

Changes in Patterns of Prices and Financial Aid

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Postsecondary Education Descriptive Analysis Report

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Postsecondary Education Descriptive Analysis Report

November 2005

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Executive Summary

The interest in postsecondary education prices and financial aid has intensified, largely because increases in published tuition and fees continue to outpace the rate of inflation. Both public 4-year institutions and public 2-year institutions raised tuitions in 2004–05, by 11 percent and 9 percent, respectively. This brought the average tuition and fees at public 4-year institutions to \$5,132 and \$2,076 at public 2-year institutions (The College Board 2004a). Private not-for-profit, 4-year institutions also raised tuitions in 2004–05 by about 6 percent, bringing the average tuition to \$20,082 and marking the fourth year in a row that private not-for-profit, 4-year institutions have increased tuition by at least 5 percent.

At the same time, considerable increases in financial aid have helped students defray their postsecondary education expenses. Over \$122 billion of financial aid from federal, state, institutional, and private sources was made available to students in 2003–04, an increase from \$108 billion in the previous year (The College Board 2004b). In 1999–2000, 55 percent of undergraduates received some type of financial aid from federal, state, institutional, or other sources, receiving about \$6,000 on average (Berkner, He, and Cataldi 2002).

Financial aid allows most students to pay less than the published (or “sticker”) price for college. A recent report (Horn, Wei, and Berker 2002) examined “net prices” (in other words, prices after subtracting financial aid) between the years 1992–93 and 1999–2000. The report

found that net prices did not increase as rapidly as sticker prices; in fact, in some cases, net prices did not increase at all during this time period. This suggests that in order to address issues of student access and affordability, it is important to examine changes in net prices in addition to changes in sticker prices.

Goals and Limitations

This report examines patterns of sticker prices, financial aid, and net prices over the period 1999–2000 to 2001–02 from an institutional perspective. Several features should be kept in mind:

- The units of analysis for this report are colleges and universities, rather than students, and the report attempts to explore how institutions with varying characteristics differ, not how different groups of students fare within those institutions.
- The report focuses on the prices and financial aid reported by institutions, not by students.¹
- It provides information on three different types of prices—tuition and fees, price of attendance, and net price—and provides a mechanism to compare changes in these different prices over time.

¹ In other words, the denominator of the calculations is the number of institutions.

- It examines the median values (rather than averages) of prices and financial aid for various subgroups of institutions.
- The analysis focuses on data for first-time, full-time, degree/certificate-seeking undergraduates (referred to as “full-time freshmen”). The percentage of undergraduates who fell into this group varied by sector, from a median of 12 percent at public 2-year institutions to 87 percent at private for-profit, less-than-4-year institutions.

Given these differences, the figures in this report may differ from those in other published sources.

Design and Methodology

Using data primarily from the Integrated Postsecondary Education Data System (IPEDS), this report analyzes how price of attendance, financial aid, and net prices changed over the period 1999–2000 to 2001–02 for various types of institutions. The universe of institutions examined in the study was drawn from Title IV participating institutions included in the 2002–03 IPEDS universe, although some IPEDS institutions were excluded from the universe to increase comparability and to deal with missing data. For example, since full-time freshmen were the focus of the analysis, institutions with low numbers of these students were excluded from the universe.² In addition, four institutional sectors were included in the analysis: public 4-year; public 2-year; private not-for-profit,

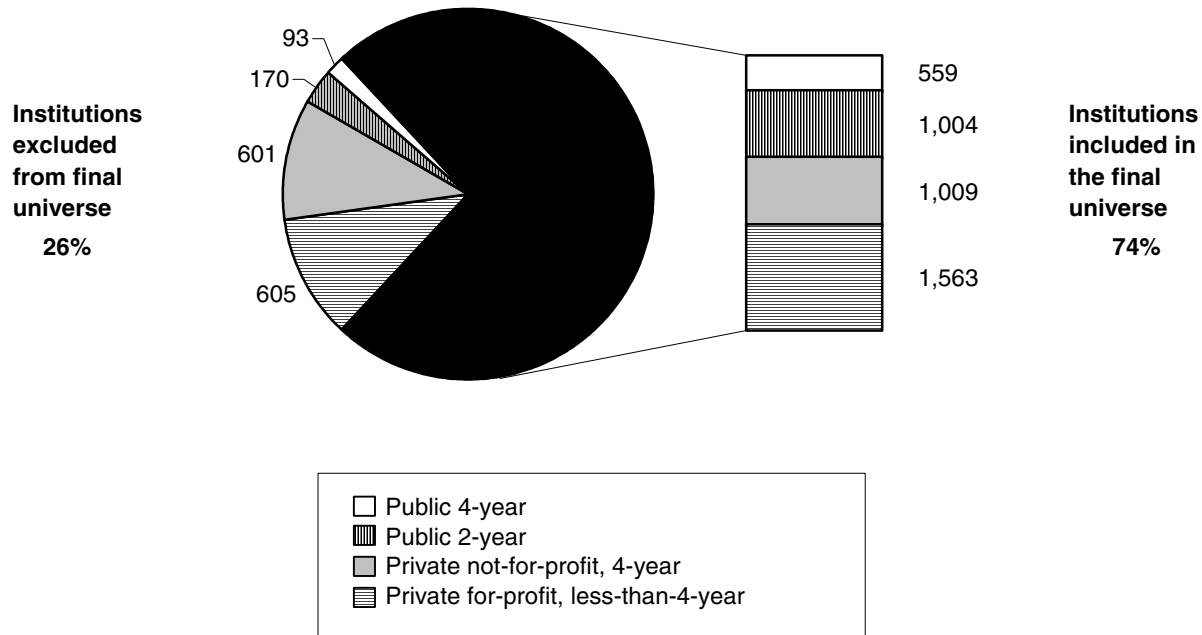
4-year; and for-profit, less-than-4-year institutions. All analyses were performed separately for each institutional sector because the groups are very different in terms of their institutional characteristics and in the types of students served.

