bachelor’s degrees, about three times what the projections suggest are necessary, will be produced. What we probably need are better skills emanating from all levels of higher education, espe-

⁷ The National Center for Higher Education Management Systems. (<http://www.higheredinfo.org/dbrowser/index.php?submeasure=85&year=2007&level=nation&mode=data&state=0>).

FIGURE 4. First degree attained by 1995-96 postsecondary students by 2001, by last major when enrolled¹



Source: U.S. Department of Education, National Center for Education Statistics, 1995–96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:96/01). Analysis by EPI using online BPS DAS on May 21, 2009.

cially the less-than four-year programs. And certainly this would argue for retooling middle and high school education to provide a better foundation for careers and postsecondary studies.

Looking back at the fastest-growing occupations warranting a bachelor’s degrees by the 2016 economy, listed were network systems and data communications analysts (computer/information science), computer software engineers (computer/information science), personal financial advisors (business/management), veterinarians (health), and substance abuse and behavioral disorder counselors (social/behavioral sciences).

Using data from the Beginning Postsecondary Students (BPS) study, we can gain a perspective of the outcomes of entering students. In this case, we focus on students who entered postsecondary education for the first time in 1995-96 and charted their completions by 2001 (six years). Figure 4 above illustrates the bachelor’s degree attainment rate for students, by major, within six years of original matriculation to higher education. Focus-

ing on the core areas identified above (computer/information science, business/management, health, and social/behavioral sciences), we can gain a perspective of the bachelor’s degree development by field.

The fastest growing occupation requiring a BA was network systems and data communications, followed by computer software engineers. However, only 1-in-6 students within computer science graduate with a BA. Perhaps more importantly, only 3.1 percent of all BAs conferred are in the computer/information science area (See Table 2). However, it is anecdotally reported that people are not entering computer science anymore because of a widely held myth that there are no jobs in the marketplace⁸. Given the growth and size of this market, and our inability to produce enough of these individuals, it seems there needs to be a recalibration of higher education to meet the market needs.

The third fastest growing BA item is the personal financial advisor (41 percent growth). Thirty-one percent of those who major in this field graduate, and 1-in-5 bachelor’s degrees conferred in the US are in this field. Veterinarians and substance abuse and behavioral disorder counselors are the 9th and 10th fast-

¹ Figures derived by EPI using BPS DAS. Variables used include SEMA-J2B2 (major when last enrolled); DGRE2B (first degree attained by 2001); Weight = WTA000;

⁸<http://www.cis.udel.edu/jobs/market>.

TABLE 2. First degree attained by 1995-96 postsecondary students by 2001, by last major when enrolled¹

	Never Attained	Certificate or Associates	Bachelor's
Undeclared or no major	8.4	1.7	0
Humanities	12.2	5.2	12.3
Social/behavioral sciences	7.7	5.7	18.5
Life sciences	3.3	2.7	9.1
Physical sciences	0.5	0.7	1.7
Mathematics	0.6	0.2	1.3
Computer/information science	6.4	5.5	3.1
Engineering	6.2	5.8	5.9
Education	6.6	5.4	9.5
Business/management	18.9	18.4	19.4
Health	10.3	16.3	7.2
Vocational/technical	8.3	12.6	2.6
Other technical/professional	10.7	19.7	9.3
TOTAL	100.0	100.0	100.0

Source: U.S. Department of Education, National Center for Education Statistics, 1995-96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:96/01). Analysis by EPI using online BPS DAS on May 21, 2009.

est growth areas. The area of health has a very low graduation rate (20 percent) and 7 percent of all BAs conferred are in the health field. In social/behavioral sciences, the graduation rate is among the highest of any category, with 53 percent of students graduating with a degree. Nineteen percent of all BA graduates belong to this category.

This discussion doesn't focus as much on the two-year institution, which is obviously instrumental in the production of medical assistants and veterinary techs. But it does show that there are some disconnects between what higher education offers and what the economy requires. One can argue about what proportions are appropriate, but the reality is that higher education, especially university level, is far too slow at shifting to the needs of society and to ensure that students matriculation into areas where which support the business, industrial, and societal needs of the US. It is, ultimately, not market sensitive to any significant degree.

For What it's Worth (continued from Page 1)

Union, via the Bologna Agreement, wrestles with altering higher education across dozens of countries, we have done little to change how we structure higher education. The first essay on occupational growth helps illustrate, in part, how our system of higher education and the workforce are not in significant alignment. We must ensure that higher education meets the needs of the workforce without becoming a complete vocational pipeline. It was Woodrow Wilson, former US President and also President of Princeton University, who warned against turning higher education into a vocational development tool. "We have misconceived and misused the college as an instrument of American life when we have organized it and used it as a place of special preparation for particular tasks and callings," said Wilson back in 1909. Ultimately, he said, "It is for liberal training, for general discipline, for that preliminary general enlightenment which every[one] should have who enters modern life with any intelligent hope or purpose of leadership and achievement." And while we need more alignment between the workforce and the education pipeline, we must guard against what Woodrow Wilson sees as the general "misuse" of the system.

I fear that our politicians do not have the foresight to make significant change to how we do higher education. But I also fear that our education leaders—the college presidents, CEOs, and their trustees—similarly lack foresight to make any rational changes to the system. As the financial stability of higher education continues to erode and as more and more students and parents find the financing of higher education too daunting to even conceptualize, let alone actualize, we need leaders who can take on these tough issues and make headway.

Let's hope that these leaders emerge, because the data we present in this edition of *The Swail Letter* will undeniably look much bleaker a decade from now.

TABLE 3. Fastest-growing occupations, 2006-16

	Title	Employment		Change		Quartile rank by 2006 median annual wages	Most significant source of postsecondary education or training
		2006	2016	Percent	Number		
1	Network systems and data communications analysts	262	402	53.4	140	VH	Bachelor's degree
2	Personal and home care aides	767	1,156	50.6	389	VL	Short-term on-the-job training
3	Home health aides	787	1,171	48.7	384	VL	Short-term on-the-job training
4	Computer software engineers, applications	507	733	44.6	226	VH	Bachelor's degree
5	Veterinary technologists and technicians	71	100	41.0	29	L	Associate degree
6	Personal financial advisors	176	248	41.0	72	VH	Bachelor's degree
7	Makeup artists, theatrical and performance	2	3	39.8	1	H	Postsecondary vocational award
8	Medical assistants	417	565	35.4	148	L	Moderate-term on-the-job training
9	Veterinarians	62	84	35.0	22	VH	First professional degree
10	Substance abuse and behavioral disorder counselors	83	112	34.3	29	H	Bachelor's degree
11	Skin care specialists	38	51	34.3	13	L	Postsecondary vocational award
12	Financial analysts	221	295	33.8	75	VH	Bachelor's degree
13	Social and human service assistants	339	453	33.6	114	L	Moderate-term on-the-job training
14	Gaming surveillance officers and gaming investigators	9	12	33.6	3	L	Moderate-term on-the-job training
15	Physical therapist assistants	60	80	32.4	20	H	Associate degree
16	Pharmacy technicians	285	376	32.0	91	L	Moderate-term on-the-job training
17	Forensic science technicians	13	17	30.7	4	H	Bachelor's degree
18	Dental hygienists	167	217	30.1	50	VH	Associate degree
19	Mental health counselors	100	130	30.0	30	H	Master's degree
20	Mental health and substance abuse social workers	122	159	29.9	37	H	Master's degree
21	Marriage and family therapists	25	32	29.8	7	H	Master's degree
22	Dental assistants	280	362	29.2	82	L	Moderate-term on-the-job training
23	Computer systems analysts	504	650	29.0	146	VH	Bachelor's degree
24	Database administrators	119	154	28.6	34	VH	Bachelor's degree
25	Computer software engineers, systems software	350	449	28.2	99	VH	Bachelor's degree
26	Gaming and sports book writers and runners	18	24	28.0	5	VL	Short-term on-the-job training
27	Environmental science and protection technicians, including health	36	47	28.0	10	H	Associate degree
28	Manicurists and pedicurists	78	100	27.6	22	VL	Postsecondary vocational award
29	Physical therapists	173	220	27.1	47	VH	Master's degree
30	Physician assistants	66	83	27.0	18	VH	Master's degree

