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## **College Costs and Prices: Background and Issues for Reauthorization of the Higher Education Act**

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## Summary

Questions are being asked by policymakers, as well as students and their families, about the driving forces behind college prices and whether current increases in tuition are merited. For students and their families, these questions focus primarily on whether they will be able to afford a college education and whether their choice of postsecondary institutions is limited by price. For federal policymakers, concerns focus on issues of affordability, and access, and whether increased funding for federal student financial aid programs further escalates the price of higher education.

Based on available data, college tuition and fees have been rising more rapidly than household income over the past 2 decades. The divergence is particularly pronounced for low-income households and becomes less pronounced as household income increases. Some research has identified specific factors related to increases in college price. For example, price increases at public 4-year institutions are strongly related to decreases in state appropriations. Given the current budget crisis that is affecting states nationwide, double-digit increases in tuition and fees are slated in some states for the 2003-2004 academic year.

It should be noted, however, that during the 2002-2003 academic year, over half of full-time undergraduates at all 4-year institutions attended institutions charging less than \$8,000 in tuition and fees, while only 7% attended institutions charging \$24,000 or more. At 4-year public institutions, 78% of full-time undergraduates attended institutions charging less than \$5,000. While \$5,000 or \$8,000 may still be more than some students can afford to pay, the issue of price is more productively viewed through this lens rather than one colored by the relatively high prices of the most selective institutions in the country.

In analyzing price increases, researchers have considered whether a relationship exists between federal aid and price increases. While federal grant aid does not seem to affect college prices, less is known about the effects of federal loans and tax credits. A direct relationship between loans and higher tuition has not been identified, but an indirect relationship may exist. With respect to tax credits, limited evidence suggests a relationship may exist under certain circumstances. In general, a complex set of factors affects college prices directly and indirectly, making it hard to say definitively what are the underlying causes of price increases. This coupled with the tremendous diversity of institutions makes it difficult to determine what can or should be done about the issue of rising college prices.

There are several ways Congress could consider addressing the issue, such as imposing price controls, offering incentives for controlling prices or costs, ensuring the public is better educated about college cost and price issues, reducing regulatory burden, or changing federal financial aid programs. It is not clear which of these strategies would be most effective, or if Congress has appropriate tools at its disposal to address the issues of costs and prices. This report will not be updated.

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# College Costs and Prices: Background and Issues for Reauthorization of the Higher Education Act

## Overview

Questions are being asked by policymakers, as well as students and their families, about the driving forces behind college prices and whether the increases in tuition are merited. For students and their families, these questions focus primarily on whether they will be able to afford a college education and whether their choice of postsecondary institutions is limited by price. For federal policymakers, concerns focus on issues of affordability, access for low-income students, and whether increased funding for federal student financial aid programs further escalates the price of higher education.

While financial barriers to obtaining a college education take many forms, this report focuses on college prices. There are few definitive answers about why college prices continue to rise, but research begins to clarify some of the likely causes of the price increases. Based on the focus of the research and available data, this report discusses college prices and costs with respect to undergraduates, particularly full-time undergraduates.

Based on available data, college tuition and fees have been rising more rapidly than household income over the past 2 decades. The divergence is particularly pronounced for low-income households and becomes less pronounced as household income increases. Some research has identified specific factors related to increases in college price. For example, price increases at public 4-year institutions are strongly related to decreases in state appropriations. Given the current budget crisis that is affecting states nationwide, this relationship is being realized in the form of double-digit increases in tuition and fees in some states for the 2003-2004 academic year.

It should be noted, however, that during the 2002-2003 academic year, over half of full-time undergraduates at all 4-year institutions attended institutions charging less than \$8,000 in tuition and fees, while only 7% attended institutions charging \$24,000 or more. At 4-year public institutions, 78% of full-time undergraduates attended institutions charging less than \$5,000. While \$5,000 or \$8,000 may still be more than some students can afford to pay, the issue of price is more productively viewed through this lens rather than one colored by the relatively high prices of the most selective institutions in the country.

In analyzing price increases, researchers have considered whether a relationship exists between federal aid and price increases. While federal grant aid does not seem

to affect college prices, less is known about the effects of federal loans and tax credits. A direct relationship between loans and higher tuition has not been identified, but an indirect relationship may exist. With respect to tax credits, limited evidence suggests that a relationship may exist under certain circumstances.

In general, a complex set of factors affects college prices directly and indirectly, making it hard to say definitively what are the underlying causes of price increases. This coupled with the tremendous diversity of institutions that constitute postsecondary schools makes it difficult to determine what can or should be done about the issue of rising college prices.

There are several ways Congress could consider addressing the issue, such as imposing price controls, offering incentives for controlling prices or costs, ensuring the public is better educated about college cost and price issues, reducing regulatory burden, or changing federal financial aid programs. It is not clear which of these strategies would be most effective, or if Congress has tools at its disposal to appropriately address the issues of college costs and prices.

The first part of this report focuses on the differences between college costs and college prices. College costs refer to what institutions spend to provide education and related services, while college prices refer to what students and their families are charged for a higher education and what they actually pay. This is followed by an overview of how legislation currently addresses these issues. The next part of the report examines institutional revenue and expenditures. The discussion then focuses on a historical overview of college price. A brief discussion of net price and financial aid also is provided. The next part of the report focuses on possible explanations for price increases. The report concludes with an overview of relevant issues for reauthorization of the Higher Education Act of 1965 as amended (HEA, P.L. 89-329 as amended by P.L. 105-244). Where data are available, this report considers all types of postsecondary education institutions — public, private, not-for-profit, and private for-profit institutions.

## Measures of College Costs and Price

In discussing how much it costs to attend college, how much it costs to educate students, or how much families need to save for college, it is critical to distinguish between two concepts: cost and price. College **costs** generally refer to what institutions spend to provide education and educational-related services to students. **Price** commonly refers to what students and their families are charged for higher education and what they pay. As discussed throughout this report, these amounts are not necessarily the same.

Three distinctions are frequently made in the definition of price. First, there is **sticker price**. This is the tuition and fees that institutions charge (e.g., the published price). The second distinction is the **total price of attendance**. This includes the tuition and fees that institutions charge students as well as other expenses related to attending that institution. These expenses may include room and board for on-campus housing, rent for off-campus housing, books, and transportation. A third

distinction in the definition of price involves **net price**. This is what students pay after financial aid is deducted from the total price of attendance.

Two measures of **net price** are commonly used. The first is a measure of **affordability**, subtracting **only** grants from the total price of attendance. Loans remain in total price of attendance for the measure of affordability, as loans must ultimately be repaid by the student or student's parents. This may affect decisions to attend college if students and their families are considering the overall price of college attendance. The second is a measure of **access**, subtracting **all** financial aid, including loans, from the total price of attendance. This measure focuses on the amount of money a student would need to attend college in a given year, without considering how much money will ultimately have to be repaid over time. Students generally are awarded financial aid based on merit or financial need. Generally, merit awards do not need to be repaid and, therefore, would be subtracted from both measures of affordability and access. Awards based on financial need, however, are made to encourage students who otherwise might not be able to attend college due to financial limitations to enroll in postsecondary education. These awards may take various forms, including grants and loans. Thus, financial aid may increase access to postsecondary education, but not necessarily reduce the ultimate price students will pay to attend.

## Higher Education Subsidy

In general, the cost of educating college students exceeds the sticker price charged by institutions; that is, in general, students, even those paying the sticker price, do not pay the full amount it costs an institution to educate them. Institutions make up the difference between what students pay and the actual cost of providing an education through subsidy payments supported by other sources of revenue, such as state appropriations, endowment earnings, private donations, and federal grants. Both public and private institutions provide some level of subsidy to students.<sup>1</sup>

To illustrate how the subsidy works, assume that the cost of education at a given institution is \$10,000. The institution receives \$8,000 per student in state appropriations and charges \$2,000 in tuition; thus, each student pays 20% of the actual cost.<sup>2</sup> Thus, all students, even students who pay the full \$2,000 in tuition are still subsidized.

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<sup>1</sup> For more information on subsidies, see, for example, G.C. Winston, "Higher Education's Costs, Prices, and Subsidies: Some Economic Facts and Fundamentals" in U.S. Department of Education, National Center for Education Statistics, 2001, *Study of College Costs and Prices, 1988-89 to 1997-98 Volume 2: Commissioned Papers*. At [<http://www.nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2002157>]. (Hereafter cited as ED, *Costs and Prices Volume 2*.)

<sup>2</sup> This assumes that the entire \$8,000 received in state appropriations for each student is used to offset the cost of providing education. There is some debate in the literature about whether this actually occurs. For example, some researchers argue that revenue may be diverted for other purposes, such as faculty or graduate student use. See D.W. Breneman, "An Essay on College Costs" in ED, *Costs and Prices Volume 2*.

As some researchers have noted, increases in college price do not necessarily mean that costs have increased but could mean that a source of revenue used to support the subsidy has decreased. Returning to the previous example, suppose the next year that the state appropriation per student is reduced to \$7,000, while the cost of providing an education remains at \$10,000. Tuition is raised to \$3,000 to accommodate the change in state appropriations; thus, each student now pays 30% of the actual cost, but tuition has increased by 50%. As discussed later in this report, the proportion of revenue that institutions derive from tuition has been increasing over time.

**In-State Versus Out-of-State Tuition at Public Institutions.** The majority of this report focuses on in-state tuition. In-state students have their tuition subsidized to some extent by state appropriations, as it is in the best interest of the state to educate its residents to subsequently realize long-term human capital gains. Thus, to encourage attendance and increase access to higher education for state residents, institutions charge a lower price for in-state residents than for out-of-state residents.

While out-of-state tuition is higher than that charged to resident students, the differences in these two prices vary from state to state.<sup>3</sup> Several states charge out-of-state students tuition at or near the full cost of instruction. Other states index non-resident tuition to the price charged for resident students. It should be noted that while non-resident students are charged a higher sticker price, they still might be subsidized in other ways.

## HEA and College Costs and Prices

Current HEA legislation does not focus specifically on the issue of controlling costs and prices. Congress traditionally has focused its role on providing student access to postsecondary education through the provision of student financial aid. This aid goes directly to the student, enabling the student to select an institution to attend.

The HEA does address issues of costs and prices from a regulatory perspective. For example, HEA Section 485(a) requires institutions to provide current and prospective students and their families with various data about the institution, including price of attendance, specific program costs, and availability and conditions for receiving financial aid, to help students determine whether the institution offers a high quality education at a price that they are willing to pay. All enrolled students must receive annual notification of what information is available and how it can be obtained. HEA Sections 131(a) and 487(a) also mandate that the National Center for Education Statistics (NCES) collect data from postsecondary institutions through the Integrated Postsecondary Education Data System (IPEDS), and that institutions respond to this data collection effort in a timely manner. In addition, HEA Section

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<sup>3</sup> For more details about current out-of-state tuition setting policies, see State Higher Education Executive Officers, 2003, *State Tuition, Fees, and Financial Assistance Policies, 2002-03*. At [<http://www.sheeo.org>]. (Hereafter cited as SHEEO, *State Tuition and Fees*.)



131(c)(4) also directs the Bureau of Labor Statistics (BLS) to develop a higher education market basket that identifies the items that compose the costs of higher education. BLS was required to report to Congress on the market basket at the end of FY2002. To date, the higher education market basket has not been developed.

## Institutional Revenue and Expenditures<sup>4</sup>

As previously discussed, most students attending postsecondary institutions receive some form of subsidy; that is, prices charged by institutions are less than the actual costs of educating students. Postsecondary institutions have various sources of revenue, including tuition and fees, and have a variety of expenditure categories that extend beyond instruction. Over the past 20 years, tuition has accounted for a larger proportion of revenue, while expenditures on scholarships and fellowships also have increased.

### Revenue

Sources of institutional revenue vary for public and private institutions. For public degree-granting institutions, during the 1999-2000 academic year current-fund revenues totaled \$157.3 billion (**Table 1**).<sup>5</sup> Of this, 36% of revenues were provided by state governments, primarily through appropriations. In 1980-1981, revenue provided by state governments accounted for 46% of total revenue. At the same time, the percentage of revenue derived from tuition and fees increased from 13% in 1980-1981 to 19% in 1999-2000. Thus, public institutions have been relying on tuition to provide a larger proportion of revenue, while the proportion of revenue derived from state appropriations has declined.

For private not-for-profit degree-granting institutions, total current-fund revenue totaled \$72.3 billion for 1995-1996, the most recent year for which data are available (**Table 1**).<sup>6</sup> Of this, tuition and fees accounted for 41% of revenue. In 1980-1981,

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<sup>4</sup> Throughout this discussion of revenue and expenditures, data from 1980-1981 to 1994-1995 are for institutions of higher education. These are institutions that were accredited by an agency or association recognized by ED. Beginning in 1995-1996, a new degree-granting classification was instituted. This classification is similar to the previous classification, except that it includes some additional institutions, mostly 2-year institutions, and excludes a few higher education institutions that did not award associate's degrees or higher.