The number of institutions and proportions of full-time freshman enrollment included in the final universe are provided in figures A and B. Although the final universe includes about three-fourths of the original number of Title IV institutions in the four sectors, the institutions remaining in the universe comprised 94 percent of the total reported enrollment of first-time, full-time, degree-seeking undergraduates in the four sectors under review.

For the analysis presented in this report, several variables were constructed for each institution in the universe. Price of attendance was defined as the sum of three components: 1) tuition and fees charged to full-time freshmen (for public institutions, weighted by the percentage of full-time freshmen attending from in-district, in-state, and out-of-state); 2) the estimated cost of room and board and other expenses, or the other expenses for students who do not contract with the school for room and board, for this group of full-time freshmen (weighted by the percentage of full-time freshmen living on-campus, off-campus not with family, and off-campus with family); and 3) the estimated cost of books, supplies, and miscellaneous expenses. The available financial aid variables (the percentages of full-time freshmen receiving federal grants, state grants, institutional grants, and loans, as well as the average amounts of aid received) were combined into composite variables to measure total grants and total aid (other types of financial aid to students, such as work-study,

² Selection criteria were: participation in the programs authorized under Title IV of the Higher Education Act, location in the 50 states or the District of Columbia, location in one of the four sectors under review, degree-granting status (except for-profit institutions), academic year reporting (except for-profit institutions), enrollment (at least 50 first-time, full-time, degree/certificate-seeking undergraduates, or 25 at for-profit institutions), and in the IPEDS universe for all 3 years.

Figure A. Number of Title IV institutions included in and excluded from the final universe, by type of institution: 2002–03



NOTE: The pattern signifies institutions that were included in the universe. The universe was drawn from the Institutional Characteristics component for the 2002 IPEDS Collection Year.
 SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Collection Year 2002.

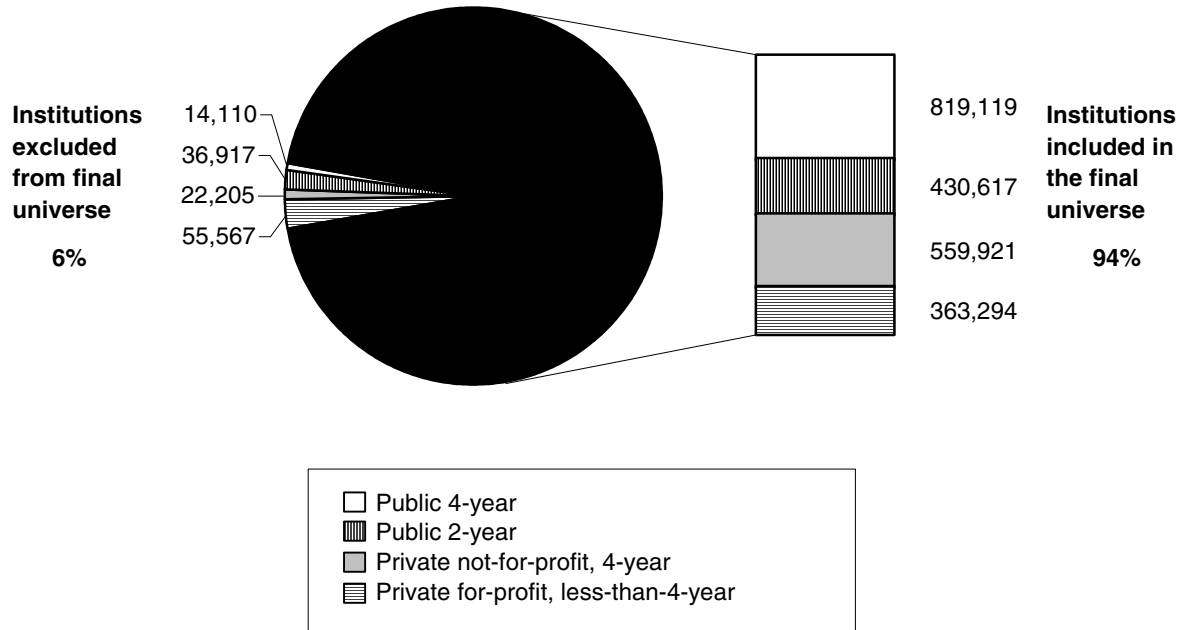
were not available for inclusion). Net price was defined as the difference between average price of attendance and average amounts of financial aid, with two versions: price of attendance less grants (federal, state, and institutional), and price of attendance less grants and loans. These are labeled as net price (grants) and net price (all aid), respectively.