SOURCE: US Bureau of Labor Statistics (<http://www.bls.gov/emp/mlrtab3.pdf>).

TABLE 4. Occupations with the largest job growth, 2006-16

	Title	Employment		Change		Quartile rank by 2006 median annual wages	Most significant source of postsecondary education or training
		2006	2016	Percent	Number		
1	Registered nurses	2,505	3,092	587	23.5	VH	Associate degree
2	Retail salespersons	4,477	5,034	557	12.4	VL	Short-term on-the-job training
3	Customer service representatives	2,202	2,747	545	24.8	L	Moderate-term on-the-job training
4	Combined food preparation and serving workers, including fast food	2,503	2,955	452	18.1	VL	Short-term on-the-job training
5	Office clerks, general	3,200	3,604	404	12.6	L	Short-term on-the-job training
6	Personal and home care aides	767	1,156	389	50.6	VL	Short-term on-the-job training
7	Home health aides	787	1,171	384	48.7	VL	Short-term on-the-job training
8	Postsecondary teachers	1,672	2,054	382	22.9	VH	Doctoral degree
9	Janitors and cleaners, except maids and housekeeping cleaners	2,387	2,732	345	14.5	VL	Short-term on-the-job training
10	Nursing aides, orderlies, and attendants	1,447	1,711	264	18.2	L	Postsecondary vocational award
11	Bookkeeping, accounting, and auditing clerks	2,114	2,377	264	12.5	L	Moderate-term on-the-job training
12	Waiters and waitresses	2,361	2,615	255	10.8	VL	Short-term on-the-job training
13	Child care workers	1,388	1,636	248	17.8	VL	Short-term on-the-job training
14	Executive secretaries and administrative assistants	1,618	1,857	239	14.8	H	Work experience in a related occupation
15	Computer software engineers, applications	507	733	226	44.6	VH	Bachelor's degree
16	Accountants and auditors	1,274	1,500	226	17.7	VH	Bachelor's degree
17	Landscaping and groundskeeping workers	1,220	1,441	221	18.1	L	Short-term on-the-job training
18	Elementary school teachers, except special education	1,540	1,749	209	13.6	H	Bachelor's degree
19	Receptionists and information clerks	1,173	1,375	202	17.2	L	Short-term on-the-job training
20	Truck drivers, heavy and tractor-trailer	1,860	2,053	193	10.4	H	Moderate-term on-the-job training
21	Maids and housekeeping cleaners	1,470	1,656	186	12.7	VL	Short-term on-the-job training
22	Security guards	1,040	1,216	175	16.9	L	Short-term on-the-job training
23	Carpenters	1,462	1,612	150	10.3	H	Long-term on-the-job training
24	Management analysts	678	827	149	21.9	VH	Bachelor's or higher degree, plus work experience
25	Medical assistants	417	565	148	35.4	L	Moderate-term on-the-job training
26	Computer systems analysts	504	650	146	29.0	VH	Bachelor's degree
27	Maintenance and repair workers, general	1,391	1,531	140	10.1	H	Moderate-term on-the-job training
28	Network systems and data communications analysts	262	402	140	53.4	VH	Bachelor's degree
29	Food preparation workers	902	1,040	138	15.3	VL	Short-term on-the-job training
30	Teacher assistants	1,312	1,449	137	10.4	VL	Short-term on-the-job training

SOURCE: US Bureau of Labor Statistics (<http://www.bls.gov/emp/mlrtab3.pdf>).

ESSAY 2

State Funding for Higher Education

What impact will the economy have on higher education?

The current economic meltdown of the US and global economy has forced states to cut their budgets in order to remain solvent. This is particularly complex and difficult situation given the fact that 49 of 50 states have a balanced-budget amendment, meaning that each year they must, by law, balance fiscal revenues with expenditures, even though the revenue side fluctuates greatly from year-to-year because of the tax structure in the US.

According to the Center on Budget and Policy Priorities (www.cbpp.org), states are facing a \$350 to \$370 billion combined deficit in the next 2.5 years¹. The much-anticipated federal stimulus funds will cover, at most, 40 percent of this shortfall. Almost half of states have cut K-12 education (22 states); 30 students have cut higher education; 40 states have cut the state workforce; and 30 states have cut funds to higher education (see Table 1). A recent survey by *The Chronicle of Higher Education* found that public and private universities have been undergoing major fiscal restructuring, complete with freezes on faculty hiring and salaries, reductions in salaries, staff furloughs, restrictions on travel, and increases in the use of adjunct faculty.²

For our analysis, we pulled data from a number of sources, most prominently the Grapevine Project out of Illinois State University (www.grapevine.ilstu.edu), where Jim Palmer and his associates annually collect information on state tax appropriations for higher education; and the State Higher Education Executive Officers (SHEEO), who also produce useful information on these issues (www.sheeo.org).

We begin with a look at the appropriations for State Fiscal Year (SFY) 2009, then take a historical view³. Note that SFY2009 began, for most states, in July 2008, and the bigger cuts are likely to be seen in the upcoming SFY2010 budget. One word of warning with these data: the FY2009 data used in this report are preliminary and do not include the most recent cuts to higher education. Thus, for whatever these data illustrate, the reality in FY2009 is that the fiscal picture of higher education in the United States is much worse than presented. EPI will provide updates once final FY2009 data are available.

¹Center on Budget and Policy Priorities, May 13, 2009 (<http://www.cbpp.org/cms/index.cfm?fa=view&id=1214>).

²Shieh, David (April 27, 2009). "It's Not Just About the Money," *The Chronicle of Higher Education*. Washington, DC: The Chronicle of Higher Education. (<http://chronicle.com/weekly/v55/i32/32a00801.htm>). Subscription required.