<sup>5</sup> Current-fund revenues are "money received during the current fiscal year from revenue that can be used to pay obligations currently due, and surpluses reappropriated for the current fiscal year." (ED, *Digest 2002*, p. 543.)

<sup>6</sup> For private not-for-profit institutions, 1995-1996 is the last year for which current-fund revenue data are available in tables published by ED. This is due to differences in accounting standards used by public institutions and private institutions that were recognized by ED. For example, the Government Accounting Standards Board (GASB) sets standards for public institutions, while the Financial Accounting Standards Board (FASB) sets standards for private institutions. There are differences in the accounting standards used by GASB and FASB, most notably in the treatment of capital assets. It also should be noted that historical data are not available for private for-profit institutions.

tuition and fees provided 36% of revenue. Thus, private not-for-profit institutions have historically relied on tuition to provide a greater proportion of revenue than public institutions. Similar to public institutions, however, the percentage of revenue derived from tuition at private not-for-profit institutions also has increased over time.

**Table 1. Source of Current-Fund Revenue for Public and Private Not-For-Profit Institutions: Selected Years**  
(\$ in billions)

Control of institution and source of revenue	1980-1981		1985-1986		1990-1991		1995-1996		1999-2000	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
<b>Public</b>										
<i>Total</i>	\$43.2	100.0%	\$65.0	100.0%	\$94.9	100.0%	\$123.5	100.0%	\$157.3	100.0%
Tuition and fees	\$5.6	12.9%	\$9.4	14.5%	\$15.3	16.1%	\$23.3	18.8%	\$29.1	18.5%
Federal	\$5.5	12.8%	\$6.9	10.5%	\$9.8	10.3%	\$13.7	11.1%	\$17.0	10.8%
State	\$19.7	45.6%	\$29.2	45.0%	\$38.2	40.3%	\$44.2	35.8%	\$56.4	35.8%
Local	\$1.6	3.8%	\$2.3	3.6%	\$3.5	3.7%	\$5.1	4.1%	\$6.0	3.8%
Private	\$1.1	2.5%	\$2.1	3.2%	\$3.7	3.8%	\$5.1	4.1%	\$7.5	4.8%
Endowment	\$0.2	0.5%	\$0.4	0.6%	\$0.4	0.5%	\$0.7	0.6%	\$1.2	0.7%
Sales and services	\$8.5	19.6%	\$13.0	20.0%	\$21.5	22.7%	\$27.4	22.2%	\$34.0	21.6%
Other	\$1.0	2.4%	\$1.7	2.6%	\$2.5	2.6%	\$4.0	3.3%	\$6.2	3.9%
<b>Private not-for-profit</b>										
<i>Total</i>	\$22.1	100.0%	\$34.8	100.0%	\$53.7	100.0%	\$72.3	100.0%	—	—
Tuition and fees	\$7.9	35.9%	\$13.2	37.8%	\$21.2	39.4%	\$30.0	41.5%	—	—
Federal	\$4.2	19.0%	\$5.8	16.8%	\$8.4	15.7%	\$10.2	14.1%	—	—
State	\$0.4	1.9%	\$0.7	2.0%	\$1.2	2.3%	\$1.3	1.9%	—	—
Local	\$0.2	0.8%	\$0.2	0.6%	\$0.4	0.7%	\$0.5	0.7%	—	—
Private	\$2.1	9.4%	\$3.3	9.5%	\$4.7	8.8%	\$6.9	9.5%	—	—

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Control of institution and source of revenue	1980-1981		1985-1986		1990-1991		1995-1996		1999-2000	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Endowment	\$1.1	5.2%	\$1.9	5.4%	\$2.8	5.3%	\$3.8	5.3%	—	—
Sales and services	\$5.2	23.5%	\$8.2	23.7%	\$12.5	23.3%	\$15.6	21.6%	—	—
Other	\$0.9	4.2%	\$1.5	4.4%	\$2.4	4.5%	\$3.9	5.4%	—	—

-: Data not available for private not-for-profit institutions due to differences in accounting standards used by public and private institutions.

**Source:** U.S. Department of Education, National Center for Education Statistics. *Digest of Education Statistics: 2002*. Tables 330 and 332. At [<http://www.nces.ed.gov>].

## Expenditures

Economist Howard Bowen developed the “revenue theory of costs.” The theory states that college revenues determine college expenditures. That is, institutions attempt to raise as much money as possible and then spend the money as wisely as possible on various activities including teaching, research, administration, and service. According to this theory, there would not be a single standard that can be used to determine how much college should cost, as colleges make expenditure decisions based on their particular circumstances.<sup>7</sup>

Postsecondary institutions’ expenditures generally are grouped into several broad categories: educational and general expenditures, auxiliary enterprises, independent operations, hospitals, and other expenditures. The educational and general expenditures category includes the majority of institutional expenditures across all types of institutions and is part of total current-fund expenditures. The educational and general expenditure category includes several subcategories such as instruction, research, public service, academic support, student services, institutional support, operation and maintenance of plant, and scholarships and fellowships.

Current-fund expenditures include money spent to meet current operating costs, such as salaries, student services, and public services, but does not include loans, capital expenditures, or investments. In 1995-1996, the last academic year for which expenditure data are available for **all** institutions, current-fund expenditures for degree-granting institutions were about \$190.5 billion and educational and general expenditures were about \$150.9 billion. This represents educational and general expenditures of \$10,583 per student, meaning that educational and general expenditures were higher than average tuition (\$4,338) and higher than average tuition, fees, room, and board combined (\$8,800). A similar pattern was observed at both public and private not-for-profit degree-granting institutions with per student expenditures exceeding the price of attendance.<sup>8</sup>

On average, in 1999-2000, the largest proportion of expenditures at public and private not-for-profit degree-granting institutions was for instruction. Spending on instruction was fairly similar across institutions, accounting for about one-third of expenditures at public (31%) and private not-for-profit schools (32%).<sup>9</sup> Spending on instruction at these institutions accounted for the largest proportion of expenditures in a single area. While instruction also accounted for 31% of expenditures at private for-profit degree-granting institutions, expenditures for student services, academic

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<sup>7</sup> D.W. Breneman, “An Essay on College Costs” in ED, *Costs and Prices Volume 2*.

<sup>8</sup> ED, *Digest 2002*, Tables 343 and 345.

<sup>9</sup> By comparison, expenditures on instruction in 1980-1981 at public degree-granting institutions accounted for 35% of expenditures (ED, *Digest 2002*, Table 347). Historical data showing expenditures for instruction are reported only for all private degree-granting institutions as opposed to being reported separately for private not-for-profit and private for-profit institutions for 1980-81. The percentage of expenditures on instruction for all private degree-granting institutions in 1980-1981 was 27% (ED, *Digest 2002*, Table 348). Other data from ED, *Digest 2002*, Tables 343 and 345.

support, and institutional support composed the largest proportion of expenditures (53%).<sup>10</sup>

Also relevant to issues of college price are expenditures for student support. Scholarships and fellowships<sup>11</sup> accounted for 3% of expenditures at public degree-granting institutions in 1980-1981, increasing to 5% by 1999-2000.<sup>12</sup> At **all** private degree-granting institutions, scholarships and fellowships accounted for 7% of expenditures in 1980-1981 and 11% in 1999-2000.<sup>13</sup> Thus, while tuition has increased over the past 2 decades, institutional aid also has increased.

## Price of a College Education

The price of higher education has increasingly become a topic of both public and congressional debate. It should be noted, however, that during the 2002-2003 academic year, over half of full-time undergraduates at all 4-year institutions attended institutions charging less than \$8,000 in tuition and fees, while only 7% attended institutions charging \$24,000 or more.<sup>14</sup> At 4-year public institutions, 78% of full-time undergraduates attended institutions charging less than \$5,000. While \$5,000 or \$8,000 may still be more than some students can afford to pay, the issue of price is more productively viewed through this lens rather than one colored by the relatively high prices of the most selective institutions in the country.

There also are public misconceptions about the price of college. For example, a study conducted for the American Council on Education found that the general public substantially overestimates the price of tuition at public institutions. In answering questions about the price of tuition, the average respondent estimate put the price of tuition more than three times higher than the average actual price.<sup>15</sup>

Increases and decreases in tuition, fees, and financial aid may affect student access to college, choice of schools, affordability, and, ultimately, the completion of a degree or certificate program. However, most discussions of college price generally focus on sticker price rather than net price, after financial aid has been taken into account.

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<sup>10</sup> ED, *Digest 2002*, Table 346.

<sup>11</sup> Scholarships and fellowships only include funds provided in the form of outright grants and training stipends to students enrolled in formal coursework. Aid provided to students in the form of tuition or fee remissions is included in this category.

<sup>12</sup> ED, *Digest 2002*, Table 347.

<sup>13</sup> Data are not available separately for private not-for-profit and private for-profit institutions. ED, *Digest 2002*, Table 348.

<sup>14</sup> The College Board, *Trends in College Pricing*, 2003, Figure 15. At [<http://www.collegeboard.com/press/cost02/html/CBTrendsPricing02.pdf>].

<sup>15</sup> American Council on Education, *Attitudes Toward Public Higher Education National Survey Results*, 2002. At [[http://www.acenet.edu/news/press\\_release/2002/02february/national.data.ppt](http://www.acenet.edu/news/press_release/2002/02february/national.data.ppt)].

## Tuition and Fees in Current or Nominal Dollars

Trends in tuition and required fees (henceforth referred to as tuition) point to steady increases in current dollars over the past 25 years (**Table 2**).<sup>16</sup> From 1976-1977 to 2001-2002, tuition at all institutions increased from \$924 to \$5,719, an increase of 519%. The rate of increase in tuition was higher at 4-year institutions, 543%, and lower at 2-year institutions, 412%. An examination of institutions by control over the same time period reveals that tuition at private institutions increased more rapidly than tuition at public institutions. Among all public institutions, tuition rose 469% compared with a 543% increase at private institutions. The same trend also occurred at public and private 4-year and 2-year institutions, with higher tuition increases occurring at private institutions than at public institutions.

**Table 2. Average Undergraduate Tuition and Fees and Room and Board Paid by Full-Time-Equivalent Students in Degree-Granting Institutions, by Type and Control of Institution: Selected Years, 1976-1977 to 2001-2002**

Year and control of institution	Total tuition, room, and board			Tuition and required fees (in-state for public institutions)		
	All institutions	All 4-year (includes univ. and other 4-year)	2-year	All institutions	All 4-year (includes univ. and other 4-year)	2-year
<b>All institutions</b>						
1976-1977	\$2,275	\$2,577	\$1,598	\$924	\$1,218	\$346
1980-1981	\$3,101	\$3,499	\$2,230	\$1,289	\$1,679	\$526
1981-1982	\$3,489	\$3,951	\$2,476	\$1,457	\$1,907	\$590
1985-1986 <sup>a</sup>	\$4,885	\$5,504	\$3,367	\$2,181	\$2,784	\$888
1990-1991	\$6,562	\$7,602	\$3,930	\$3,016	\$4,009	\$1,087
1991-1992	\$7,077	\$8,238	\$4,092	\$3,286	\$4,385	\$1,189
1995-1996	\$8,800	\$10,330	\$4,725	\$4,338	\$5,786	\$1,522
1999-2000	\$10,444	\$12,352	\$5,408	\$5,238	\$7,044	\$1,721
2000-2001	\$10,818	\$12,922	\$5,460	\$5,377	\$7,372	\$1,698
2001-2002 <sup>b</sup>	\$11,454	\$13,677	\$5,705	\$5,719	\$7,828	\$1,772
<b>Public institutions</b>						
1976-1977	\$1,789	\$1,935	\$1,491	\$479	\$617	\$283
1980-1981	\$2,373	\$2,550	\$2,027	\$635	\$804	\$391
1981-1982	\$2,663	\$2,871	\$2,224	\$714	\$909	\$434
1985-1986 <sup>a</sup>	\$3,571	\$3,859	\$2,981	\$1,045	\$1,318	\$641
1990-1991	\$4,757	\$5,243	\$3,467	\$1,454	\$1,888	\$824
1991-1992	\$5,138	\$5,693	\$3,623	\$1,628	\$2,117	\$936
1995-1996	\$6,256	\$7,014	\$4,217	\$2,179	\$2,848	\$1,239
1999-2000	\$7,310	\$8,275	\$4,720	\$2,506	\$3,349	\$1,338

<sup>16</sup> Changes in tuition in constant dollars are addressed in a subsequent section.