Finally, “price change indices” were calculated for each sector, and for four types of prices: tuition and fees; price of attendance; and the two definitions of net prices. In each case, the index was calculated as the rate of change in price between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the

Consumer Price Index (CPI) during this period. This formulation measures the difference between the rate of change in prices overall and the rate of change in college prices, where an institution that raises its price over this period at the rate of inflation would have an index value of 0. An institution that raises its price faster than the rate of inflation over 3 years would have a positive index value, while an institution that raises its prices by lower than the rate of inflation (or, decreases its price) would have a negative index value.³ In this report, the term

³ To provide some context, the rate of inflation over the period 1999–2000 and 2001–02 was about 5.4 percent, according to the CPI.

Figure B. Percentage of enrollment of first-time, full-time, degree/certificate-seeking undergraduates at Title IV institutions included in and excluded from the final universe, by type of institution: 2001–02



NOTE: This analysis was conducted using the original data files. The pattern signifies institutions that were included in the universe. The enrollment refers to the number of students in each reporting institution's cohort, whether reported by academic year or by program year. This analysis does not include approximately 150,000 full-time freshmen reported by institutions in other institutional sectors. Detail may not sum to totals because of rounding. Note that the 2002 IPEDS Collection Year collects data on the number of first-time, full-time, degree/certificate-seeking undergraduates for the previous year.
 SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Student Financial Aid, Collection Year 2002.

“price change indices” may also be called “price index” or “price index value.”

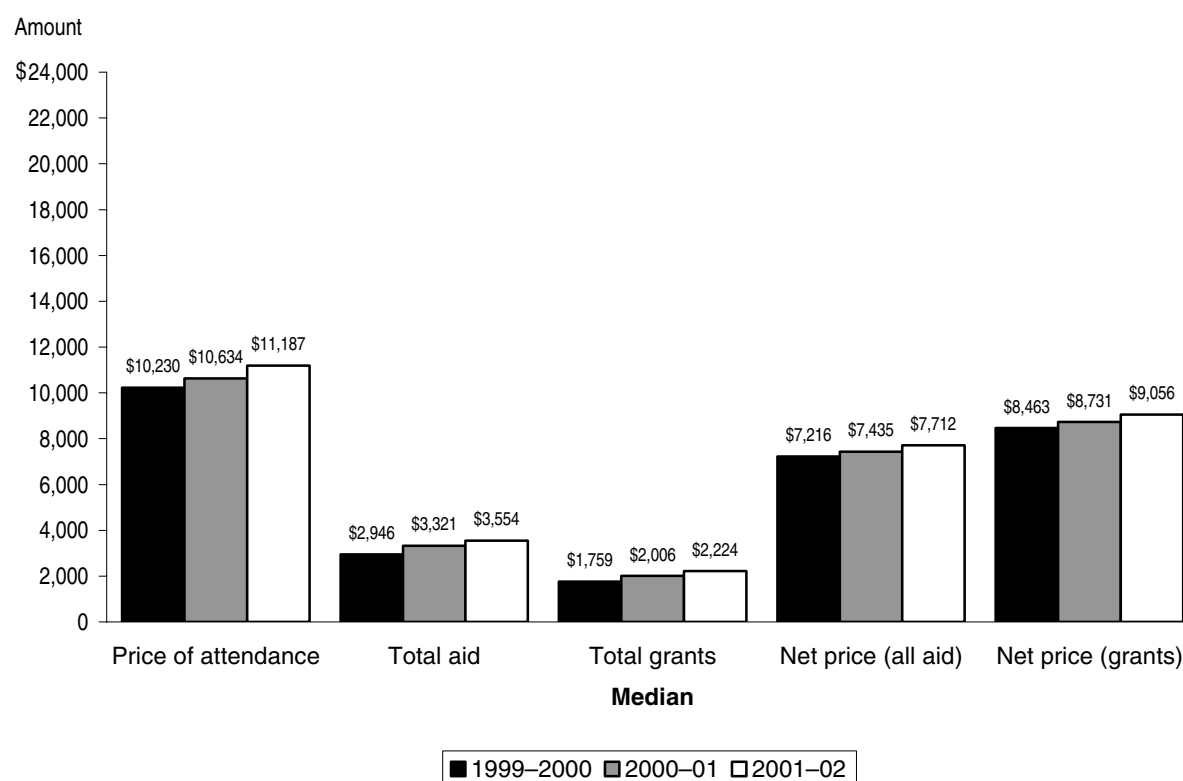
Findings

Public 4-Year Institutions

At public 4-year institutions, the median price of attendance increased from \$10,230 in 1999–2000 to \$11,187 in 2001–02 (figure C). The median value of total aid (across all first-time freshmen, including nonrecipients) at

public 4-year institutions increased from \$2,946 in 1999–2000 to \$3,554 in 2001–02. The median value of total grants increased, but not meaningfully. The median percentage changes in aid over the 3-year period were higher than median percentage change in price of attendance: a median of 20 percent increase for total grants and 14 percent increase for total aid, compared to a median of 10 percent increase for price of attendance (table 4). The median percentage increases for both price of attendance and aid were higher than inflation

Figure C. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates: Public 4-year institutions, academic year 1999–2000 to 2001–02



NOTE: Medians are in current dollars.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Years 2000 to 2002.

over the 3-year period, which was about 5 percent.