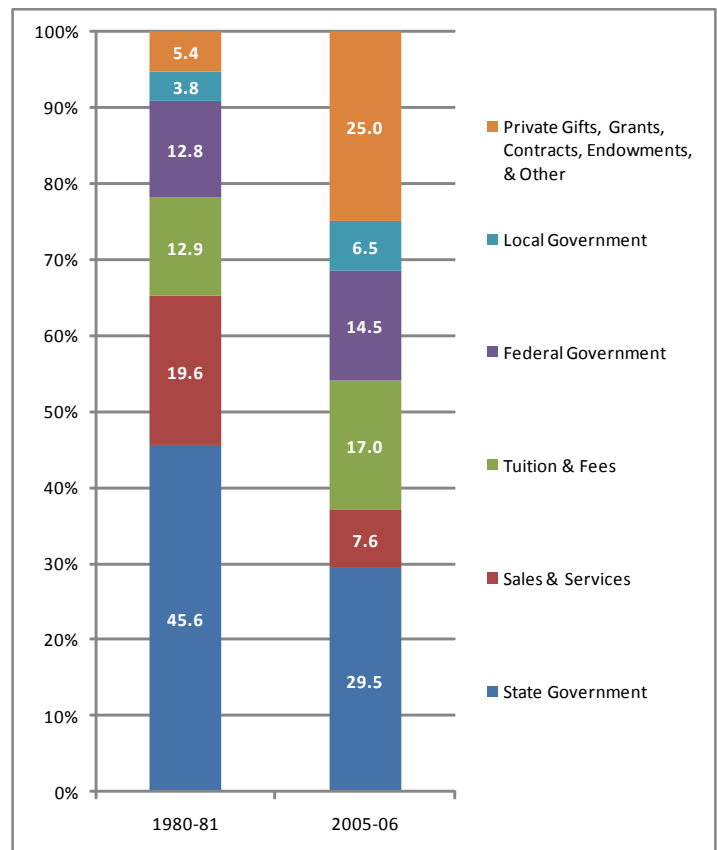
³Note that most states operate on a July-June fiscal year, while the federal government operates on an October-September fiscal year.

Understanding How Higher Education is Financed

Figure 1 illustrates the distribution of funds that support public higher education across the states. In 2005-06 (most recent data), the major revenue sources for public institutions were state governments (29.5 percent), private gifts/contracts (25 percent), tuition and fees (17 percent), and the federal government (14.5 percent). A quarter century earlier, this distribution looked much different, with almost half of funds coming from the state government (45.6 percent) and only 13 percent coming from students and families.

The continuing decline of the state government in the total revenues produced for higher education is a major concern for policymakers. More is expected from students and parents, as

FIGURE 1. Percentage Distribution of Total Revenues of Public Degree-Granting Institutions, by Source of Funds, 1980-81 and 2005-06



SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS).

TABLE 1. 2009 State Budget Cuts, by Area

	Public Health (19)	Elderly Disabled (22)	K-12 Education (22)	Higher Education (30)	State Workforce (40)
Alabama	X	X	X	X	
Alaska	X				
Arizona	X	X	X	X	X
Arkansas					
California	X	X	X	X	X
Colorado	X				
Connecticut	X	X	X		
Delaware	X	X			
District of Columbia	X	X	X	X	
Florida	X	X	X	X	X
Georgia	X	X	X	X	X
Hawaii	X				
Idaho	X	X	X		
Illinois	X	X			
Indiana					
Iowa	X	X	X		
Kansas	X	X	X	X	
Kentucky	X	X	X		
Louisiana	X	X	X	X	
Maine	X	X	X	X	X
Maryland	X	X	X	X	X
Massachusetts	X	X	X	X	
Michigan	X	X	X		
Minnesota	X	X	X		
Mississippi	X	X	X		
Missouri					
Montana					
Nebraska					
Nevada	X	X	X		
New Hampshire	X	X			
New Jersey	X	X	X		
New Mexico	X	X			
New York	X	X	X		
North	X	X			
North					
Ohio	X	X	X		
Oklahoma	X				
Oregon	X				
Pennsylvania	X	X	X		
Rhode Island	X	X	X	X	X
South Carolina	X	X	X	X	X
South Dakota	X				
Tennessee	X	X	X	X	
Texas					
Utah	X	X	X	X	X
Vermont	X	X	X		
Virginia	X	X	X	X	
Washington	X	X	X	X	X
West Virginia					
Wisconsin	X				
Wyoming	X				

SOURCE: Center on Budget and Policy Priorities, May 13, 2009 (<http://www.cbpp.org/cms/index.cfm?fa=view&id=1214>).

is more from the federal government and private philanthropy/contracts. Although the state government still is the largest piece of the funding pie, institutions and systems of higher education are being forced to look elsewhere due to the overall percentage reduction in state funding. This, from a trend perspective, is particularly disconcerting, as the public will continue to have difficulty making up the personal investment for higher education.

State Appropriations for Higher Education

According to the Grapevine Report, 78.5 billion in state tax funds were appropriated for higher education in the 50 states in FY09, representing a 1 percent increase over the prior year, or 2.8 percent when adjusted for inflation⁴ (Please note that these are preliminary data and the actuals, when available, will show a reduction over FY08). The top 10 states in level of higher education funding account for over half of the total funding across all states, with California at the top (\$11.8 billion), followed by Texas (\$5.8 billion) and New York (\$5.3 billion). Alternatively, the smaller states (by amount and population) included Vermont (\$88 million) and New Hampshire (\$138 million). (See Tables 2 and 2b).

The Historically, even with the recent downturn in the economy, state funds for higher education have increased over the past decade, albeit only marginally. Compared with budget numbers from a decade prior, aggregate state funds are up 16.5 percent (inflation adjusted). Unfortunately, as illustrated in Figure 1, this still results in a lesser percentage of total revenues for higher education at the state level.

Some of the largest funding increases were made by our smallest states (Wyoming, Nevada, Louisiana, Hawaii, and Alaska), while several of our largest states posted above-average increases (New York, California, and Texas). Eleven states posted decreases in state funding over the course of the past decade. Those posting double-digit decreases include South Carolina, Massachusetts, Michigan, and Rhode Island.

Although the aggregate numbers are important, they do not take into account the size of higher education in each state. For instance, we understand that California is a much bigger state than Vermont, but that ‘understanding’ doesn’t provide us with a common metric to gauge appropriations for higher education. For this we use FTE, or full-time equivalent student, to provide an approximate number of students currently in higher education based on a combination of full-time and part-time students⁵. Tables 3 and 3b plus Figures 2 and 3 showcase this analysis.

Before entering this analysis, it is important to note that, in addition to state funding increases, FTE numbers also grew. Since 1998, FTE enrollment increased 25 percent to 10,474,401 stu-

⁴ This past year saw deflation for the first time since 1954, so the percentage goes up, which is counterintuitive to what we are used to seeing.

⁵ Typically, FTE is calculated as follows: 1 FTE = 1 full-time student = 3 part-time students.

dents at public institutions (2008). The majority of states realized a 1 to 2 percent increase in enrollment between 2007 and 2008⁶ (Table 3).

For FY2009, the average appropriations of state tax funds per FTE (public institutions only) was \$7,497 for the nation (Figure 2). The largest expenditures per FTE were in some of the small states that posted the highest appropriations increase over the past decade (Hawaii: \$17,276; Alaska: \$16,855), while New Hampshire (\$4,145) and Vermont (\$4,420) posted the lowest appropriations in the current fiscal year. Thus, there is wide variation in how much public funds are used for higher education across the country, especially when controlled by FTE calculations.

Over time, the national average change in funding per FTE between 1999 and 2009 was a negative 7 percent—much different than the 16.5 percent increase posted in aggregate format (Figure 3; Table 2b). Wyoming (61 percent) had the largest increase in funds per FTE, followed by Alaska (31 percent), Louisiana (30 percent), and Alabama. The lowest growth states per FTE were Massachusetts (-34 percent), Michigan (-29 percent), and Rhode Island (-27 percent).