Year and control of institution	Total tuition, room, and board			Tuition and required fees (in-state for public institutions)		
	All institutions	All 4-year (includes univ. and other 4-year)	2-year	All institutions	All 4-year (includes univ. and other 4-year)	2-year
2000-2001	\$7,586	\$8,653	\$4,839	\$2,562	\$3,501	\$1,333
2001-2002 <sup>b</sup>	\$8,046	\$9,199	\$5,137	\$2,727	\$3,746	\$1,379
<b>Private institutions</b>						
1976-1977	\$3,906	\$3,977	\$2,971	\$2,467	\$2,534	\$1,592
1980-1981	\$5,470	\$5,594	\$4,303	\$3,498	\$3,617	\$2,413
1981-1982	\$6,166	\$6,330	\$4,746	\$3,953	\$4,113	\$2,605
1985-1986 <sup>a</sup>	\$8,885	\$9,228	\$6,512	\$5,789	\$6,121	\$3,672
1990-1991	\$12,910	\$13,237	\$9,302	\$8,772	\$9,083	\$5,570
1991-1992	\$13,892	\$14,258	\$9,632	\$9,419	\$9,759	\$5,754
1995-1996	\$17,208	\$17,612	\$11,563	\$11,864	\$12,243	\$7,094
1999-2000	\$20,186	\$20,706	\$13,965	\$14,081	\$14,588	\$8,235
2000-2001	\$21,368	\$21,856	\$14,788	\$15,000	\$15,470	\$9,067
2001-2002 <sup>b</sup>	\$22,520	\$22,968	\$15,879	\$15,851	\$16,287	\$10,010

**Source:** U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2002*, Table 312. At [<http://www.nces.ed.gov>].

**Note:** “Data are for the entire academic year and are average charges paid by students. Tuition and fees were weighted by the number of full-time-equivalent undergraduates, but were not adjusted to reflect student residency. Room and board were based on full-time students.” (ED, *Digest*, p. 355) Data for 1986-1987 and later years reflect 20 meals per week rather than meals 7 days per week. “The data have not been adjusted for changes in the purchasing power of the dollar over time. Data from 1976-1977 to 1996-1997 are for institutions of higher education. Institutions of higher education were accredited by an agency or association that was recognized by the U.S. Department of Education, or recognized directly by the Secretary of Education. The new degree-granting classification is very similar to the earlier higher education classification, except that it includes some additional institutions, primarily 2-year colleges, and excludes a few higher education institutions that did not award associate or higher degrees. Some data have been revised from previously published figures. Because of their low response rate, data for private 2-year colleges must be interpreted with caution. Data for 1999 were imputed using alternative procedures. Some data have been revised from previously published figures. Detail may not sum to totals due to rounding.” (ED, *Digest*, p. 355)

<sup>a</sup> Room and board data are estimated.

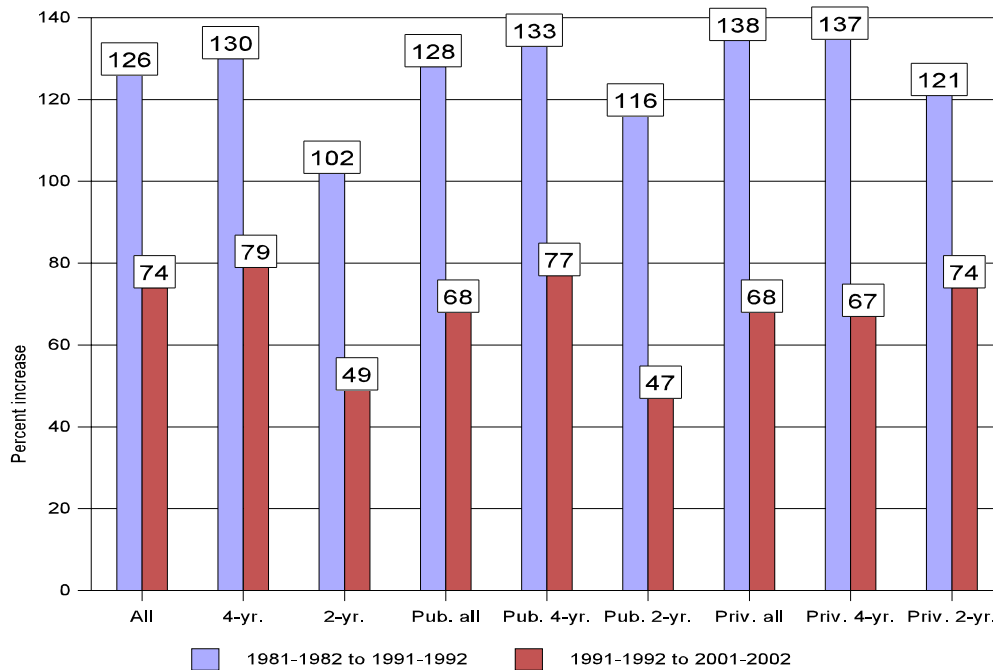
<sup>b</sup> Preliminary data based on fall 2000 enrollment weights.

As depicted in **Figure 1**, increases in tuition were greater from 1981-1982 through 1991-1992 than from 1991-1992 through 2001-2002. For example, during the 1980s, tuition at all institutions increased by 126% compared with an increase of 74% during the 1990s. Similar patterns occurred for public and private 2-year and 4-year institutions. Thus, percentage increases in tuition over the last decade actually represent a slowdown in the increase in college price compared to the previous decade. It should be noted, however, that as tuition and fees increase over time, subsequent equal dollar amount increases in tuition and fees result in lower percentage increases. For example, if tuition and fees increased from \$1,000 to



\$2,000 over 10 years, an increase of \$1,000 or 100%, a subsequent \$1,000 increase over the next 10 years from \$2,000 to \$3,000 will result in only a 50% increase in tuition and fees.

**Figure 1. Increases in Tuition and Fees from 1981-1982 to 1991-1992 and 1991-1992 to 2001-2002, by Institution Control and Level**



**Source:** CRS analysis of data from U.S. Department of Education, National Center for Education Statistics. *Digest of Education Statistics 2002*. Table 312. At [<http://www.nces.ed.gov>].

## Tuition and Fees in Constant or Real Dollars

Examining tuition using current dollars identifies changes in tuition over time but fails to take into account inflationary factors affecting college price. Adjusting college prices for inflation using an index such as the Consumer Price Index-Urban (CPI-U)<sup>17</sup> enables direct comparisons in college price to be made across years by adjusting all prices to be comparable with a base year (in this case 2001). More simply, adjusting for inflation means that the price of tuition in a given year, such as 1981-1982, has been recalculated to determine what the price of tuition that year would have been in today's dollars.

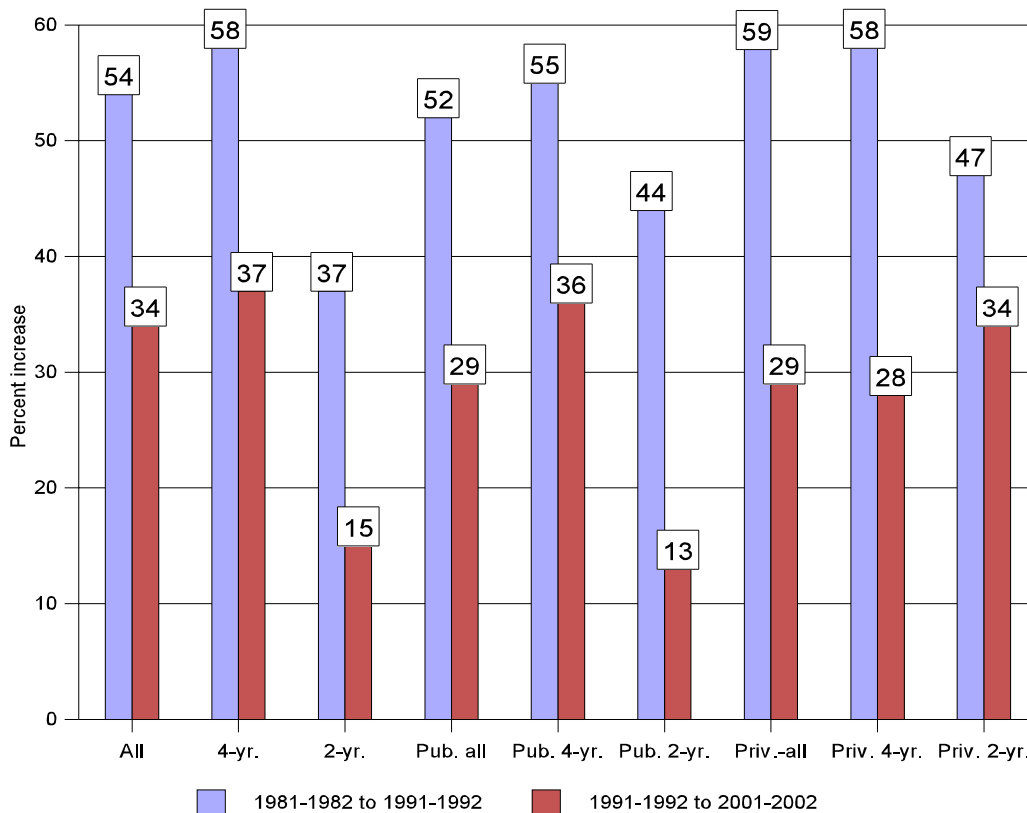
When increases in tuition are considered in constant dollars (i.e., dollars adjusted for inflation), the increase in tuition over the past 25 years is substantially lower (see **Appendix Table A**). From 1976-1977 to 2001-2002, the tuition increase in constant dollars for all institutions was 99% compared with an increase of 519% in current dollars. Similar differences in increases are evident for 4-year, 2-year,

<sup>17</sup> The CPI-U is a measure of the average change in prices paid by urban consumers for specific goods and services. It is often used as a proxy measure for the cost of living.

public, and private institutions. For example, in constant dollars, the increase in tuition at public 4-year institutions over this time period was 95% in constant dollars compared with 507% in current dollars.

A comparison of tuition increases over the past 2 decades in constant dollars also reveals that tuition increases in the 1990s represent a slowdown in the rate of increase from the 1980s (**Figure 2**). For example, the percentage increase in tuition across all institutions in constant dollars from 1981-1982 to 1991-1992 was 54% compared with 34% from 1991-1992 to 2001-2002. As with other comparisons, the percentage rate of increase in constant dollars in both decades is substantially smaller than in current dollars at all types of institutions.

**Figure 2. Increases in Tuition and Fees in Constant Dollars from 1981-1982 to 1991-1992 and 1991-1992 to 2001-2002, by Institution Control and Level**



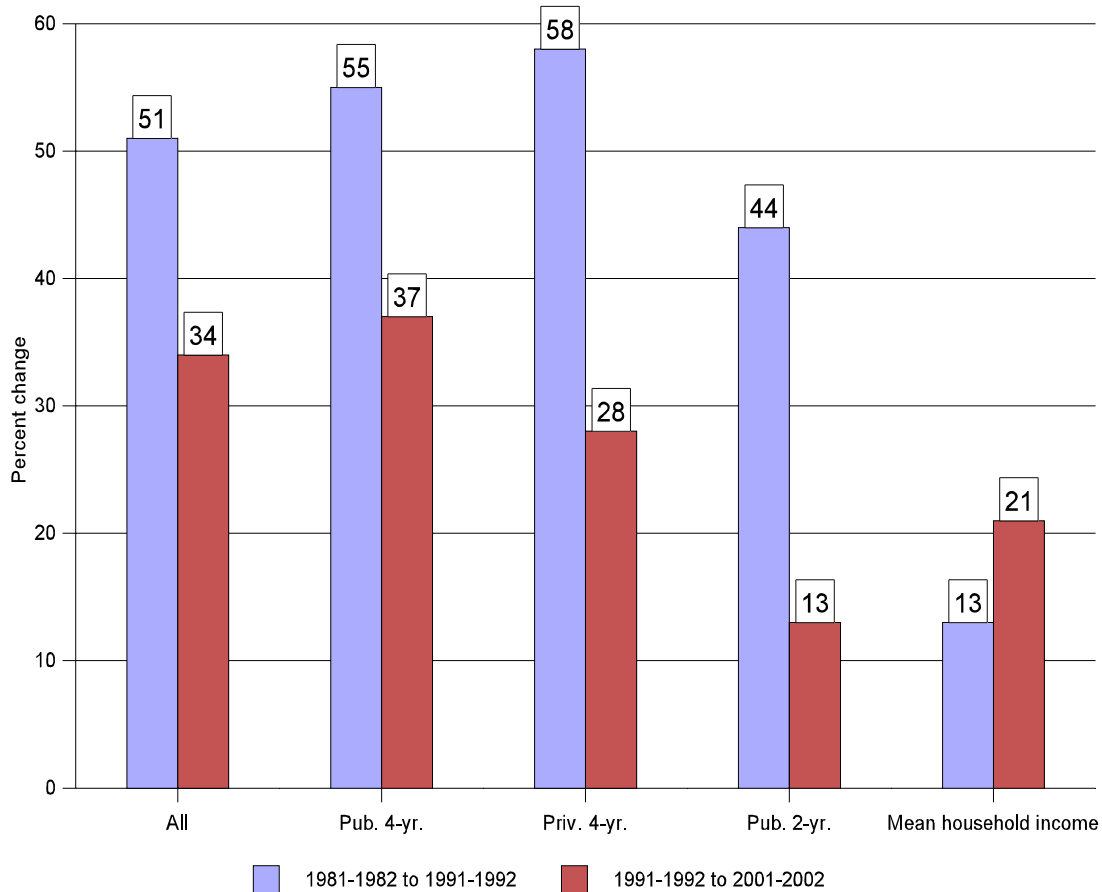
**Source:** CRS analysis based on U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2002*, Table 312, At [<http://www.nces.ed.gov>]; and Bureau of Labor Statistics, annual unadjusted Consumer Price Index-Urban data, at [<http://www.bls.gov>].