Together, the changes in price of attendance and in financial aid impacted the median net prices of public 4-year institutions. Median net price (all aid) increased from \$7,216 in 1999–2000 to \$7,712 in 2001–02; median net price (grants) increased from \$8,463 to \$9,056 (table 4). The median percentage changes in both types of net price over the 3-year period were lower than the median percentage change in price of attendance. In other words, increases in financial aid made it possible for net prices to

increase at a slower rate than the price of attendance (sticker price) at public 4-year institutions.

Varying patterns in prices and aid may reflect differences in the missions and goals of colleges and universities. In fact, the median price of attendance, total aid, total grants, and net prices for full-time freshmen in 2001–02 differed according to various institutional characteristics. The following groups of public 4-year institutions had higher median prices of attendance, net prices (all aid), and net prices (grants) than their counterparts in other

categories: the Carnegie classification of Doctoral/Research Universities—Extensive; very selective public 4-year institutions;⁴ institutions with a low proportion of full-time freshmen receiving federal grants (receipt of federal grants may be considered a proxy for low-income students); and institutions with high enrollment sizes (compared to those with low enrollment). Institutions with high tuition (compared to those with low tuition) also had higher aid amounts. On the other hand, public 4-year institutions with a low proportion of full-time freshmen receiving federal grants had lower median amounts of total aid and total grants.

The price indices constructed for this report combine all of the patterns in price and aid together into one measure, which takes into account inflation during the 3-year period. This formulation measures the difference between the rate of change in prices overall (inflation) and the rate of change in college prices. An institution that raises its price over this period at the rate of inflation would have an index value of 0. For all public 4-year institutions, the median index value for tuition and fees was higher than for price of attendance—public 4-year institutions raised their tuition and fees by a median of almost 7 percentage points higher than the rate of inflation over 3 years, but raised their prices of attendance by less—about 5 percentage points higher than the rate of inflation (table 6). At the same time, the median index values for net price (all aid) and net price (grants) were lower than for price of attendance—about 3 for both net price indices. This reflects the fact that for the typical

institution, net prices increased at a slower rate than did sticker prices over the 3-year period.

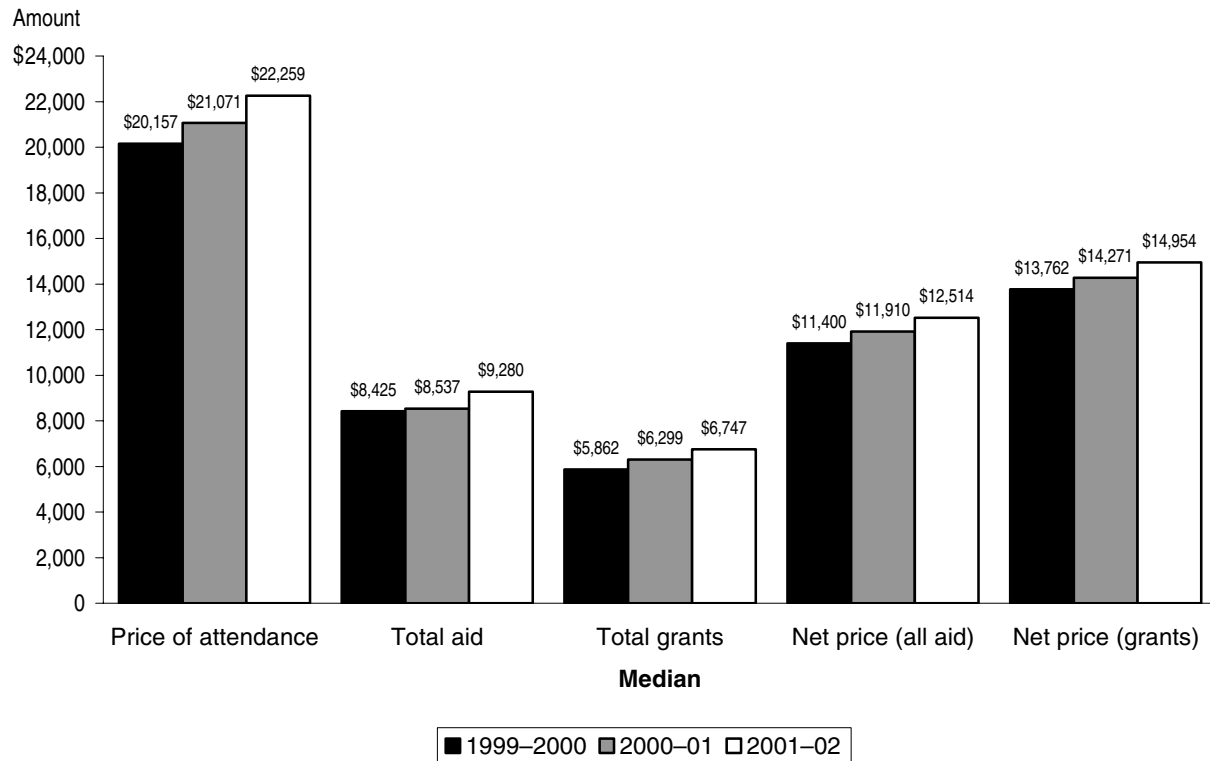
The various indices also differed according to specific institutional characteristics. Several groups of public 4-year institutions had median net price index values that were close to zero or even negative: Doctoral/Research Universities—Intensive and Associates-Baccalaureate/Associates Colleges; institutions with a low proportion of undergraduates who were full-time freshmen; those with a high proportion of students who were not White; those with a high proportion of full-time freshmen receiving federal grants; and low-tuition institutions for net price (grants). These groups of institutions had net prices that increased at or below the rate of inflation, or decreased. Other groups of public 4-year institutions had median net price index values that were relatively high, such as institutions with a high percentage of undergraduates who were full-time freshmen; institutions with high tuition; and institutions with low or lower middle proportions of students receiving federal grants.