Will States be Able to Provide Enough Appropriations in the Years to Come?

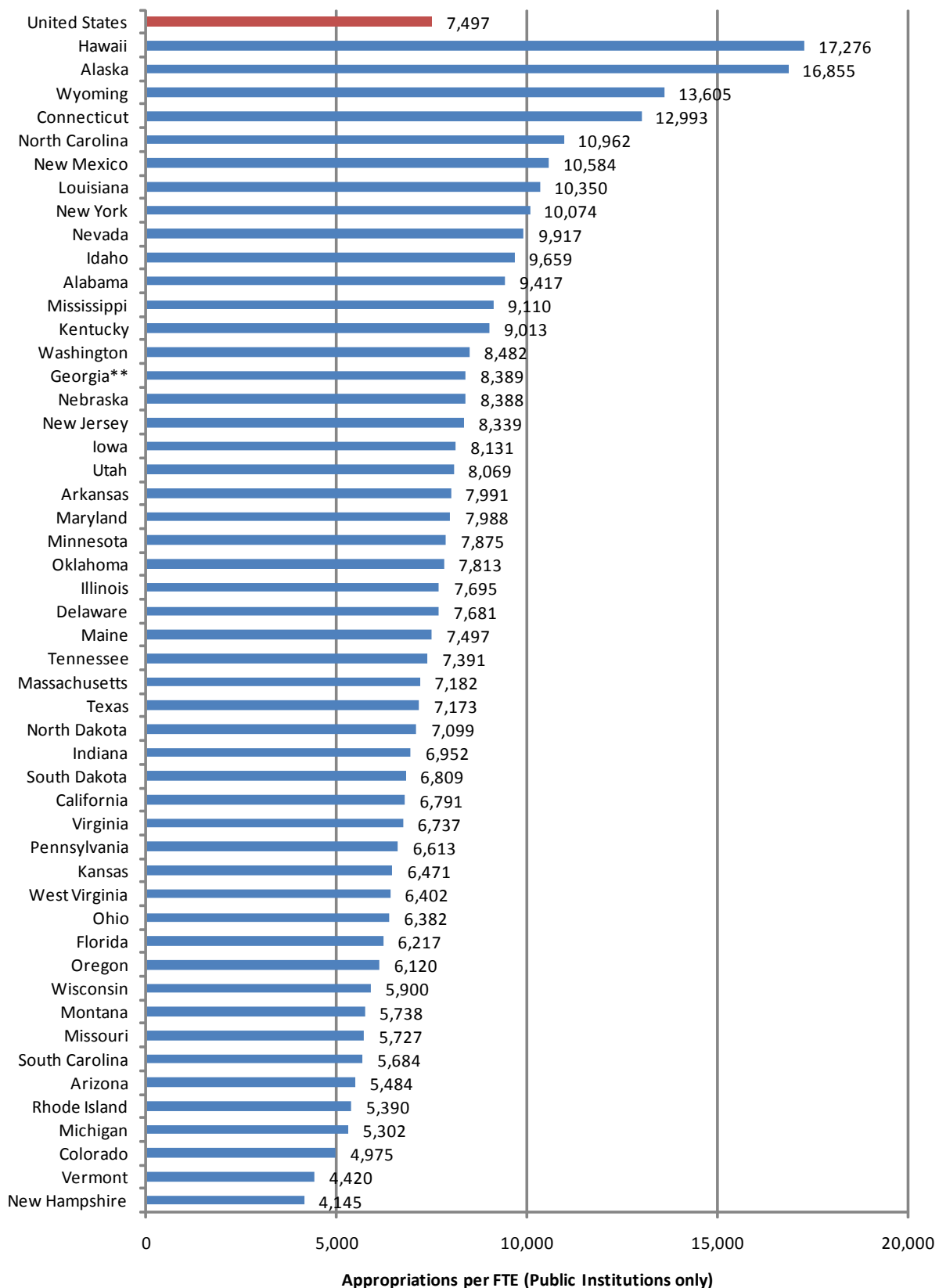
On February 17, 2009, President Barack Obama signed into law the American Recovery and Reinvestment Act of 2009 (ARRA) in order to provide states the opportunity to utilize one-time federal funds to protect access and quality while improving cost effectiveness and increasing degree productivity. While ARRA contains strong directives to promote improvements in K-12 education, the same are not available regarding funds for higher education. Therefore, the postsecondary funding gap is reaching epic proportions, especially with the economic collapse of 2008-09. The economic crisis will continue to push higher education in understandable-but-predicted directions: tuition hikes, cutbacks in enrollment, and rollbacks in programs designed to reduce attainment gaps and increase degree production.

The Administration has requested \$2 billion for Higher Education programs out of the total of \$98.2 billion in funding for the Department of Education (about 2 percent of the budget), a 15 percent decrease from FY2009.⁷ Along with a decrease from FY2009 to FY2010 in the federal budget for higher education, states have began cutting their budgets once more.

⁶ SHEEO SHEF Early Release

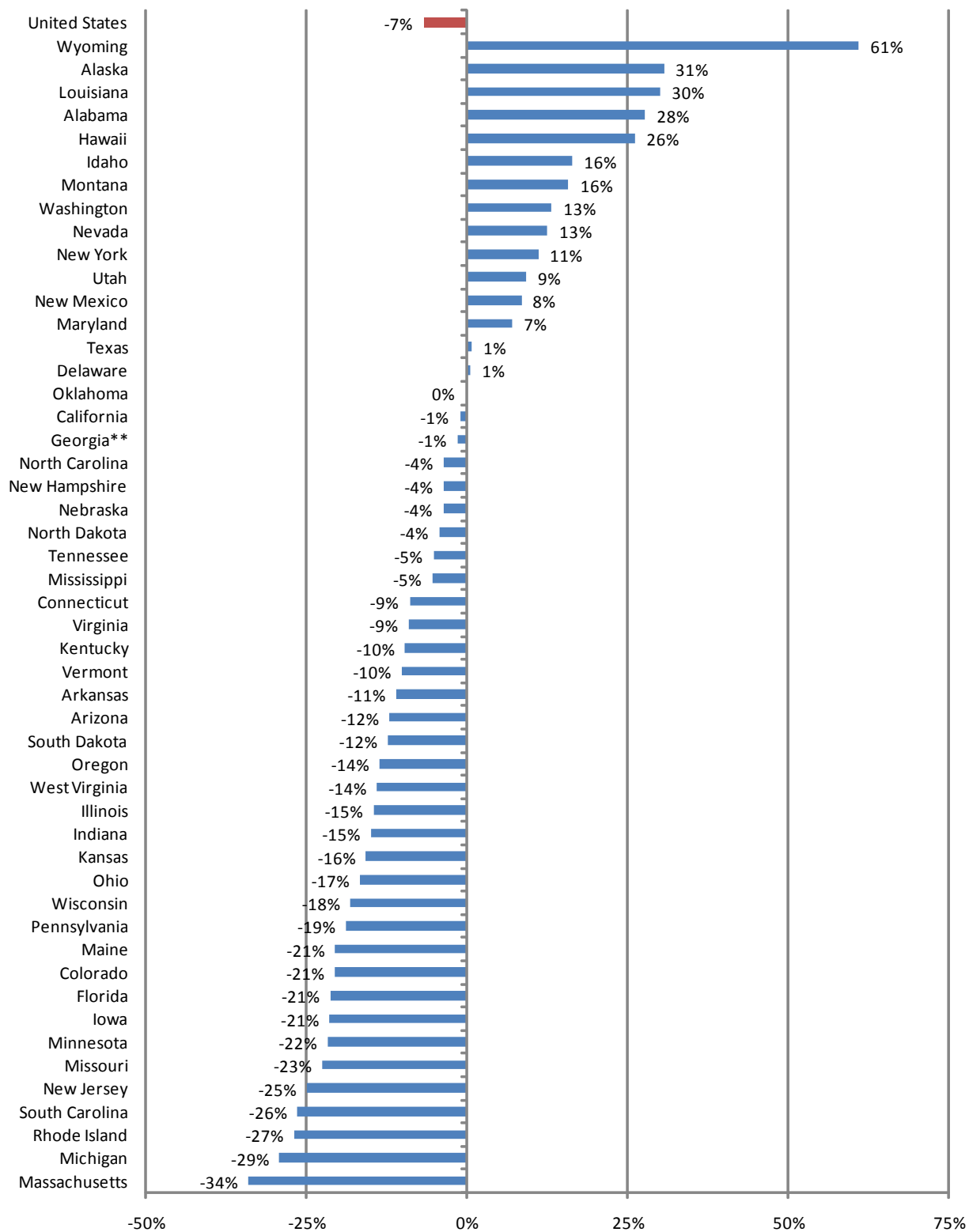
⁷ <http://www.ed.gov/about/overview/budget/budget10/summary/appendix1.pdf>.