## Interpreting Changes in Tuition

To put the increases in tuition in perspective, **Figure 3** compares changes in tuition at public and private 4-year institutions and 2-year public institutions from 1981-1982 to 1991-1992 and 1991-1992 to 2001-2002 in constant 2001 dollars with

changes in mean household income in constant 2001 dollars.<sup>18</sup> During the 1980s, increases in tuition at all institutions were about three to four times higher than growth in mean household income. While the discrepancy in growth diminished during the 1990s, tuition increases continued to outpace the growth in mean household income, except at 2-year public institutions (**Figure 3**).

**Figure 3. Percent Changes in Tuition and Fees and Mean Household Income: 1981-1982 to 1991-1992 and 1991-1992 to 2001-2002**



**Source:** CRS analysis based on U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2002*, Table 312, At [<http://www.nces.ed.gov>]; Bureau of Labor Statistics, annual unadjusted Consumer Price Index-Urban data, At [<http://www.bls.gov>]; and U.S. Census Bureau, Historical Income Tables — Households, Table H-9. Available at [<http://www.census.gov/hhes/income/histinc/h09.html>].

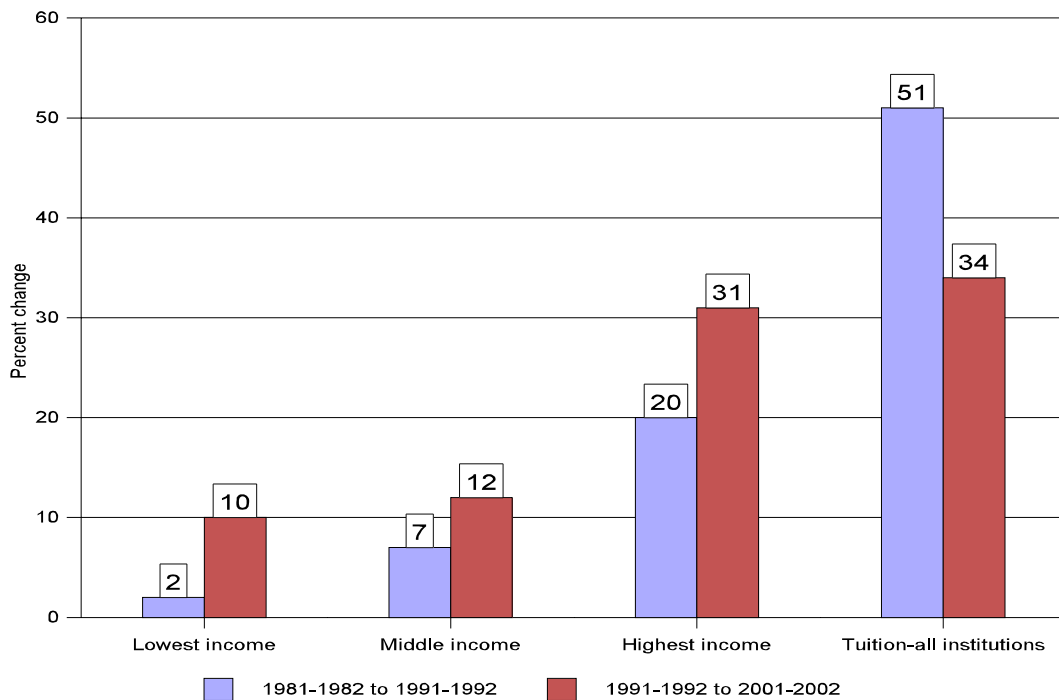
**Note:** Figures are in constant 2001 dollars.

When income is analyzed by households using mean income in the top quintile, third quintile (or middle quintile), and lowest quintile, other trends become apparent. During the 1980s, all three groups saw growth in their mean household income outpaced by increases in tuition (**Figure 4**). For households in the lowest quintile,

<sup>18</sup> The U.S. Census Bureau defines a household as all the individuals who occupy a housing unit regardless of relationship.

tuition increased at a rate about 25 times higher than mean income. For households in the middle quintile, tuition increased at a rate of about seven times that of mean income. For households in the highest quintile, tuition increased at a rate of about 2.5 times that of mean income. During the 1990s, all three groups experienced growth in mean income, but growth in income for households in the highest quintile continued to outstrip growth in mean income for households in the lowest quintile. For households with mean income in the highest quintile, growth in income came close to matching increases in tuition. For households in the lowest and middle quintiles, however, increases in tuition were about three times greater than increases in mean income. While this represents an improvement over the growth discrepancies of the 1980s, potential college students from these households may continue to experience substantial difficulties affording a college education. It should be noted, however, that these comparisons are based on sticker prices, not net prices. As many students do not pay the sticker price to attend college, the discrepancies between increases in income and tuition may not be as substantial if net price were considered.<sup>19</sup>

**Figure 4. Percent Change in Mean Household Income for Households in the Top, Middle, and Bottom Quintiles and Changes in Tuition and Fees: 1981-1982 to 1991-1992 and 1991-1992 to 2001-2002 (in constant 2001 dollars)**



**Source:** CRS analysis of data from U.S. Bureau of the Census. Historical Income Tables — Household, Table H-3. At [<http://www.census.gov/hhes/income/histinc/h03.html>].

<sup>19</sup> Net price is discussed in the next section of this report.

**Table 3** demonstrates that as a percentage of income, tuition consumes a larger proportion of mean household income for households in the lowest quintile than of households in either the middle or highest quintile. While the percentage of mean household income required to pay tuition increased for all groups, particularly from 1981-1982 to 1991-1992, for the lowest income households, the percentage of income required to pay tuition increased from 32% in 1981-1982 to 46% in 1991-1992 to 56% in 2001-2002. The percentage of income required to pay tuition dropped when only public institutions were considered, particularly 2-year public institutions, but still required a greater proportion of income from households in the lowest quintile. For households in the middle and highest quintile, the percentage of income required to pay tuition rose across all categories over time, but consumed a substantially smaller proportion of resources relative to households in the lowest quintile. As previously mentioned, however, analyzing mean income with respect to sticker prices may overstate the percentage of income required to pay for college as most students do not pay the sticker price.

**Table 3. Tuition and Fees as a Percentage of Mean Household Income at Public Institutions, by Selected Income Quintile: 1981-1982, 1991-1992, and 2001-2002**  
(in constant 2001 dollars)

Year and income quintile	Mean income	All institutions		Public 4-year		Public 2-year	
		Price	Percent of mean income	Price	Percent of mean income	Price	Percent of mean income
<b>1981-1982</b>							
Lowest quintile	\$,8995	\$2,838	31.6%	\$1,727	19.2%	\$841	9.3%
Middle quintile	\$35,603	\$2,838	8.0%	\$1,727	4.9%	\$841	2.4%
Highest quintile	\$92,894	\$2,838	3.1%	\$1,727	1.9%	\$841	0.9%
<b>1991-1992</b>							
Lowest quintile	\$9,206	\$4,272	46.4%	\$2,753	29.9%	\$1,218	13.2%
Middle quintile	\$38,210	\$4,272	11.2%	\$2,753	7.2%	\$1,218	3.2%
Highest quintile	\$111,701	\$4,272	3.8%	\$2,753	2.5%	\$1,218	1.1%
<b>2001-2002</b>							
Lowest quintile	\$10,136	\$5,719	56.4%	\$3,746	37.0%	\$1,379	13.6%

Year and income quintile	Mean income	All institutions		Public 4-year		Public 2-year	
		Price	Percent of mean income	Price	Percent of mean income	Price	Percent of mean income
Middle quintile	\$42,629	\$5,719	13.4%	\$3,746	8.8%	\$1,379	3.2%
Highest quintile	\$145,970	\$5,719	3.9%	\$3,746	2.6%	\$1,379	0.9%

**Source:** CRS analysis of data from U.S. Bureau of the Census. Historical Income Tables — Household, Table H-3. At [<http://www.census.gov/hhes/income/histinc/h03.html>]; U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2002*, Table 312, At [<http://www.nces.ed.gov>]; and Bureau of Labor Statistics, annual unadjusted Consumer Price Index-Urban data, At [<http://www.bls.gov>].

Another useful comparison is to look at increases in tuition in current dollars compared with increases in the CPI-U. From 1981-1982 to 1991-1992, tuition at all institutions in current dollars increased by 126% compared with an increase of 50% in the CPI-U over the same time period. Similarly, from 1991-1992 to 2001-2002, tuition at all institutions in current dollars increased by 74% compared with an increase of 30% in the CPI-U over the same time period. Thus, over the past 2 decades, tuition has continued to rise at about 2.5 times the rate of the CPI-U.

## Net Price and Financial Aid

As previously mentioned, there are several ways to measure college price, including sticker price, total price of attendance, and net price. Net price is a measure of price that takes into account financial aid provided to students. It is the actual price students and their families need to pay out of their own pockets to attend college.

Student aid for postsecondary education may be need-based aid or merit-based aid. Need-based aid addresses concerns of access and affordability through grants and loans, while merit-based aid programs are designed to recognize student achievement through tuition waivers and scholarships. Numerous entities provide student aid, including states, local governments, institutions, foundations, and the federal government.

In 2001-2002, a total of \$90 billion was awarded in student aid.<sup>20</sup> About 70% of this amount was generated by the federal government through appropriations, loan guarantees, and tax credits. For the federal government, providing access to postsecondary education for low-income students has been the focus of student aid

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<sup>20</sup> The College Board, *Trends in Student Aid*, 2003. At [<http://www.collegeboard.com/press/cost02/html/CBTrendsAid02.pdf>]. (Hereafter cited as The College Board, *Student Aid*.)

programs. From 1981-1982 to 1991-1992, federal aid increased 59%.<sup>21</sup> The increase in federal aid was even more substantial from 1991-1992 to 2001-2002, increasing 161%; outpacing the increase in tuition during this time period.

## Percentage of Students Receiving Aid

In 1999-2000, about 73% of all **full-time, full-year undergraduates** received some form of financial aid (**Table 4**). The percentage of students receiving **any** aid varied by control of institution, ranging from 68% of students at public institutions to 89% of students at private for-profit institutions. Over half (58%) of full-time, full-year undergraduates attending public institutions received **federal aid**. Higher percentages of students received federal aid at private institutions, with 67% of students at private not-for-profit institutions and 86% of students at private for-profit institutions receiving federal aid. While undergraduates attending public and private institutions on a full-time, full-year basis also received state and institutional aid, a greater proportion of students at private not-for-profit institutions received this type of assistance.

**Table 4. Percent of Full-Time, Full-Year Undergraduates Receiving Aid, by Source of Aid and Control of Institution: 1999-2000**

Control of institution	Number of students in 1999	Percent of students receiving aid by source of aid				
		Any aid	Federal	State	Institution	Other
All	6,364,000	72.5%	57.7%	22.6%	30.8%	9.6%
Public	4,538,000	67.5%	52.6%	21.6%	22.1%	8.2%
Private not-for-profit	1,547,000	84.0%	67.6%	26.9%	59.8%	12.8%
Private for-profit	278,000	89.2%	86.0%	15.8%	11.6%	16.1%

**Source:** U.S. Department of Education, National Center for Education Statistics. *Digest of Education Statistics: 2002*, Table 319. At [<http://www.nces.ed.gov>].

There also were differences in the percentage of students who received aid by institution type and family income. For example, at public 2-year institutions, about 51% of all **full-time, full-year dependent undergraduates** received some form of financial aid, while 93% of all students at private not-for-profit nondoctoral (except liberal arts) institutions received some form of financial assistance.<sup>22</sup> By family

<sup>21</sup> Ibid.

<sup>22</sup> The National Center for Education Statistics aggregated Carnegie categories of institutions for the purposes of the report. Private not-for-profit nondoctoral (except liberal arts) (continued...)

income, a higher percentage of students from low-income families (less than \$30,000) received financial assistance than students at other income levels, ranging from 78% at 2-year public institutions to 98% at private not-for-profit nondoctoral (except liberal arts) institutions for students from low-income families. For students from middle-income families (\$45,000-\$74,999) and families earning the highest level of income (\$100,000 or more), smaller percentages of students received aid at 2-year public institutions (40% and 23%, respectively) and private not-for-profit nondoctoral (except liberal arts) institutions (93% and 85%, respectively).

## Federal Loans and Grants and Tuition Increases

Federal student aid takes many forms, including grants, loans, and education tax credits. Concerns have been raised by researchers, interest groups, and some Members of Congress about whether increased federal aid contributes to increasing college price. Debate about whether federal financial aid provides incentives for tuition increases was widespread in the 1980s.<sup>23</sup> By the 1990s, much of the debate had narrowed to focus on the relationship, if any, between federal loan aid and price.