Private Not-For-Profit, 4-Year Institutions

The median price of attendance for private not-for-profit, 4-year institutions increased from \$20,157 in 1999–2000 to \$22,259 in 2001–02 (figure D). Across all first-time freshmen, including nonrecipients, the median total aid at private not-for-profit, 4-year institutions increased from \$8,425 in 1999–2000 to \$9,280 in 2001–02, while the median value of total grants increased from \$5,862 to \$6,747. The

⁴ The term “very selective” was drawn from a new selectivity variable created for this report for 4-year institutions, using a combination of admissions standards and test scores. See appendix E for details.

Figure D. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates: Private not-for-profit, 4-year institutions, academic year 1999–2000 to 2001–02



NOTE: Medians are in current dollars.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Years 2000 to 2002.

median percentage change in total grants over the 3-year period, an 11 percent increase, was higher than the median percentage change in price of attendance, a 10 percent increase; both of these percentage increases were higher than the rate of inflation, a 5 percent increase (table 9). The changes in price of attendance and in financial aid were reflected in changes in the median net prices of private not-for-profit, 4-year institutions. Median net price (all aid) increased from \$11,400 in 1999–2000 to \$12,514 in 2001–02; median net price (grants) increased from \$13,762 to \$14,954.

There were differences in the median price of attendance, total aid, total grants, and net prices for full-time freshmen in 2001–02 for various groups of private not-for-profit, 4-year institutions. For example, the following groups of private not-for-profit, 4-year institutions had higher median prices of attendance, net prices (all aid), and net prices (grants) than their counterparts in other categories: Doctoral/ Research Universities—Extensive; very selective institutions; institutions with a low proportion of full-time freshmen receiving federal grants; institutions with high enrollment (compared to those with low enrollment); and

institutions with high and higher middle tuition (compared to those with low tuition). Moderately selective institutions had the highest median aid amounts, as did institutions in the lower middle category of the percentage of full-time freshmen receiving federal grants, in comparison with their counterparts in other categories.

For all private not-for-profit, 4-year institutions, the difference between the rate of change in prices overall (inflation) and the rate of change in college prices varied depending upon the type of price measured. For example, the median index value for tuition and fees was slightly higher than for price of attendance (table 11). The median index values for net price (grants) were slightly lower. Focusing on the net price indices, certain groups of institutions had index values that were lower than the values for all private not-for-profit, 4-year institutions, including: Masters colleges and Universities, and Baccalaureate Colleges—General; moderately and minimally selective institutions; institutions with a low proportion of full-time freshmen who were not White; institutions in the higher categories of the proportion for students receiving federal grants; and institutions in the middle tuition categories.

Public 2-Year Institutions

The median price of attendance for public 2-year institutions increased from \$6,667 in 1999–2000 to \$7,184 in 2001–02 (figure E). Across all first-time freshmen, including nonrecipients, the median value of total aid and total grants at public 2-year institutions increased, but the change was not meaningful. Nonetheless, median percentage changes in aid over the 3-year period were higher than median percentage