FIGURE 2. Appropriations of State Tax Funds for Operating Expenses of Higher Education per FTE (Public Institutions Only) in the 50 States for Fiscal Year 2009



SOURCE: Grapevine Report, Illinois State University (<http://www.grapevine.ilstu.edu/index.shtml>). Data adjusted for inflation.
 FTE data: SHEEO State Higher Education Finance (Early Release) 2008 (<http://sheeo.org/finance/shef/SHEF%20FY08%20Early%20Release%202.pdf>)

FIGURE 3. 10-Year Change in Appropriations of State Tax Funds for Operating Expenses of Higher Education per FTE (Public Institutions Only) in the 50 States for Fiscal Year FY 1999 to 2009



10-year percentage change in Appropriations per FTE (public institutions only) Adjusted for Inflation

SOURCE: Grapevine Report, Illinois State University (<http://www.grapevine.ilstu.edu/index.shtml>). Data adjusted for inflation. FTE data: SHEEO State Higher Education Finance (Early Release) 2008 (<http://sheeo.org/finance/shef/SHEF%20FY08%20Early%20Release%202.pdf>)

TABLE 2. Appropriations of State Tax Funds for Operating Expenses of Higher Education in the 50 States for Fiscal Years 1999, 2004, 2007, 2008, and 2009, with Percentages of Change Over the Most Recent One, Two, Five, and Ten Years (In \$1,000s). IN CURRENT DOLLARS.

STATES	FY 99	FY 04*	FY07	FY 08	FY 09	1-yr Change	2-yr Change	5-yr Change	10-yr Change
Alabama	1,042,954	1,167,537	1,685,067	1,959,750	1,754,251	-10.5%	4.1%	50.3%	68.2%
Alaska	170,403	217,245	286,725	296,910	315,239	6.2%	9.9%	45.1%	85.0%
Arizona	836,389	863,472	1,106,044	1,227,971	1,227,594	0.0%	11.0%	42.2%	46.8%
Arkansas	556,447	667,357	785,273	862,049	858,501	-0.4%	9.3%	28.6%	54.3%
California	7,250,661	8,450,942	11,098,331	11,552,699	11,759,821	1.8%	6.0%	39.2%	62.2%
Colorado	676,520	591,511	681,903	737,724	802,400	8.8%	17.7%	35.7%	18.6%
Connecticut	623,692	748,226	923,719	1,034,204	1,001,601	-3.2%	8.4%	33.9%	60.6%
Delaware	164,115	190,289	233,226	243,130	242,868	-0.1%	4.1%	27.6%	48.0%
Florida	2,501,857	2,808,468	3,659,076	3,668,708	3,344,365	-8.8%	-8.6%	19.1%	33.7%
Georgia**	1,483,818	1,891,270	2,217,101	2,428,859	2,606,982	7.3%	17.6%	37.8%	75.7%
Hawaii	322,258	398,836	503,627	554,292	612,780	10.6%	21.7%	53.6%	90.2%
Idaho	266,522	318,828	365,998	399,382	424,692	6.3%	16.0%	33.2%	59.3%
Illinois	2,411,068	2,701,159	2,787,716	2,935,504	3,011,705	2.6%	8.0%	11.5%	24.9%
Indiana	1,147,819	1,360,318	1,456,561	1,528,494	1,594,375	4.3%	9.5%	17.2%	38.9%
Iowa	784,987	737,752	804,488	873,709	935,161	7.0%	16.2%	26.8%	19.1%
Kansas	604,704	685,832	788,720	825,698	839,517	1.7%	6.4%	22.4%	38.8%
Kentucky	888,700	1,104,797	1,253,192	1,312,462	1,283,253	-2.2%	2.4%	16.2%	44.4%
Louisiana	859,036	1,208,995	1,430,956	1,702,159	1,715,878	0.8%	19.9%	41.9%	99.7%
Maine	199,149	233,695	259,089	274,767	266,399	-3.0%	2.8%	14.0%	33.8%
Maryland	942,748	1,140,033	1,435,940	1,548,379	1,646,880	6.4%	14.7%	44.5%	74.7%
Massachusetts	975,360	828,405	1,029,545	1,051,518	1,038,416	-1.2%	0.9%	25.4%	6.5%
Michigan	1,882,500	1,984,293	2,040,389	2,033,709	2,061,066	1.3%	1.0%	3.9%	9.5%
Minnesota	1,239,394	1,287,455	1,400,500	1,574,499	1,576,292	0.1%	12.6%	22.4%	27.2%
Mississippi	751,195	795,963	904,205	1,043,246	1,070,923	2.7%	18.4%	34.5%	42.6%
Missouri	859,461	838,596	895,376	935,281	1,027,185	9.8%	14.7%	22.5%	19.5%
Montana	129,929	150,576	169,434	189,506	204,029	7.7%	20.4%	35.5%	57.0%
Nebraska	440,095	498,854	571,039	607,938	632,901	4.1%	10.8%	26.9%	43.8%
Nevada	290,363	483,134	597,852	621,534	627,980	1.0%	5.0%	30.0%	116.3%
New Hampshire	91,156	112,446	123,966	133,093	138,512	4.1%	11.7%	23.2%	52.0%
New Jersey	1,448,860	1,740,829	1,987,225	2,044,508	1,984,924	-2.9%	-0.1%	14.0%	37.0%
New Mexico	517,261	644,996	861,447	959,313	901,770	-6.0%	4.7%	39.8%	74.3%
New York	3,104,892	3,752,758	4,807,447	5,136,537	5,304,386	3.3%	10.3%	41.3%	70.8%
North Carolina	2,149,972	2,474,773	3,389,715	3,730,894	3,920,102	5.1%	15.6%	58.4%	82.3%
North Dakota	173,107	201,545	215,719	253,901	253,901	0.0%	17.7%	26.0%	46.7%
Ohio	1,934,587	2,071,035	2,207,680	2,287,796	2,499,847	9.3%	13.2%	20.7%	29.2%
Oklahoma	725,450	739,651	955,483	1,015,150	1,025,024	1.0%	7.3%	38.6%	41.3%
Oregon	568,079	584,025	649,643	727,612	791,373	8.8%	21.8%	35.5%	39.3%
Pennsylvania	1,773,094	1,946,617	2,153,998	2,193,274	2,242,118	2.2%	4.1%	15.2%	26.5%
Rhode Island	143,100	171,225	182,343	174,972	162,333	-7.2%	-11.0%	-5.2%	13.4%
South Carolina	774,648	775,569	900,400	999,200	822,493	-17.7%	-8.7%	6.1%	6.2%
South Dakota	125,322	152,725	175,831	192,911	201,521	4.5%	14.6%	32.0%	60.8%
Tennessee	967,969	1,088,680	1,254,677	1,346,366	1,255,834	-6.7%	0.1%	15.4%	29.7%
Texas	3,527,867	4,939,809	5,449,196	6,058,375	5,773,809	-4.7%	6.0%	16.9%	63.7%
Utah	489,878	603,196	705,073	799,241	826,345	3.4%	17.2%	37.0%	68.7%
Vermont	59,173	77,153	85,217	88,195	88,257	0.1%	3.6%	14.4%	49.2%
Virginia	1,299,919	1,346,281	1,854,731	1,885,554	1,899,318	0.7%	2.4%	41.1%	46.1%
Washington	1,146,399	1,344,701	1,630,945	1,767,760	1,876,675	6.2%	15.1%	39.6%	63.7%
West Virginia	362,261	353,169	389,611	456,747	470,705	3.1%	20.8%	33.3%	29.9%
Wisconsin	1,040,341	1,114,812	1,174,980	1,242,558	1,292,042	4.0%	10.0%	15.9%	24.2%
Wyoming	139,711	198,634	261,214	282,692	313,646	10.9%	20.1%	57.9%	124.5%
Totals	52,865,190	60,788,467	72,787,633	77,800,730	78,527,989	0.9%	7.9%	29.2%	48.5%