Students apply for federal grants and loans using the Free Application for Federal Student Aid (FAFSA) form. Based on information reported on the FAFSA, ED calculates the Expected Family Contribution (EFC). In general, most institutions use the EFC to determine students' financial need by determining the difference between the price of attendance and the EFC. Since this calculation takes the price of attendance into account, a direct relationship between federal aid and price only would be likely if increased financial need resulted in increased federal aid. However, federal grant and loan aid are capped at specific amounts.<sup>24</sup> These amounts generally are lower than the price of attendance at many institutions. Thus, an incentive for institutions to increase their price in anticipation of students receiving

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<sup>22</sup> (...continued)

arts) includes many small not-for-profit colleges. Liberal arts colleges generally would be classified in this category, but for this particular study, they were classified with doctoral institutions. These liberal arts colleges include many of the most selective and expensive institutions in the country. In terms of tuition, aid, and student expectations, these institutions are more closely aligned with doctoral institutions. U.S. Department of Education, National Center for Education Statistics, *How Families of Low- and Middle-Income Undergraduates Pay for College: Full-Time Dependent Students in 1999-2000*, Table 5. At [<http://www.nces.ed.gov>].

<sup>23</sup> U.S. Department of Education, National Center for Education Statistics, 2001, *Study of College Costs and Prices, 1988-89 to 1997-98 Volume 1*. At [<http://www.nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2002157>]. (Hereafter cited as ED, *Costs and Prices Volume 1*.)

<sup>24</sup> For more information about federal grants and loans, see, for example, CRS Report RL30655, *Federal Student Loans: Terms and Conditions for Borrowers*, by Adam Stoll; and CRS Report RL31668, *Federal Pell Grant Program of the Higher Education Act: Background and Reauthorization*, by James B. Stedman.



additional financial aid may exist for institutions with relatively low prices but not at institutions whose price already exceeds available federal aid.<sup>25</sup>

In general, research has shown that no relationship exists between federal grants and college prices.<sup>26</sup> Research on the relationship between federal student loans and tuition, however, has been less conclusive with some researchers believing that there may be an indirect relationship between federal student loans and college price. For example, institutions may raise prices knowing that students can apply for loans to cover tuition increases. Institutions then may use revenue from tuition increases to provide additional institutional aid to make it possible for some students to access and afford the price of college. At the same time, increased loan availability could reduce the need for institutions to increase price to generate revenue to provide institutional aid since students can receive aid in the form of loans. Thus, it is difficult to determine whether federal student loan programs are contributing to tuition increases.

In its examination of college costs and prices, NCES found virtually no associations between price and most student aid variables, including federal grants and loans, and tuition. The only association that was identified was that institutional aid had a positive association with tuition increases at comprehensive public institutions and comprehensive private not-for-profit institutions.<sup>27</sup> This could be related to institutions increasing tuition to increase revenue to provide institutional aid to students. Thus, in the NCES study, federal grants and loans were not found to have a positive relationship with tuition increases.

## **Federal Tax Legislation and Tuition Increases**

Limited data are available about the effect of federal tax credits on tuition increases.<sup>28</sup> A recent General Accounting Office study concluded that data and methodological challenges make it difficult to identify and isolate the effects of tax credits, as well as grants and loans, on attendance, choice, completion, or costs.<sup>29</sup>

In a recent survey of state higher education agencies, few states reported raising tuition in response to new tax credits or taking federal tax credits into account when

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<sup>25</sup> Incentives for price increases also may be created when grant and loan limits are increased and an institution currently charges a price below these levels.

<sup>26</sup> ED, *Costs and Prices Volume I*.

<sup>27</sup> For the purposes of this study, the researchers developed a modified version of the Carnegie classification codes. Comprehensive institutions include institutions offering a full range of bachelor's programs that are also committed to graduate education through the master's degree. These institutions award 20 or more master's degrees annually in one or more disciplines.

<sup>28</sup> The aforementioned NCES study of college costs and prices did not include federal tax credits in its analysis.

<sup>29</sup> General Accounting Office, Sept. 2002, *Student Aid and Tax Benefits: Better Research and Guidance Will Facilitate Comparison and Effectiveness of Student Use*, GAO-02-751. At [<http://www.gao.gov>].

calculating student aid eligibility.<sup>30</sup> Most states reported taking advantage of opportunities to create a tax-advantaged state prepayment or college savings plan, and many states indicated they publicize the availability of federal tax credits to help finance college.

However, a forthcoming analysis of the effect of tax credits on state support for higher education and changes in college prices found that a relationship does exist between tax credits and state appropriations and tax credits and price under certain circumstances.<sup>31</sup> For example, the study found that when other factors were held constant, state appropriations to public 2-year institutions charging less than \$2,000 fell relative to other institutions after the introduction of tax credits. At the same time, states that had developed a track record of supporting student aid programs continued to support, and possibly bolster, these programs despite the availability of additional federal aid.

At the institution level, incentives existed for institutions to increase their prices for students who benefitted from the tax credits; that is, the tax credits increased student income providing students with more money to pay for college. Evidence indicates that public 2-year colleges raised prices higher than what could be explained by fluctuations in state appropriations, and the increases were greater at schools with higher percentages of tax credit-eligible students.<sup>32</sup>

## Net Price

A recent study of college price and financial aid awards from 1992-1993 to 1999-2000 examined the issue of net price at public 2-year and 4-year institutions and private not-for-profit 4-year institutions.<sup>33</sup> The researchers examined net price from five perspectives:

- **Net tuition 1:** Total tuition minus federal grants only;
- **Net tuition 2:** Total tuition minus all grants;
- **Net price 1:** Total price of attendance minus federal and state grants;
- **Net price 2:** Total price of attendance minus all grants (including institutional grants); and
- **Net price 3:** Total price of attendance minus all grants and loans

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<sup>30</sup> SHEEO, *State Tuition and Fees*.

<sup>31</sup> B.T. Long, “The Impact of Federal Tax Credits for Higher Education Expenses” (Sept. 4, 2003 version), forthcoming in Caroline M. Hoxby, ed., *College Costs: The Economics of Which College, When College, and How to Pay For It* (Chicago: University of Chicago Press and the National Bureau of Economic Research). (Hereafter cited as Long, *Impact of Federal Tax Credits*.)

<sup>32</sup> *Ibid.*

<sup>33</sup> U.S. Department of Education, National Center for Education Statistics, *What Students Pay for College: Changes in Net Price of college Attendance Between 1992-1993 and 1999-2000*, 2002. At [<http://nces.ed.gov/pubs2002/202174.pdf>].

Using constant dollars, the researchers determined that average total tuition increased across all types of institutions during the time period studied. Net tuition also increased at all types of institutions, except 2-year public institutions, when only federal grants were considered. When all grants were considered (net tuition 2), however, no changes were found in tuition for any type of institution from 1992-1993 to 1999-2000, indicating that grant aid increased enough to offset increases in total tuition.

Similar to average total tuition, researchers determined that the average total price of attendance increased across all types of institutions during the time period studied. When federal and state grants were taken into consideration (net price 1), the total price of attendance still increased across all types of institutions. When all grants were taken into consideration (net price 2), the increase in total grants was not enough to offset the increase in the total price of attendance at all types of institutions. Only when loans were included in the examination (net price 3) did researchers find no changes in total price for all institutions from 1992-1993 to 1999-2000. It should be noted that when students were examined by family income levels, students in the lowest income quartile did not experience an increase in total price of attendance from 1992-1993 to 1999-2000 when only grants were considered (net price 2). The same did not hold true, however, for middle- and high-income students. Thus, grant aid provided low-income students with enough financial support to offset increases in the total price of attendance without requiring them to rely on loans, but did not do the same for middle- and high-income students.

## **Possible Explanations of Price Increases**

Researchers have been studying the issue of tuition increases for many years. Based on their work, it has been determined that the price of postsecondary education is established in multiple ways and differs for public and private institutions. Due to limitations in the data, however, it has been difficult to determine specific internal and external factors that have a strong relationship with price increases.

### **Establishing Price at Public Institutions**

States differ in their basic philosophy that guides decision making with respect to setting tuition levels for public institutions. The majority of states have embraced a philosophy of low tuition to maximize access to postsecondary education by making it as affordable as possible.<sup>34</sup> States that have adopted a philosophy based on higher levels of tuition, on the other hand, often provide substantial student financial aid to help ensure access for low-income students.

Primary authority to establish tuition levels may rest with the legislature, state coordinating/governing agency, individual system boards, and/or individual institutions. In 18 states, the state coordinating/governing agency has the primary

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<sup>34</sup> SHEEO, *State Tuition and Fees*.

authority to establish tuition levels.<sup>35</sup> Sixteen states delegate this power to individual institutions with varying levels of discretion, while 12 states rely on system boards. The number of states in which institutions have primary authority to establish tuition levels may be increasing as evidenced by the recent decision by the state legislature in Texas to give institutions authority to establish their own tuition levels.<sup>36</sup>

According to states, when setting in-state tuition, state general fund appropriations have the most significant influence on this decision.<sup>37</sup> For most states, there are no formal incentives to limit tuition increases, but many operate under informal incentives, such as the desire to provide an affordable education.<sup>38</sup> States or institutions also may opt to place self-imposed limitations on tuition increases.<sup>39</sup> For example, a State Higher Education Executive Officers (SHEEO) study found that 19 states had applied some type of limitation on tuition increases during the previous three fiscal years, including capping tuition increases at a certain percentage, freezing tuition at a specific level, or indexing tuition to the Consumer Price Index.

An NCES study examining college costs and price provides some evidence as to factors that may be related to tuition increases. The specific factors differ based on the level and control of the institution. At public 4-year institutions, a decline in state appropriations revenue was found to be the most important factor associated with changes in tuition. According to The Institute for Higher Education Policy (IHEP), the increase in price results from institutions attempting to maintain their total revenue when state appropriations decline.<sup>40</sup> An increase in instructional expenditures also was associated with changes in tuition, but the relationship was not as strong. At 2-year public institutions, changes in revenues, including state appropriations, and expenditures accounted for only a small proportion of changes in tuition. This is attributed to overriding efforts by 2-year institutions to maintain relatively low tuition. They often will opt to make other changes, such as reducing courses, eliminating programs, or reducing services before they will increase price. Thus, tuition changes at 2-year and public 4-year institutions are affected by different factors.

## Establishing Price at Private Institutions

In a discussion of primarily non-public institutions, IHEP divides the non-public sector into three markets: (1) highly selective institutions — predominantly private not-for-profit institutions, as well as a few highly selective public institutions; (2)

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<sup>35</sup> Ibid.

<sup>36</sup> W. Potter, “Texas Legislature Gives Public Colleges the Power to Set Tuition” in *The Chronicle of Higher Education*, June 13, 2003, vol. 49, issue 40, p. A25.

<sup>37</sup> See for example, SHEEO, *State Tuition and Fees*; IHEP, *Reauthorizing HEA*; and ED, *Costs and Prices Volume 1*.

<sup>38</sup> SHEEO, *State Tuition and Fees*.

<sup>39</sup> For example, limits on tuition increases may be instituted or encouraged by state legislatures, governors, or institutions.

<sup>40</sup> IHEP, *Reauthorizing HEA*, p. 117

competitive institutions; and (3) proprietary institutions.<sup>41</sup> Highly selective institutions are primarily private not-for-profit institutions that experience excess demand for their available openings. These institutions tend to compete against one another based on non-price mechanisms, such as institutional reputation. They generally have similar prices and often have higher levels of institutional wealth than other types of institutions.<sup>42</sup>

Competitive institutions also compete with their peer institutions but on a regional rather than national level. They tend to compete through non-price mechanisms and tuition discounting for specific groups of students. Prices within a specific group of peer institutions tend to cluster in a narrow range.

Less is known about proprietary institutions. However, by definition, these for-profit institutions exist to make a profit. As previously discussed, tuition is their primary source of revenue, so the costs of educating students at these institutions may be more closely related to price than at other types of institutions.

The NCES study examining college costs and prices found that factors affecting tuition at private not-for-profit 4-year institutions are more varied.<sup>43</sup> That is, unlike public 4-year institutions, there is not a single factor that is strongly related to tuition changes. Rather, prices at private not-for-profit 4-year institutions are driven by internal institutional budget controls and external market conditions. Among the internal factors associated with higher tuition were higher costs for institutional aid and faculty salaries, and declining revenues from endowments and private giving. Among the external factors associated with tuition changes were the availability of institutional aid, price of public institutions in the same state, and per capita income in the state.

## Tuition Discounting

Tuition discounting is a practice by which institutions charge students less than the sticker price. This is intended to increase net revenue, attract minority students, increase enrollment, and/or attract academically talented students.<sup>44</sup> It is unclear

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<sup>41</sup> Ibid., p. 116-117.

<sup>42</sup> In the 1980s, the U.S. Department of Justice launched an investigation into possible antitrust violations by private institutions. The primary focus of the investigation was on the 23 institutions, including all of the Ivy League universities, composing the Overlap Group, which met annually to compare financial aid offers made to students admitted to two or more member institutions. As a result of the suit, the institutions discontinued their collaboration with respect to financial aid packages. Through the Higher Education Act, however, Congress has authorized an exemption for institutions that do not consider a family's ability to pay in making admissions decisions (need-blind admissions) to permit them to discuss their financial aid policies. The exemption currently is approved until 2008 (P.L. 107-72).