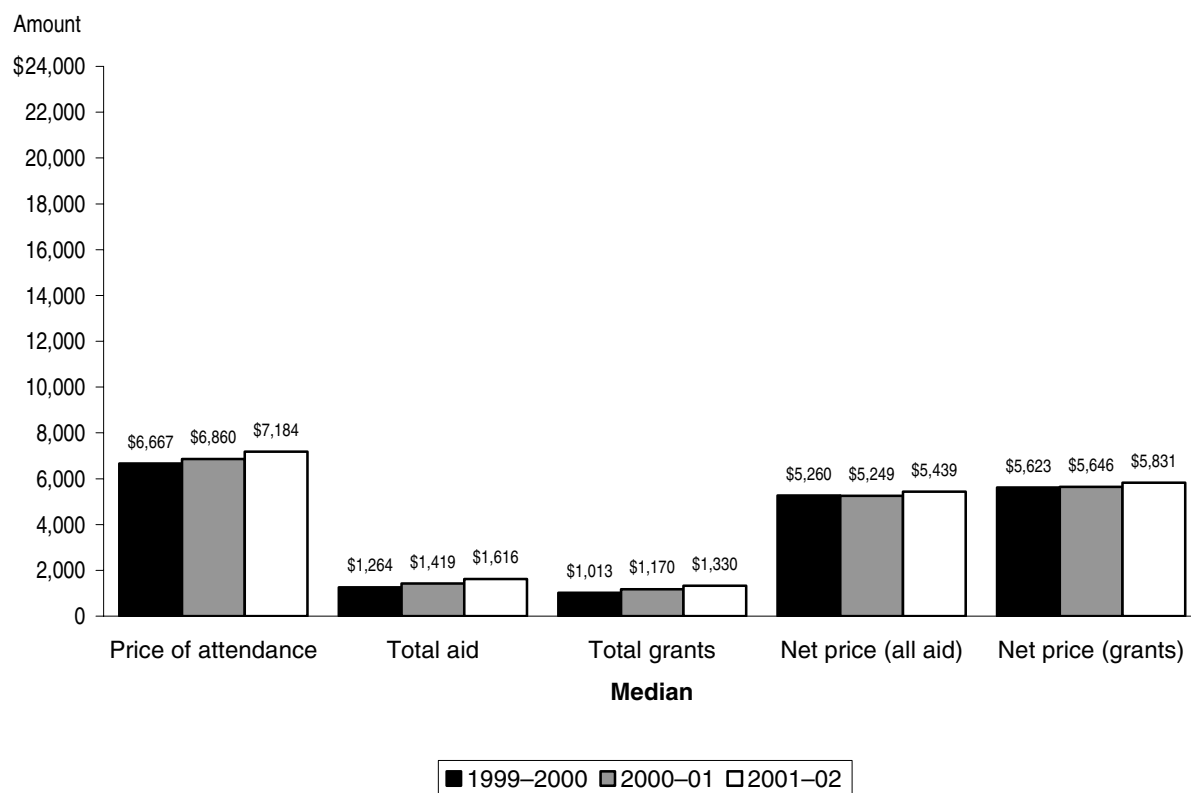
change in price of attendance: a median of 25 percent increase for total grants and 22 percent increase for total aid, compared to a median of 8 percent increase for price of attendance (table 14). All of these percentages were higher than the rate of inflation over this period, 5 percent.

With the impact of changes in sticker prices and financial aid at public 2-year institutions, the median percentage changes between 1999–2000 and 2001–02 in both types of net price were lower than the median percentage change in price of attendance. In fact, the percentage changes in net price (all aid) and net price (grants) were lower than the rate of inflation over this period. Increases in financial aid at public 2-year institutions made it possible for net prices to increase at a slower rate than price of attendance (sticker prices), and than inflation.

The median price of attendance, total aid, total grants, and net prices for full-time freshmen at public 2-year institutions in 2001–02 differed according to various institutional characteristics (table 15). For example, public 2-year institutions with a low proportion of full-time freshmen receiving federal grants had higher median net prices (all aid) and net prices (grants)—but lower median amounts of total aid and total grants—than their counterparts with a high proportion of these students. In addition, public 2-year institutions with high enrollment sizes had higher median net prices (all aid) and net prices (grants) than those with low enrollment, and lower median amounts of total aid and total grants.

Turning to the price indices for all public 2-year institutions, the median index value for tuition and fees, 4, was twice as high as the median index value for price of attendance, 2 (table 16). At the same time, the median index

Figure E. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates: Public 2-year institutions, academic year 1999–2000 to 2001–02



NOTE: Medians are in current dollars.

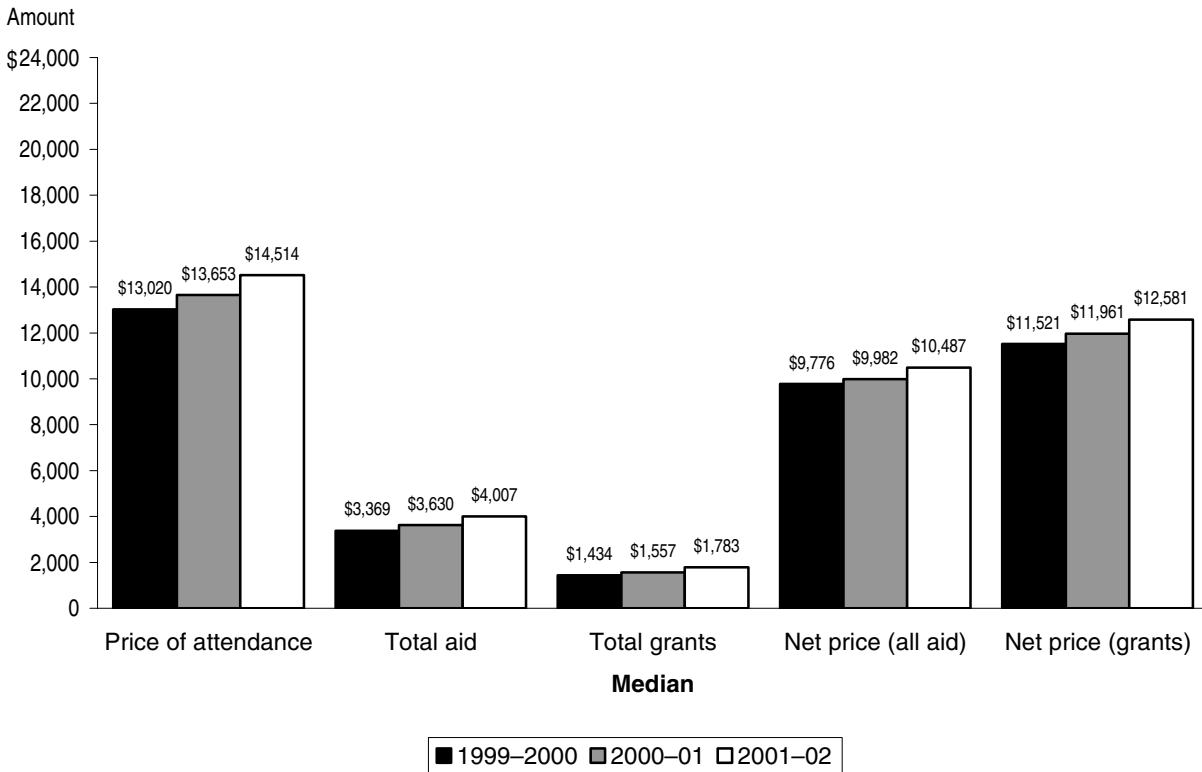
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Years 2000 to 2002.