SOURCE: Grapevine Report, Illinois State University (<http://www.grapevine.ilstu.edu/index.shtml>).

TABLE 2b. Appropriations of State Tax Funds for Operating Expenses of Higher Education in the 50 States for Fiscal Years 1999, 2004, 2007, 2008, and 2009, with Percentages of Change Over the Most Recent One, Two, Five, and Ten Years (In \$1,000s). IN CONSTANT DOLLARS

STATES	FY 99	FY 04*	FY07	FY 08	FY 09	1-yr Change	2-yr Change	5-yr Change	10-yr Change
Alabama	1,329,978	1,312,413	1,725,530	1,932,614	1,754,251	-9.2%	1.7%	33.7%	31.9%
Alaska	217,298	244,202	293,610	292,799	315,239	7.7%	7.4%	29.1%	45.1%
Arizona	1,066,566	970,617	1,132,603	1,210,968	1,227,594	1.4%	8.4%	26.5%	15.1%
Arkansas	709,583	750,167	804,129	850,112	858,501	1.0%	6.8%	14.4%	21.0%
California	9,246,063	9,499,592	11,364,831	11,392,731	11,759,821	3.2%	3.5%	23.8%	27.2%
Colorado	862,700	664,910	698,277	727,509	802,400	10.3%	14.9%	20.7%	-7.0%
Connecticut	795,334	841,071	945,900	1,019,884	1,001,601	-1.8%	5.9%	19.1%	25.9%
Delaware	209,280	213,901	238,826	239,763	242,868	1.3%	1.7%	13.5%	16.0%
Florida	3,190,375	3,156,962	3,746,940	3,617,908	3,344,365	-7.6%	-10.7%	5.9%	4.8%
Georgia**	1,892,169	2,125,952	2,270,339	2,395,227	2,606,982	8.8%	14.8%	22.6%	37.8%
Hawaii	410,944	448,326	515,720	546,617	612,780	12.1%	18.8%	36.7%	49.1%
Idaho	339,870	358,390	374,787	393,852	424,692	7.8%	13.3%	18.5%	25.0%
Illinois	3,074,600	3,036,337	2,854,656	2,894,857	3,011,705	4.0%	5.5%	-0.8%	-2.0%
Indiana	1,463,702	1,529,115	1,491,537	1,507,329	1,594,375	5.8%	6.9%	4.3%	8.9%
Iowa	1,001,018	829,297	823,806	861,611	935,161	8.5%	13.5%	12.8%	-6.6%
Kansas	771,120	770,935	807,659	814,265	839,517	3.1%	3.9%	8.9%	8.9%
Kentucky	1,133,273	1,241,888	1,283,284	1,294,289	1,283,253	-0.9%	0.0%	3.3%	13.2%
Louisiana	1,095,445	1,359,015	1,465,317	1,678,590	1,715,878	2.2%	17.1%	26.3%	56.6%
Maine	253,955	262,693	265,310	270,962	266,399	-1.7%	0.4%	1.4%	4.9%
Maryland	1,202,195	1,281,496	1,470,421	1,526,939	1,646,880	7.9%	12.0%	28.5%	37.0%
Massachusetts	1,243,782	931,199	1,054,267	1,036,958	1,038,416	0.1%	-1.5%	11.5%	-16.5%
Michigan	2,400,569	2,230,517	2,089,384	2,005,549	2,061,066	2.8%	-1.4%	-7.6%	-14.1%
Minnesota	1,580,479	1,447,211	1,434,130	1,552,697	1,576,292	1.5%	9.9%	8.9%	-0.3%
Mississippi	957,926	894,731	925,917	1,028,800	1,070,923	4.1%	15.7%	19.7%	11.8%
Missouri	1,095,987	942,655	916,876	922,330	1,027,185	11.4%	12.0%	9.0%	-6.3%
Montana	165,686	169,260	173,503	186,882	204,029	9.2%	17.6%	20.5%	23.1%
Nebraska	561,210	560,755	584,751	599,520	632,901	5.6%	8.2%	12.9%	12.8%
Nevada	370,272	543,085	612,208	612,928	627,980	2.5%	2.6%	15.6%	69.6%
New Hampshire	116,242	126,399	126,943	131,250	138,512	5.5%	9.1%	9.6%	19.2%
New Jersey	1,847,590	1,956,843	2,034,943	2,016,198	1,984,924	-1.6%	-2.5%	1.4%	7.4%
New Mexico	659,613	725,031	882,133	946,030	901,770	-4.7%	2.2%	24.4%	36.7%
New York	3,959,367	4,218,425	4,922,886	5,065,412	5,304,386	4.7%	7.7%	25.7%	34.0%
North Carolina	2,741,650	2,781,860	3,471,111	3,679,233	3,920,102	6.5%	12.9%	40.9%	43.0%
North Dakota	220,747	226,554	220,899	250,385	253,901	1.4%	14.9%	12.1%	15.0%
Ohio	2,466,991	2,328,023	2,260,692	2,256,117	2,499,847	10.8%	10.6%	7.4%	1.3%
Oklahoma	925,096	831,432	978,427	1,001,093	1,025,024	2.4%	4.8%	23.3%	10.8%
Oregon	724,416	656,495	665,243	717,537	791,373	10.3%	19.0%	20.5%	9.2%
Pennsylvania	2,261,054	2,188,166	2,205,721	2,162,904	2,242,118	3.7%	1.7%	2.5%	-0.8%
Rhode Island	182,482	192,472	186,722	172,549	162,333	-5.9%	-13.1%	-15.7%	-11.0%
South Carolina	987,833	871,807	922,021	985,364	822,493	-16.5%	-10.8%	-5.7%	-16.7%
South Dakota	159,811	171,676	180,053	190,240	201,521	5.9%	11.9%	17.4%	26.1%
Tennessee	1,234,357	1,223,771	1,284,805	1,327,723	1,255,834	-5.4%	-2.3%	2.6%	1.7%
Texas	4,498,746	5,552,774	5,580,045	5,974,486	5,773,809	-3.4%	3.5%	4.0%	28.3%
Utah	624,694	678,045	722,004	788,174	826,345	4.8%	14.5%	21.9%	32.3%
Vermont	75,458	86,727	87,263	86,974	88,257	1.5%	1.1%	1.8%	17.0%
Virginia	1,657,660	1,513,337	1,899,268	1,859,445	1,899,318	2.1%	0.0%	25.5%	14.6%
Washington	1,461,891	1,511,561	1,670,108	1,743,282	1,876,675	7.7%	12.4%	24.2%	28.4%
West Virginia	461,956	396,993	398,967	450,423	470,705	4.5%	18.0%	18.6%	1.9%
Wisconsin	1,326,646	1,253,145	1,203,194	1,225,353	1,292,042	5.4%	7.4%	3.1%	-2.6%
Wyoming	178,160	223,282	267,486	278,778	313,646	12.5%	17.3%	40.5%	76.0%
Totals	67,413,833	68,331,510	74,535,454	76,723,439	78,527,989	2.4%	5.4%	14.9%	16.5%