<sup>43</sup> The NCES study only included private not-for-profit 4-year institutions. Private not-for-profit 2-year institutions and private for-profit institutions were not examined.

<sup>44</sup> For more information on tuition discounting, see L. Lapovsky, *Institutional Financial* (continued...)

whether this strategy ultimately accomplishes these goals. For example, one question focuses on whether reductions in tuition provided for students who are able to pay based on formulas such as the Expected Family Contribution, but are unwilling to pay the sticker price, results in enrollment in the institution that otherwise would not have occurred, potentially contributing to net revenue. Another issue focuses on whether by subsidizing students able to pay to attend college, funds are being diverted from needy students or from improvements in academic programs or services. A third issue focuses on whether the practice of tuition discounting causes institutions to raise prices, knowing that many students will not pay this price ultimately. Last, the question remains whether an alternative strategy of across the board reductions in price to the level at which tuition is generally discounted would result in increased enrollment, increased net revenue, and/or recruitment of the desired student body.

A recent study conducted by the Lumina Foundation examined the use of tuition discounting.<sup>45</sup> Researchers state that the practice does work successfully at some institutions, but that when institutional aid practices are examined across all institutions, tuition discounting has some adverse financial effects on low-income students in terms of accessibility and affordability. For example, researchers suggest that if institutions use financial resources to attract students that could afford to pay to attend, then institutions had fewer funds to provide institutional support to low-income students. Researchers support this argument based on data from the National Postsecondary Student Aid Study which show that between 1995-1996 and 2000-2001, institutional grant aid for higher-income undergraduates rose more quickly than for lower-income undergraduates at 4-year institutions. The Lumina Foundation study also found that the use of tuition discounting does not always produce the desired result of increased net revenue, nor does it necessarily lead to the recruitment of the most academically talented students based on the median SAT scores of the students attending institutions using tuition discounting.

## Institutional Costs

Researchers also have studied whether institutional costs, that is, trends in the cost of items for which colleges and universities pay, drive increases in price. Current analysis suggests that there is not a strong relationship between cost and price.<sup>46</sup> While evidence does not point to a strong relationship, it could be argued that revenue must cover or exceed institutional costs or an institution may go into debt. Researchers have determined, however, that most postsecondary institutions do not function like for-profit businesses. The labor-intensive nature of providing a higher education makes it difficult to realize productivity gains. For example,

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<sup>44</sup> (...continued)

*Health: Tuition Discounting and Enrollment Management*, in *ED, Costs and Prices Volume 2*.

<sup>45</sup> Lumina Foundation for Education, *Unintended Consequences of Tuition Discounting*, May 2003. At [<http://www.luminafoundation.org/publications/Tuitiondiscounting.pdf>].

<sup>46</sup> *ED, Costs and Prices Volume 1*, p. 21

increasing class sizes to reduce costs might result in a decline in quality rather than an increase in productivity.<sup>47</sup>

Researchers have identified various factors that drive institutional costs. For example, a recent summary of relevant literature identified five primary cost drivers: (1) revenue availability; (2) institutional aid; (3) mission and discipline; (4) faculty compensation and workload policies; and (5) class size.<sup>48</sup> Other researchers have pointed to specific costs that institutions are facing, including the provision of technology, increasing health care costs, burdens associated with government regulation, facilities, enrollment, and student expectations.<sup>49</sup>

More specifically, for example, the mission and discipline of an institution can have substantial cost ramifications, as institutions with research programs, graduate education, and public service missions have higher costs than other institutions.<sup>50</sup> These costs may be even higher if the institution offers engineering or other science programs with laboratory components. Providing students, faculty, and staff with access to technology incurs infrastructure costs, as well as costs associated with continual updating of hardware, software, and connections. Some institutions have imposed new technology fees to have students cover some of these costs.

## State of the States

A great deal of attention has been focused on changes in tuition at public institutions in recent years and changes in state appropriations, especially this year as most states confront a fiscal crisis. This section provides information about tuition increases by state from 2001-2002 to 2002-2003, examples of tuition increases from public institutions nationwide for 2002-2003 to 2003-2004, and changes in state appropriations over the past 2 years.

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<sup>47</sup> See for example, Testimony of Sandy Baum, U.S. House of Representatives, Committee on Education and the Workforce, Subcommittee on 21<sup>st</sup> Century Competitiveness, *Affordability in Higher Education: We Know There's a Problem; What's the Solution?*, hearing, July 10, 2003. (Hereafter cited as House Education and the Workforce, *Affordability in Higher Education*.) At [<http://edworkforce.house.gov/hearings/108th/21st/afford71003/baum.htm>].

<sup>48</sup> ED, *Costs and Prices Volume 1*, p. 21

<sup>49</sup> See House Education and the Workforce, *Affordability in Higher Education*; or The National Commission on the Cost of Higher Education, *Straight Talk About College Costs & Prices*, 1998. At [<http://www.eric.org/government/talk.html>]. (Hereafter cited as NCC, *College Costs & Prices*.)

<sup>50</sup> According to a recent SHEEO survey of state higher education agencies, most of the responding agencies (41 of 46) reported charging different levels of tuition for undergraduate and graduate students, and 32 of 46 agencies reported charging different prices for credit and non-credit bearing enrollment. For more information, see SHEEO, *State Tuition and Fees*.

## Tuition

Based on data collected by the Washington Higher Education Coordinating Board, institutions in almost every state raised their tuition at public 2-year and 4-year colleges from 2001-2002 to 2002-2003 (**Table 5**). More specifically, 14 states raised their tuition at public 2-year colleges by 10% or more and 18 states raised their tuition at public 4-year college by 10% or more. At public 4-year institutions, the largest dollar increase in tuition occurred in Massachusetts (\$842), and the smallest occurred in Nevada (\$75). While Massachusetts had both the highest dollar increase and percentage increase in tuition (24%), three states had lower percentage increases than Nevada that resulted in higher dollar increases. At public 2-year institutions, tuition increases ranged from \$0 in California and Maine to \$649 in New Hampshire. While no states had smaller percentage increases in tuition than California or Maine (0% for both), two states with larger percentage increases than New Hampshire had smaller dollar amount increases.

**Table 5. Changes in Tuition and Fees at Public Institutions, by State: 2001-2002 to 2002-2003**

State	Public 4-year institutions				Public 2-year institutions			
	2001-2002	2002-2003	Percent change	Dollar amount change	2001-2002	2002-2003	Percent change	Dollar amount change
Alabama	\$3,266	\$3,500	7.1%	\$233	\$1,964	\$2,099	6.9%	\$135
Alaska	\$3,495	\$3,595	2.9%	\$100	\$2,148	\$2,208	2.8%	\$60
Arizona	\$2,486	\$2,583	3.9%	\$97	\$930	\$977	5.1%	\$47
Arkansas	\$3,613	\$3,871	7.1%	\$258	\$1,503	\$1,752	16.6%	\$249
California	\$2,083	\$2,177	4.6%	\$95	\$330	\$330	0.0%	\$0
Colorado	\$2,652	\$2,847	7.4%	\$195	\$1,999	\$2,117	5.9%	\$118
Connecticut	\$4,585	\$4,955	8.1%	\$370	\$1,888	\$2,034	7.7%	\$146
Delaware	\$5,290	\$5,640	6.6%	\$350	\$1,710	\$1,806	5.6%	\$96
Florida	\$2,551	\$2,691	5.5%	\$140	\$1,525	\$1,576	3.3%	\$51
Georgia	\$2,480	\$2,605	5.1%	\$125	\$1,486	\$1,550	4.3%	\$64
Hawaii	\$3,253	\$3,349	3.0%	\$96	\$1,322	\$1,323	0.1%	\$1
Idaho	\$2,728	\$3,055	12.0%	\$327	\$1,406	\$1,547	10.0%	\$141
Illinois	\$4,215	\$4,606	9.3%	\$392	\$1,580	\$1,684	6.6%	\$104
Indiana	\$4,209	\$4,750	12.9%	\$541	\$2,601	\$2,957	13.7%	\$356
Iowa	\$3,481	\$4,154	19.3%	\$674	\$2,422	\$2,670	10.2%	\$248
Kansas	\$2,516	\$2,771	10.1%	\$255	\$1,446	\$1,554	7.5%	\$108
Kentucky	\$3,001	\$3,302	10.0%	\$300	\$1,450	\$1,536	5.9%	\$86
Louisiana	\$2,492	\$2,587	3.8%	\$95	\$1,403	\$1,485	5.8%	\$82
Maine	\$4,046	\$4,282	5.8%	\$236	\$2,040	\$2,040	0.0%	\$0
Maryland	\$4,842	\$5,222	7.8%	\$380	\$2,345	\$2,564	9.3%	\$219
Massachusetts	\$3,534	\$4,376	23.8%	\$842	\$2,279	\$2,861	25.5%	\$582
Michigan	\$4,848	\$5,262	8.5%	\$413	\$1,677	\$1,752	4.5%	\$75
Minnesota	\$3,561	\$3,970	11.5%	\$409	\$2,750	\$3,049	10.9%	\$299
Mississippi	\$3,277	\$3,595	9.7%	\$318	\$1,278	\$1,396	9.2%	\$118
Missouri	\$3,436	\$4,127	20.1%	\$691	\$2,214	\$2,437	10.1%	\$223



State	Public 4-year institutions				Public 2-year institutions			
	2001-2002	2002-2003	Percent change	Dollar amount change	2001-2002	2002-2003	Percent change	Dollar amount change
Montana	\$3,364	\$3,863	14.8%	\$499	\$1,818	\$1,891	4.0%	\$73
Nebraska	\$3,192	\$3,507	9.9%	\$315	\$1,480	\$1,536	3.8%	\$56
Nevada	\$2,295	\$2,370	3.3%	\$75	\$1,320	\$1,365	3.4%	\$45
New Hampshire	\$6,269	\$6,706	7.0%	\$438	\$3,780	\$4,429	17.2%	\$649
New Jersey	\$5,874	\$6,630	12.9%	\$756	\$2,399	\$2,524	5.2%	\$125
New Mexico	\$2,534	\$2,696	6.4%	\$162	\$744	\$768	3.2%	\$24
New York	\$4,136	\$4,216	1.9%	\$80	\$2,838	\$2,855	0.6%	\$17
North Carolina	\$2,416	\$2,874	18.9%	\$458	\$992	\$1,096	10.5%	\$104
North Dakota	\$2,980	\$3,378	13.4%	\$398	\$2,040	\$2,263	10.9%	\$223
Ohio	\$5,058	\$5,920	17.0%	\$862	\$2,138	\$2,300	7.6%	\$162
Oklahoma	\$2,284	\$2,495	9.2%	\$211	\$1,520	\$1,613	6.1%	\$93
Oregon	\$3,734	\$3,890	4.2%	\$157	\$1,934	\$2,059	6.5%	\$125
Pennsylvania	\$5,131	\$5,722	11.5%	\$591	\$2,252	\$2,285	1.5%	\$33
Rhode Island	\$4,443	\$4,808	8.2%	\$364	\$1,854	\$2,014	8.6%	\$160
South Carolina	\$3,927	\$4,662	18.7%	\$735	\$1,856	\$2,343	26.2%	\$487
South Dakota	\$3,682	\$3,948	7.2%	\$267	na	na	na	na
Tennessee	\$3,246	\$3,490	7.5%	\$245	\$1,626	\$1,740	7.0%	\$114
Texas	\$2,874	\$3,467	20.6%	\$592	\$895	\$977	9.2%	\$82
Utah	\$2,648	\$2,876	8.6%	\$228	\$1,626	\$1,770	8.9%	\$144
Vermont	\$6,310	\$6,581	4.3%	\$271	\$3,124	\$3,312	6.0%	\$188
Virginia	\$3,906	\$4,261	9.1%	\$355	\$1,159	\$1,304	12.5%	\$145
Washington	\$3,299	\$3,745	13.5%	\$446	\$1,743	\$1,982	13.7%	\$239
West Virginia	\$2,637	\$2,904	10.1%	\$266	\$1,628	\$1,708	4.9%	\$80
Wisconsin	\$3,272	\$3,526	7.7%	\$254	\$2,619	\$2,902	10.8%	\$283
Wyoming	\$2,807	\$2,997	6.8%	\$190	\$1,501	\$1,575	4.9%	\$74