values for net price (all aid) and net price (grants) were negative, reflecting the fact that institutions either increased their net prices slower than the rate of inflation, or decreased their net prices. Most groups of public 2-year institutions had median net price index values that were close to zero or even negative. Groups with the lowest median net price index values were institutions in the Mid East and Great Lakes, and those with a high proportion of full-time freshmen receiving federal grants.

Private For-Profit, Less-Than-4-Year Institutions

The median price of attendance for private for-profit, less-than-4-year institutions increased from \$13,020 in 1999–2000 to \$14,514 in 2001–02 (figure F). In addition, the median total aid at private not-for-profit, 4-year institutions across all first-time freshmen, including nonrecipients, increased from \$3,369 in 1999–2000 to \$4,007 in 2001–02. The median percentage changes in total aid and total grants over the 3-year period—an 18 percent increase and a 23 percent

Figure F. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates: Private for-profit, less-than-4-year institutions, 1999–2000 to 2001–02



NOTE: Medians are in current dollars. Data are for academic year for institutions that were academic year reporters, program year for program year reporters. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Years 2000 to 2002.

increase, respectively—were higher than the median percentage change in price of attendance, a 10 percent increase (table 19), as well as the rate of inflation, 5 percent.

The changes in price of attendance and in financial aid were reflected in changes in the median net prices of private for-profit, less-than-4-year institutions. Median net price (all aid) increased from \$9,776 in 1999–2000 to \$10,487 in 2001–02; median net price (grants) increased from \$11,521 to \$12,581 (table 19). Over the 3-year period, median percentage changes in both

types of net price were lower than the median changes in price of attendance.

Certain groups of private for-profit, less-than-4-year institutions had higher median prices of attendance, net prices (all aid), and net prices (grants): institutions with high enrollment sizes (compared to those with low enrollment) and institutions with high tuition (compared to those with low tuition) (table 20). These groups of institutions also had higher median amounts of total aid, likely reflecting higher loan amounts. Private for-profit, less-than-4-year

institutions with a high proportion of full-time freshmen receiving federal grants had higher median aid amounts than institutions with a low proportion, and had lower median net price (all aid) and net price (grants).

For all private for-profit, less-than-4-year institutions, the median index value for tuition and fees was higher than the median value for price of attendance; institutions raised their tuition and fees by a median of almost 7 percentage points higher than the rate of inflation over 3 years, compared with about 5 percentage points for price of attendance (table 21). The median index values for net price (all aid) and net price (grants) were even lower, at around 3. Some groups of private for-profit, less-than-4-year institutions had median net price index values that were close to zero or even negative, including institutions with a high proportion of full-time freshmen receiving federal grants and institutions in the higher middle category of tuition and fees.

Conclusions

The four institutional sectors studied in this report face different circumstances that impact their patterns of prices, financial aid, and net prices. These differences relate to the roles, missions, governance, and student bodies of these institutions, and reflect such considerations as the proportion of students who attend schools in state, the amount of appropriations provided to public institutions by states, the way tuition levels are set by governing bodies or other agencies, the income distribution or attendance patterns of an institution's students, and other factors.

Nonetheless, the analysis found many similarities across sectors in how prices, aid,

and net prices changed during the period under review. For example, for public 4-year institutions, private not-for-profit, 4-year institutions, and private for-profit, less-than-4-year institutions, the median price of attendance for full-time freshmen increased between 1999–2000 and 2001–02. The median value of total aid also increased during this time,⁵ and median aid amounts increased at a faster rate than did median price of attendance.⁶ Further, both price of attendance (sticker price) and aid increased at a faster rate than inflation over this period.

Net price calculations allowed a better understanding of the prices postsecondary institutions actually charge to students, and demonstrated that in these sectors, the median value of net price (all aid) and net price (grants) increased between 1999–2000 and 2001–02. In most cases, the median percentage changes were lower than the median percentage change in price of attendance.⁷ In other words, as a result of financial aid, net prices did not rise as rapidly as price of attendance.