SOURCE: Grapevine Report, Illinois State University (<http://www.grapevine.ilstu.edu/index.shtml>).NOTE: Constant dollar figures adjusted using CPI Index data from the Bureau of Labor Statistics (<ftp://ftp.bls.gov/pub/special.requests/cpi/cpiat.txt>).

TABLE 3. Public Higher Education FTEs and Funds per FTE in the 50 States for Fiscal Years 1999, 2008, and 2009, with Percentages of Change Over the Most Recent One and Ten Years (IN CURRENT DOLLARS)

STATES	FTE Data (Public Institutions Only)				Funds per FTE			Change	
	1998 FTE	2007 FTE	2008 FTE	Net	1999 Funds per FTE	2008 Funds per FTE	2009 Funds per FTE	10-year change	1-year change
Alabama	180,335	182,504	186,280	5,945	5,783	10,738	9,417	63%	-12%
Alaska	16,840	18,656	18,703	1,863	10,119	15,915	16,855	67%	6%
Arizona	170,930	221,180	223,852	52,922	4,893	5,552	5,484	12%	-1%
Arkansas	78,940	103,369	107,428	28,488	7,049	8,340	7,991	13%	-4%
California	1,346,144	1,686,828	1,731,754	385,610	5,386	6,849	6,791	26%	-1%
Colorado	137,682	157,382	161,283	23,601	4,914	4,687	4,975	1%	6%
Connecticut	55,727	74,951	77,088	21,361	11,192	13,798	12,993	16%	-6%
Delaware	27,401	31,269	31,619	4,218	5,989	7,775	7,681	28%	-1%
Florida	403,535	518,086	537,898	134,363	6,200	7,081	6,217	0%	-12%
Georgia**	222,203	297,755	310,759	88,556	6,678	8,157	8,389	26%	3%
Hawaii	29,993	35,010	35,469	5,476	10,744	15,832	17,276	61%	9%
Idaho	40,937	43,378	43,968	3,031	6,511	9,207	9,659	48%	5%
Illinois	341,197	390,359	391,386	50,189	7,066	7,520	7,695	9%	2%
Indiana	178,920	223,602	229,345	50,425	6,415	6,836	6,952	8%	2%
Iowa	96,706	112,934	115,011	18,305	8,117	7,736	8,131	0%	5%
Kansas	100,435	127,245	129,737	29,302	6,021	6,489	6,471	7%	0%
Kentucky	113,583	145,605	142,382	28,799	7,824	9,014	9,013	15%	0%
Louisiana	137,610	166,671	165,781	28,171	6,243	10,213	10,350	66%	1%
Maine	26,913	35,514	35,533	8,620	7,400	7,737	7,497	1%	-3%
Maryland	161,140	197,966	206,162	45,022	5,850	7,821	7,988	37%	2%
Massachusetts	114,154	139,688	144,578	30,424	8,544	7,528	7,182	-16%	-5%
Michigan	320,533	384,225	388,725	68,192	5,873	5,293	5,302	-10%	0%
Minnesota	156,973	191,456	200,160	43,187	7,896	8,224	7,875	0%	-4%
Mississippi	99,503	115,739	117,556	18,053	7,549	9,014	9,110	21%	1%
Missouri	148,155	174,650	179,364	31,209	5,801	5,355	5,727	-1%	7%
Montana	33,431	35,293	35,556	2,125	3,886	5,370	5,738	48%	7%
Nebraska	64,441	73,940	75,451	11,010	6,829	8,222	8,388	23%	2%
Nevada	42,013	61,323	63,324	21,311	6,911	10,135	9,917	43%	-2%
New Hampshire	27,027	32,093	33,416	6,389	3,373	4,147	4,145	23%	0%
New Jersey	166,289	229,968	238,040	71,751	8,713	8,890	8,339	-4%	-6%
New Mexico	67,591	83,224	85,203	17,612	7,653	11,527	10,584	38%	-8%
New York	436,396	508,909	526,538	90,142	7,115	10,093	10,074	42%	0%
North Carolina	241,175	344,056	357,601	116,426	8,915	10,844	10,962	23%	1%
North Dakota	29,759	35,429	35,767	6,008	5,817	7,166	7,099	22%	-1%
Ohio	322,011	383,492	391,725	69,714	6,008	5,966	6,382	6%	7%
Oklahoma	118,153	132,093	131,191	13,038	6,140	7,685	7,813	27%	2%
Oregon	102,238	124,794	129,309	27,071	5,556	5,831	6,120	10%	5%
Pennsylvania	277,287	337,425	339,043	61,756	6,394	6,500	6,613	3%	2%
Rhode Island	24,730	28,925	30,120	5,390	5,786	6,049	5,390	-7%	-11%
South Carolina	127,873	146,624	144,696	16,823	6,058	6,815	5,684	-6%	-17%
South Dakota	20,564	29,231	29,595	9,031	6,094	6,600	6,809	12%	3%
Tennessee	158,340	171,845	169,924	11,584	6,113	7,835	7,391	21%	-6%
Texas	631,994	794,211	804,918	172,924	5,582	7,628	7,173	29%	-6%
Utah	84,598	102,372	102,406	17,808	5,791	7,807	8,069	39%	3%
Vermont	15,324	19,457	19,968	4,644	3,861	4,533	4,420	14%	-2%
Virginia	223,817	273,039	281,940	58,123	5,808	6,906	6,737	16%	-2%
Washington	195,074	214,847	221,264	26,190	5,877	8,228	8,482	44%	3%
West Virginia	62,026	72,679	73,525	11,499	5,840	6,284	6,402	10%	2%
Wisconsin	184,019	215,098	219,006	34,987	5,653	5,777	5,900	4%	2%
Wyoming	21,077	22,569	23,054	1,977	6,629	12,526	13,605	105%	9%
Totals	8,383,736	10,248,958	10,474,401	2,090,665	6,306	5,931	7,497	19%	26%