**Source:** CRS analysis of unpublished data from the Washington Higher Education Coordinating Board.

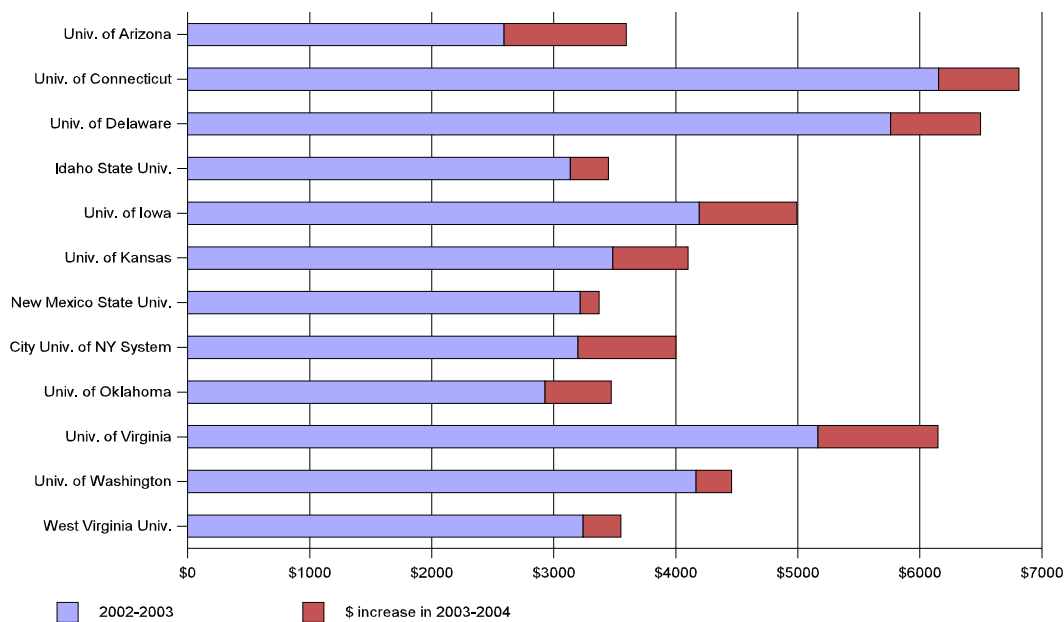
**Note:** The Washington Higher Education Coordinating Board collects data from a sample of public 2-year and 4-year institutions. The data do not include all institutions in the U.S. For example, tuition and fees at public 4-year institutions are based on a simple average of tuition and fees at the flagship institution for the state and selected comprehensive institutions.

na: Not available.

According to data compiled by the National Association of State Universities and Land-Grant Colleges (NASULGC), several state institutions also had mid-year tuition increases in 2002-2003. For example, the University of Connecticut, University of Delaware, and University of Maryland had tuition increases of about 5% between fall and spring. This translated to dollar increases ranging from \$76 to \$120. The University of Oregon increased tuition by 13% for dollar increases of \$130 - \$140, while the University of Virginia increased its tuition by \$385 or 8%.

Based on current economic conditions, particularly record state deficits and related decreases (or relatively small increases) in state appropriations for higher education, substantial tuition increases for the 2003-2004 academic year continue to be announced at many institutions. In many states, these increases will follow double-digit increases in tuition for the 2002-2003 academic year (see **Table 5**). While many states continue to have relatively low tuition at public institutions, several public institutions are considering or have approved tuition increases in excess of 10% for a single year.<sup>51</sup> Based on data gathered by NASULGC, **Figures 5 and 6** provide **examples** of price increases at **public** institutions from 2002-2003 to 2003-2004.<sup>52</sup>

**Figure 5. Change in In-State Tuition and Fees for Full-Time Students at Selected Public 4-year Institutions, 2002-2003 to 2003-2004**



**Source:** National Association of State Universities and Land-Grant Colleges, *Changes in Annual Tuition and Fees Charges at NASULGC Institutions: Academic Year 2003-2004*. At [<http://www.nasulgc.org>].

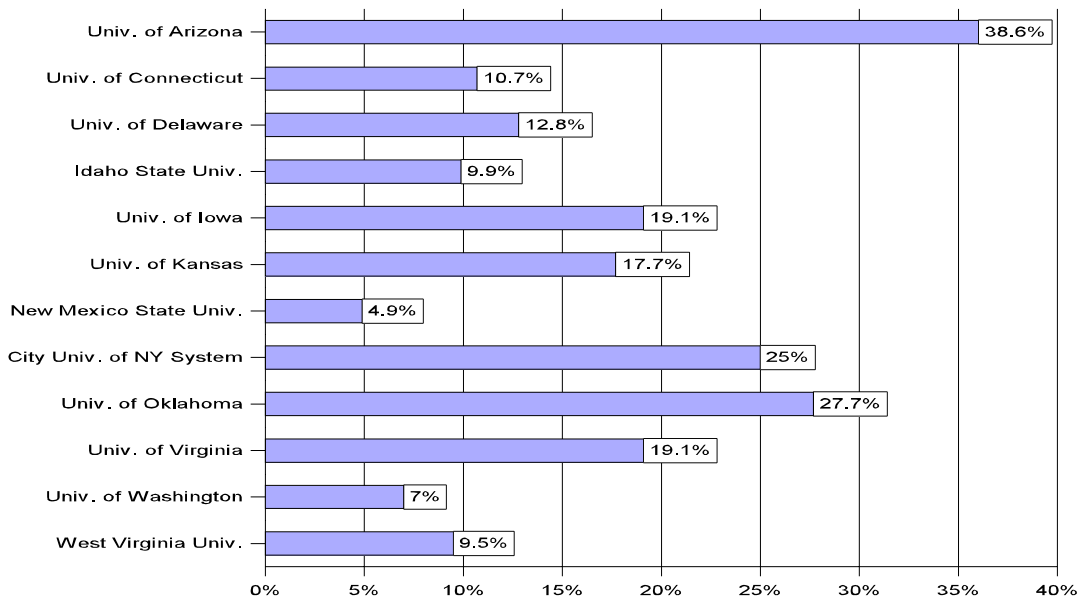
Of the institutions that provided NASULGC with information about why tuition had increased, the majority indicated it was due to state budget shortfalls or cuts. Other reasons cited included higher health insurance costs, increasing enrollment, increased spending for technology, and increased spending for need-based financial aid.

<sup>51</sup> National Association of State Universities and Land-Grant Colleges, *Changes in Annual Tuition and Fees Charges at NASULGC Institutions: Academic Year 2003-2004*. At [<http://www.nasulgc.org>].

<sup>52</sup> For information about additional institutions, visit the NASULGC website at [<http://www.nasulgc.org>].

In examining changes in price from year to year, two measures of change are available — the percentage increase and the dollar increase. It cannot be assumed that a large percentage increase results in a correspondingly large dollar increase and vice versa. For example, if an institution charging \$1,000 annually raises its tuition by 20%, the resulting tuition will be \$1,200, or an increase of \$200. At the same time, an institution charging a relatively high annual tuition can have a small percentage increase, resulting in a relatively large increase in dollar amount. For example, a 5% increase in tuition at an institution charging \$20,000 annually results in a \$1,000 increase in tuition. More specifically, based on the institutions included in **Figures 5 and 6**, a 28% increase in tuition at the University of Oklahoma resulted in a \$542 increase in tuition, while an 11% increase in tuition at the University of Connecticut resulted in a \$658 increase in tuition. In addition, while the University of Arizona had the largest percentage increase in tuition of the institutions shown on **Figure 5**, the actual dollar cost of tuition at the University of Arizona remains below that charged by 7 of the other 11 institutions included in the figure. Thus, when examining changes in tuition, it is useful to have both the percentage change and the dollar change to evaluate the effect of the change in tuition on access and affordability.

**Figure 6. Percent Change in In-State Tuition and Fees for Full-Time Students at Selected 4-Year Public Institutions, 2002-2003 to 2003-2004**



**Source:** National Association of State Universities and Land-Grant Colleges, *Changes in Annual Tuition and Fees Charges at NASULGC Institutions: Academic Year 2003-2004*. At [<http://www.nasulgc.org>].

## State Appropriations

For FY2003, state tax funds appropriated for higher education operating expenses (e.g., colleges and universities, student aid, governing boards) totaled \$63.6 billion.<sup>53</sup> This represented an overall increase of 1.2% in appropriated funds from the previous year, and a 4.7% increase in appropriated funds from FY2001. From FY2002 to FY2003, however, 13 states decreased state appropriations. Changes in state appropriations over this time period ranged from a decrease of 11% to an increase of 17%. From FY2001 to FY2003, nine states decreased state appropriations. Changes in state appropriations over this time period ranged from a decrease of 13% to an increase of 25%. Over a 10-year period (FY1993 to FY2003), however, overall state appropriations increased 60%, with increases in appropriations occurring in every state.

## Possible Implications of Declining State Support

As almost every state contends with serious financial difficulties, resulting in smaller increases in support for higher education than in previous years or outright reductions in support for higher education, public institutions are feeling, and will continue to feel, the impact of these decisions. A substantial decline in state appropriations, especially at 4-year institutions, may lead to large percentage and/or dollar increases in tuition, regardless of whether the actual cost of providing the education also increases. Based on the NASULGC data, this outcome already is being realized. In addition, as enrollment in higher education continues to increase, per student appropriations may be reduced if corresponding increases are not made in state appropriations for higher education.

Research has shown that changes in revenues and expenditures do not have as substantial an effect on tuition at public 2-year institutions. These institutions may maintain current tuition levels or eliminate the need for large tuition increases by reducing course offerings, services, or enrollment. These types of changes ultimately may have the same effect as higher tuition with respect to restricting access to postsecondary education. This could be particularly troublesome for low-income students, non-traditional students, and individuals seeking to return to school for additional training.

Decreases in state appropriations may also mean less money is available to support institutional aid, which may, in turn, reduce student access to postsecondary education. For example, institutions that rely on state appropriations to offer institutional aid may find that they need to shift money that would have been used to provide aid to other purposes. They might use available state appropriations to affect tuition levels rather than using state appropriations to support student aid. While this practice may be beneficial to all students in terms of the price of college, low-income students dependent on institutional aid may no longer receive needed support.

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<sup>53</sup> Center for the Study of Education Policy, Illinois State University. At [<http://www.coe.ilstu.edu/grapevine/Welcome.htm>].

## Issues for Reauthorization

In 1998, the Cost Commission on Higher Education issued recommendations regarding the price of postsecondary education, and since the last reauthorization of the Higher Education Act in 1998, Congress has held hearings on affordability and accessibility issues. Clearly there are concerns about students' and their families' ability to afford college and, consequently, their ability to access postsecondary education opportunities. Congressional involvement with the issue of college price has historically been limited, focusing on issues of access. This raises the question of what the appropriate federal role is, if any, in relation to college prices. Concomitantly, a second question of whether Congress has tools at its disposal that will effectively address issues of college price and cost must be asked. A key issue is how to develop and implement effectively a federal policy related to college price given the diversity of institutions, and policies and price drivers affecting those institutions nationwide.<sup>54</sup> Regardless of the approach ultimately selected, Congress faces the need to balance concerns about affordability and access with the goal of maintaining a high quality system of postsecondary education.

### Price Controls

According to a report by IHEP,<sup>55</sup> most analysts predict that college prices will continue to rise in the near future. The continued increase in tuition is attributed to market operations — high demand for college education because of its impact on lifetime earnings and multiple options for financing a college education, including loans, tax credits, and public subsidies. Congressional debate may focus on the use of price controls as a means to temper anticipated increases in tuition. Traditionally, Congress has not embraced a policy role with respect to the prices charged by public and private institutions, choosing instead to address issues of access and affordability from the student financial aid perspective.

More practically, the issue of what price controls to use may be difficult to determine. If a certain percentage increase is set as a limit, institutions with relatively low tuition may be penalized for making small changes in the actual dollar amount being charged to students, while institutions with already high tuition levels may be able to make relatively small percentage increases resulting in relatively large dollar increases. Similar problems could arise from establishing a specific dollar increase as a limit. In addition, depending on the implementation timeline of such a policy, in the years just prior to the policy taking place, institutions nationwide may seize their last opportunities to have relatively large tuition increases.

While price controls may help to reduce the magnitude of price increases, consideration also may need to be given to the challenges of implementing this type

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<sup>54</sup> NCC, *College Costs & Prices*, p. 21. The National Commission on the Cost of Higher Education argues against a one-size-fits-all approach for reducing price or controlling costs.

<sup>55</sup> The Institute for Higher Education Policy, *Looking Back, Going Forward: The Carnegie Commission Tuition Policy, Working Paper*, 2001. At [<http://www.ihep.com/Pubs/PDF/Carnegie.pdf>]. (Hereafter cited as IHEP, *Tuition Policy*).

of policy. For example, students, especially low-income students, could face unintended consequences as a result of price controls. These unintended consequences could take many forms, such as a reduction in institutional aid that is available because the institution is no longer generating enough revenue to make grants, or state reallocation of appropriations previously used to provide grant aid to low-income students to minimize the need for tuition increases. In both these examples, while controlling price increases may benefit numerous students, it may indirectly reduce access and affordability for low-income students. Additional unintended consequences of restrictions on price increases may include diminished course offerings, more courses being taught by teaching assistants, or a decrease in the availability or quality of student services provided.

The specific penalty or penalties imposed on institutions exceeding the mandated limit on price increases also pose challenges in finding a balance between holding institutions accountable without unduly penalizing students, particularly aid-eligible students. For example, if exceeding the limit on tuition results in an institution being ineligible to participate in loan programs and the Pell Grant program,<sup>56</sup> or results in an institution losing its eligibility for any form of financial assistance under any federal program, students will be directly affected.<sup>57</sup> While publicizing which institutions have exceeded various limits on price increases may be valuable to students and their families considering which institution to attend, for students currently at the institution, loss of federal aid could result in their needing to transfer from the institution. Students transferring from one institution to another may not receive credit for all the course work they have completed, thus incurring additional costs. In addition, students wanting to stay at the institution may be forced to take out loans from private lenders at higher interest rates than might otherwise be available through a federal subsidized or unsubsidized loan program. Congress could consider strategies to continue to provide federal aid to students already enrolled at an institution at the time the institution loses its eligibility to participate in federal financial aid programs due to price controls to help mitigate direct negative effects of the policy on students.

## **Incentives for Controlling Price**

While price controls are viewed by some as using a “stick” to gain institutional cooperation, others have suggested offering a “carrot” to institutions in the form of incentive structures to encourage limits on price increases. If institutions responded positively to the incentive, students would benefit from the lower prices, especially

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<sup>56</sup> Loss of eligibility for the Federal Family Education Loan and the William D. Ford Direct Loan programs, for example, are penalties imposed on institutions for exceeding cohort default rates. For more information on cohort default rates, see CRS Report RL30656, *The Administration of Federal Student Loan Programs: Background and Provisions*, by Adam Stoll.

<sup>57</sup> The latter penalty is the penalty imposed by HEA (Sections 120 and 487(a)) on institutions that fail to certify that they have adopted and implemented a program to prevent the use of illicit drugs and alcohol abuse.

lower prices achieved without potential institutional penalties affecting student aid.<sup>58</sup> At the same time, however, providing incentives poses another potential cost for the federal government, raising the question about whether additional federal monies would be more effective if allocated in some other way, such as increasing Pell Grants. Since the Education Amendments of 1972, the federal government through the HEA principally has placed funding for higher education into the hands of students rather than institutions. Providing incentives to evoke specific behaviors by postsecondary institutions could be viewed as a deviation from this precedent.

## Controlling Costs

Some institutions already have taken steps to control costs and increase productivity and efficiency, while improving or maintaining quality. For example, some institutions are relying more heavily on adjunct faculty for instruction rather than hiring tenure track professors, some have entered into collaborative purchasing agreements, while others have implemented different pricing systems based on the cost of the student's program. Congress may consider measures to require or encourage more institutions to take similar steps. For example, just as college price could be linked to an index, increases in administrative costs could be indexed to instructional costs. Institutions could be provided with incentives for using technology to deliver instruction more effectively and efficiently, especially as the number of students participating in distance education increases rapidly.<sup>59</sup> Institutions also could be encouraged to collaborate to gain economies of scale in various aspects of purchasing and administration, use existing facilities more collaboratively, or rethink the role of tenure.

As previously discussed, however, institutional costs do not have a strong relationship to college price. While encouraging institutions to control costs might be more appealing and more feasible than other routes for controlling price increases, these strategies may not have as large an impact on prices as desired, as productivity gains in labor-intensive enterprises are difficult to obtain. In addition, efforts to control costs could inadvertently result in diminished quality and quantity of courses, programs, and services. Last, as previously mentioned, providing funding directly to institutions as incentives rather than to students has not been the primary traditional role of the federal government in higher education.

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<sup>58</sup> The degree of responsiveness of institutions would depend on the structure of the incentive.

<sup>59</sup> U.S. Department of Education, NCES, *A Profile of Participation in Distance Education: 1999-2000*, October 2002, NCES 2003-154. At [<http://www.nces.ed.gov/pubssearch/pubsinfo.asp?pubid=2003154>]. For more information about distance education, see CRS Report RL31926, *Institutional Eligibility for Participation in Title IV Student Aid Programs Under the Higher Education Act: Background and Issues*, by Rebecca R. Skinner.

## Public Information

Another possible approach to the issues of price and cost is to provide potential and current students with more and better information about these issues, enabling them to make better informed decisions about their postsecondary education; that is, providing information to enable the higher education market to operate more efficiently without controls or incentives. While some information is available to the general public through various college guides and websites, concerns have been raised by some researchers that there is not enough information being made available and that the public needs to understand more about the differences between cost and price. The National Commission on the Cost of Higher Education stated that it is difficult to understand the difference between price and costs, and that these differences need to be communicated more clearly. It has been suggested that data related to college costs and price should be designed to be useful, accurate, timely, understandable, and provided annually.

While Congress may consider addressing the need for more useful information to be made available to the public, it might build on existing data collection strategies. Current legislation mandates that NCES collect data from postsecondary institutions and that institutions respond to the Integrated Postsecondary Education Data System (IPEDS) surveys in a timely manner. There are some concerns, however, that institutions do not respond appropriately to IPEDS.<sup>60</sup> In addition, there are time lags between when the data are collected and released to the public. This could be a problem, however, with any data collection designed to include the universe of institutions.

In addition, existing HEA legislation requires institutions to provide current and prospective students and their families with a variety of institutional information. While institutions are required to tell enrolled students what information is available, Congress could consider strengthening existing requirements by specifying how data must be presented in terms of user-friendly formats and how individuals must be notified about the existence of the data and how to easily obtain it.<sup>61</sup> There also is discussion of adding additional accountability measures for institutions. If these measures are added, provisions could be made to ensure this information is made available to students and their families.

The National Association of College and University Business Officers (NACUBO) has started to address the need for more information through the creation of a common methodology to calculate the cost of undergraduate education. According to NACUBO, the methodology can be used by public and private

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<sup>60</sup> In July 2003, ED announced that about 470 institutions had failed to complete at least one of the 10 IPEDS surveys. In Aug. 2003, ED announced that it was fining about 80 institutions.

<sup>61</sup> NCES also provides summary information about institutions through the College Opportunities On-Line (COOL) system. Steps also could be taken to better publicize the availability of these data.



institutions, and includes a form that can be used to present cost and price data in a standard format.<sup>62</sup>

## Regulatory Burden

Regulations encompass requirements that function as control strategies (e.g., accountability measures), but these regulations often add to the costs institutions shoulder in providing higher education to students. Postsecondary institutions and some researchers have agreed that institutions already may be overburdened by regulation. While most agree that public accountability is essential, there are questions about whether public accountability could be maintained through less costly and cumbersome measures. For example, performance-based models and requirements could be implemented, allowing institutions to determine how to meet specific requirements, rather than specifying both standards and procedures for meeting standards. The House Committee on Education and the Workforce has examined the issue of regulatory burden through the FED UP initiative in which feedback was solicited from institutions nationwide regarding the burden placed on institutions by federal regulations. Congress may debate whether steps need to be taken to reduce the regulatory burden placed on institutions by the federal government, regardless of whether price or cost control strategies are implemented, and whether reducing these burdens may result ultimately in smaller price increases.<sup>63</sup> At the same time, any new actions taken by Congress, including price controls or incentive strategies, will likely be viewed by institutions in terms of any additional regulatory burden that they place on institutions.

In addition, Congress also may address the issue of accreditation.<sup>64</sup> Institutions are eligible to participate in HEA, Title IV student financial aid programs only if they are accredited by an agency or association recognized by ED. The accreditation process, while voluntary, periodically involves an institutional self-assessment, followed by reviews by faculty and administrative peers and the public. While institutions find this process burdensome and expensive, adding to the costs of providing higher education, other questions also are being asked about whether accreditation is a reliable indicator of a quality education. This concern has already led to the introduction of legislation to eliminate accreditation as a prerequisite for Title IV eligibility.<sup>65</sup>

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<sup>62</sup> For more information, see [<http://www.nacubo.org>].

<sup>63</sup> A bill was introduced in the 107<sup>th</sup> Congress, H.R. 4866, FED UP Higher Education Technical Amendments, which would address the issue of regulatory burden. The bill was introduced on June 5, 2002.

<sup>64</sup> This issue is addressed in greater detail in CRS Report RL31926, *Institutional Eligibility for Participation in Title IV Student Aid Programs Under the Higher Education Act: Background and Issues*, by Rebecca R. Skinner.

<sup>65</sup> See for example H.R. 838 introduced on Feb. 13, 2003. The bill would eliminate accreditation and preaccreditation requirements for institutional eligibility.

## **Federal Financial Aid**

Congress also may consider making changes to federal financial aid programs as a way to address affordability issues. As previously discussed, the relationship between federal student financial aid and price is not clear. Research indicates that federal grants are not related to price increases, but less conclusive evidence is available with respect to federal loans and tax credits. Thus, changes to the Pell Grant program, based on research, seem unlikely to have an adverse effect on college price. However, changes to Stafford Loan program, for example, could have an effect on college price. Congress also may consider providing funding to support additional research on the relationship between federal aid, specifically loans and tax credits, and college price.

**Appendix Table A. Average Undergraduate Tuition and Fees and Room and Board in Constant Dollars Paid by Full-Time-Equivalent Students in Degree-Granting Institutions, by Type and Control of Institution: Selected Years, 1976-1977 to 2001-2002**  
(in 2001 constant dollars)

Year and control of institution	Total tuition, room, and board			Tuition and required fees (in-state)		
	All institutions	All 4-year (includes univ. and other 4-year)	2-year	All institutions	All 4-year (includes univ. and other 4-year)	2-year
<b>All institutions</b>						
1976-1977	\$7,082	\$8,021	\$4,973	\$2,876	\$3,792	\$1,076
1980-1981	\$6,665	\$7,521	\$4,793	\$2,770	\$3,608	\$1,130
1981-1982	\$6,798	\$7,697	\$4,823	\$2,838	\$3,716	\$1,149
1985-1986 <sup>a</sup>	\$8,040	\$9,059	\$5,542	\$3,590	\$4,583	\$1,462
1990-1991	\$8,891	\$10,300	\$5,326	\$4,087	\$5,432	\$1,474
1991-1992	\$9,202	\$10,711	\$5,321	\$4,272	\$5,702	\$1,546
1995-1996	\$10,227	\$12,004	\$5,491	\$5,041	\$6,724	\$1,769
1999-2000	\$11,103	\$13,130	\$5,749	\$5,568	\$7,488	\$1,830
2000-2001	\$11,126	\$13,290	\$5,615	\$5,530	\$7,581	\$1,746
2001-2002 <sup>b</sup>	\$11,454	\$13,677	\$5,705	\$5,719	\$7,828	\$1,772
<b>Public institutions</b>						
1976-1977	\$5,568	\$6,023	\$4,639	\$1,490	\$1,919	\$882
1980-1981	\$5,101	\$5,481	\$4,357	\$1,365	\$1,727	\$841
1981-1982	\$5,188	\$5,593	\$4,333	\$1,391	\$1,772	\$847
1985-1986 <sup>a</sup>	\$5,878	\$6,351	\$4,906	\$1,720	\$2,169	\$1,055
1990-1991	\$6,446	\$7,104	\$4,698	\$1,970	\$2,558	\$1,117
1991-1992	\$6,681	\$7,403	\$4,711	\$2,117	\$2,753	\$1,218
1995-1996	\$7,270	\$8,151	\$4,900	\$2,532	\$3,309	\$1,440
1999-2000	\$7,771	\$8,796	\$5,017	\$2,663	\$3,560	\$1,422
2000-2001	\$7,802	\$8,900	\$4,977	\$2,635	\$3,600	\$1,370
2001-2002 <sup>b</sup>	\$8,046	\$9,199	\$5,137	\$2,727	\$3,746	\$1,379
<b>Private institutions</b>						
1976-1977	\$12,157	\$12,378	\$9,247	\$7,678	\$7,887	\$4,955
1980-1981	\$11,757	\$12,022	\$9,248	\$7,518	\$7,774	\$5,186
1981-1982	\$12,012	\$12,332	\$9,247	\$7,701	\$8,014	\$5,075
1985-1986 <sup>a</sup>	\$14,623	\$15,189	\$10,718	\$9,528	\$10,074	\$6,044
1990-1991	\$17,493	\$17,937	\$12,605	\$11,887	\$12,307	\$7,547
1991-1992	\$18,064	\$18,539	\$12,525	\$12,248	\$12,690	\$7,482
1995-1996	\$19,997	\$20,466	\$13,438	\$13,787	\$14,227	\$8,244
1999-2000	\$21,458	\$22,011	\$14,845	\$14,968	\$15,508	\$8,754
2000-2001	\$21,976	\$22,478	\$15,209	\$15,427	\$15,911	\$9,325
2001-2002 <sup>b</sup>	\$22,520	\$22,968	\$15,879	\$15,851	\$16,287	\$10,010

**Source:** CRS analysis based on U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2002*, Table 312, At [<http://www.nces.ed.gov>]; and Bureau of Labor Statistics, annual unadjusted Consumer Price Index-Urban data, at [<http://www.bls.gov>].

**Note:** All data are reported in constant 2001 dollars. See **Table 1** for additional information about the data.

<sup>a</sup> Room and board data are estimated.

<sup>b</sup> Preliminary data based on fall 2000 enrollment weights.