SOURCE: Grapevine Report, Illinois State University (<http://www.grapevine.ilstu.edu/index.shtml>).FTE data: SHEEO State Higher Education Finance (Early Release) 2008 (<http://sheeo.org/finance/shef/SHEF%20FY08%20Early%20Release%202.pdf>)

TABLE 3b. Public Higher Education FTEs and Funds per FTE in the 50 States for Fiscal Years 1999, 2008, and 2009, with Percentages of Change Over the Most Recent One and Ten Years (IN CONSTANT DOLLARS)

STATES	FTE Data (Public Institutions Only)				Funds per FTE			Change	
	1998 FTE	2007 FTE	2008 FTE	Net	1999 Funds per FTE	2008 Funds per FTE	2009 Funds per FTE	10-year change	1-year change
Alabama	180,335	182,504	186,280	5,945	7,375	10,589	9,417	28%	-11%
Alaska	16,840	18,656	18,703	1,863	12,904	15,695	16,855	31%	7%
Arizona	170,930	221,180	223,852	52,922	6,240	5,475	5,484	-12%	0%
Arkansas	78,940	103,369	107,428	28,488	8,989	8,224	7,991	-11%	-3%
California	1,346,144	1,686,828	1,731,754	385,610	6,869	6,754	6,791	-1%	1%
Colorado	137,682	157,382	161,283	23,601	6,266	4,623	4,975	-21%	8%
Connecticut	55,727	74,951	77,088	21,361	14,272	13,607	12,993	-9%	-5%
Delaware	27,401	31,269	31,619	4,218	7,638	7,668	7,681	1%	0%
Florida	403,535	518,086	537,898	134,363	7,906	6,983	6,217	-21%	-11%
Georgia**	222,203	297,755	310,759	88,556	8,515	8,044	8,389	-1%	4%
Hawaii	29,993	35,010	35,469	5,476	13,701	15,613	17,276	26%	11%
Idaho	40,937	43,378	43,968	3,031	8,302	9,080	9,659	16%	6%
Illinois	341,197	390,359	391,386	50,189	9,011	7,416	7,695	-15%	4%
Indiana	178,920	223,602	229,345	50,425	8,181	6,741	6,952	-15%	3%
Iowa	96,706	112,934	115,011	18,305	10,351	7,629	8,131	-21%	7%
Kansas	100,435	127,245	129,737	29,302	7,678	6,399	6,471	-16%	1%
Kentucky	113,583	145,605	142,382	28,799	9,977	8,889	9,013	-10%	1%
Louisiana	137,610	166,671	165,781	28,171	7,961	10,071	10,350	30%	3%
Maine	26,913	35,514	35,533	8,620	9,436	7,630	7,497	-21%	-2%
Maryland	161,140	197,966	206,162	45,022	7,461	7,713	7,988	7%	4%
Massachusetts	114,154	139,688	144,578	30,424	10,896	7,423	7,182	-34%	-3%
Michigan	320,533	384,225	388,725	68,192	7,489	5,220	5,302	-29%	2%
Minnesota	156,973	191,456	200,160	43,187	10,068	8,110	7,875	-22%	-3%
Mississippi	99,503	115,739	117,556	18,053	9,627	8,889	9,110	-5%	2%
Missouri	148,155	174,650	179,364	31,209	7,398	5,281	5,727	-23%	8%
Montana	33,431	35,293	35,556	2,125	4,956	5,295	5,738	16%	8%
Nebraska	64,441	73,940	75,451	11,010	8,709	8,108	8,388	-4%	3%
Nevada	42,013	61,323	63,324	21,311	8,813	9,995	9,917	13%	-1%
New Hampshire	27,027	32,093	33,416	6,389	4,301	4,090	4,145	-4%	1%
New Jersey	166,289	229,968	238,040	71,751	11,111	8,767	8,339	-25%	-5%
New Mexico	67,591	83,224	85,203	17,612	9,759	11,367	10,584	8%	-7%
New York	436,396	508,909	526,538	90,142	9,073	9,953	10,074	11%	1%
North Carolina	241,175	344,056	357,601	116,426	11,368	10,694	10,962	-4%	3%
North Dakota	29,759	35,429	35,767	6,008	7,418	7,067	7,099	-4%	0%
Ohio	322,011	383,492	391,725	69,714	7,661	5,883	6,382	-17%	8%
Oklahoma	118,153	132,093	131,191	13,038	7,830	7,579	7,813	0%	3%
Oregon	102,238	124,794	129,309	27,071	7,086	5,750	6,120	-14%	6%
Pennsylvania	277,287	337,425	339,043	61,756	8,154	6,410	6,613	-19%	3%
Rhode Island	24,730	28,925	30,120	5,390	7,379	5,965	5,390	-27%	-10%
South Carolina	127,873	146,624	144,696	16,823	7,725	6,720	5,684	-26%	-15%
South Dakota	20,564	29,231	29,595	9,031	7,771	6,508	6,809	-12%	5%
Tennessee	158,340	171,845	169,924	11,584	7,796	7,726	7,391	-5%	-4%
Texas	631,994	794,211	804,918	172,924	7,118	7,523	7,173	1%	-5%
Utah	84,598	102,372	102,406	17,808	7,384	7,699	8,069	9%	5%
Vermont	15,324	19,457	19,968	4,644	4,924	4,470	4,420	-10%	-1%
Virginia	223,817	273,039	281,940	58,123	7,406	6,810	6,737	-9%	-1%
Washington	195,074	214,847	221,264	26,190	7,494	8,114	8,482	13%	5%
West Virginia	62,026	72,679	73,525	11,499	7,448	6,197	6,402	-14%	3%
Wisconsin	184,019	215,098	219,006	34,987	7,209	5,697	5,900	-18%	4%
Wyoming	21,077	22,569	23,054	1,977	8,453	12,352	13,605	61%	10%
Totals	8,383,736	10,248,958	10,474,401	2,090,665	8,041	5,849	7,497	-7%	28%

SOURCE: Grapevine Report, Illinois State University (<http://www.grapevine.ilstu.edu/index.shtml>). Data adjusted for inflation.

FTE data: SHEEO State Higher Education Finance (Early Release) 2008 (<http://sheeo.org/finance/shef/SHEF%20FY08%20Early%20Release%20202.pdf>).

NOTE: Constant dollar figures adjusted using CPI Index data from the Bureau of Labor Statistics (<ftp://ftp.bls.gov/pub/special.requests/cpi/cpi.txt>).

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