The public 2-year sector exhibited slightly different patterns in price, aid, and net price over this period. The median price of attendance for full-time freshmen increased between 1999–2000 and 2001–02, but median aid amounts increased at a faster rate than did median price of attendance. However, the changes in the median value of net prices for public 2-year

⁵ The difference in the total grant amount between 1999–2000 and 2001–02 was meaningful for private not-for-profit, 4-year institutions, but not meaningful for public 4-year institutions or for private for-profit, less-than-4-year institutions. The differences (changes) in this report were found to be meaningful based on specific criteria, in this case plus or minus \$500. See appendix B for details.

⁶ An exception is the median percentage change in total aid for private not-for-profit, 4-year institutions.

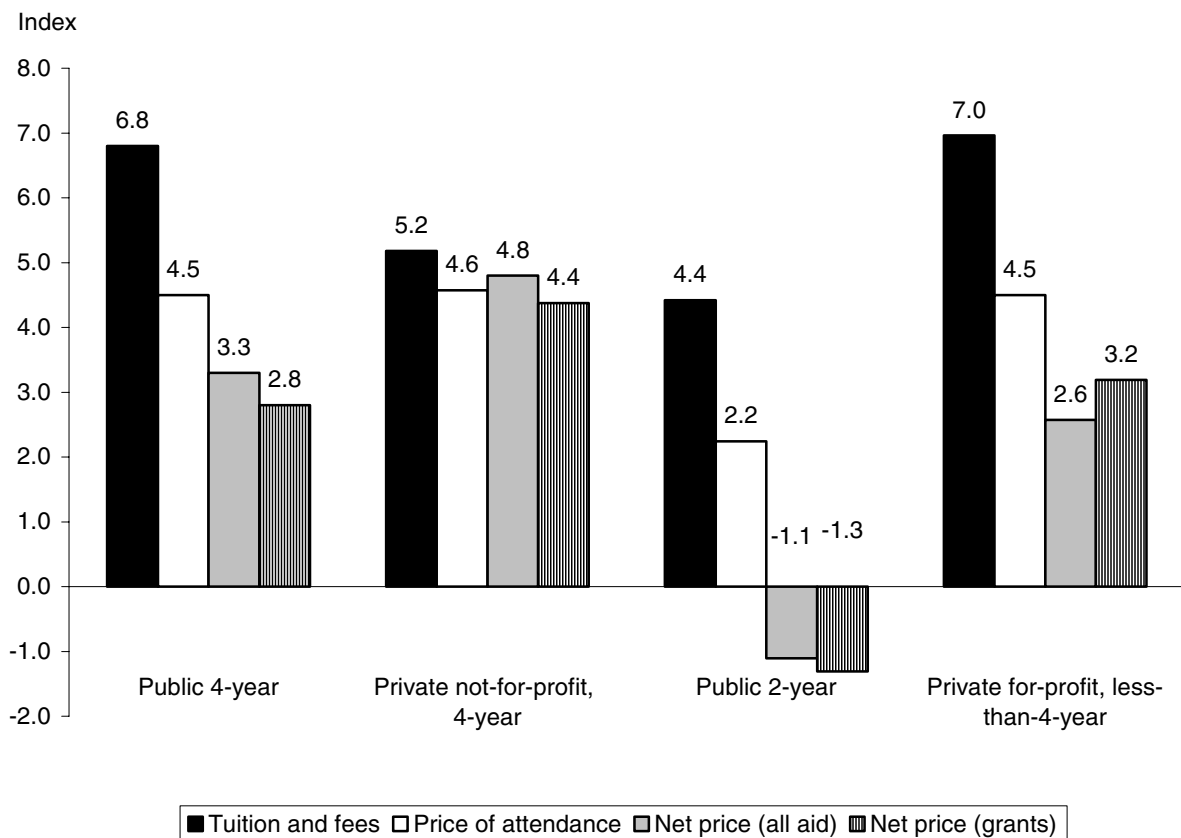
⁷ For private not-for-profit, 4-year institutions, the differences were not meaningful.

institutions were not meaningful. Net prices not only increased at a slower rate than did sticker prices, but they also increased at a slower rate than inflation.

By using the price indices as a mechanism for comparing changes in tuition and fees, price

of attendance, and net price over time (as well as comparing these changes to the rate of inflation over the period under review) the analysis confirmed that examining different types of prices and net prices may lead to different conclusions (figure G). In all institutional sectors, increases in median tuition

Figure G. Median values for indices of tuition and fees, price of attendance, and net price, by sector: 1999–2000 to 2001–02



NOTE: Each index was calculated as the rate of change in price between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Consumer Price Index during this period. Therefore, an institution that raises its price over this period at the rate of inflation would have an index value of 0. Data are for academic year for institutions that were academic year reporters (including all public 4-year, private not-for-profit, 4-year, and public 2-year institutions), and program year for program year reporters. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Years 2000 to 2002.

and fee levels tended to be greater than increases in median price of attendance. Furthermore, increases in price of attendance tended to be greater than increases in net prices. In most sectors, median net prices increased at a slower rate than did sticker prices over the 3-year period reviewed in this report. In the public 2-year sector, net prices increased at a slower rate than inflation or even decreased.

Finally, there are several common findings across sectors with regard to the variation in net price index values according to certain institutional characteristics, after taking into account inflation over the period under review. For example, in the case of net price (all aid)

- Institutions with a low proportion of full-time freshmen receiving federal grant aid had higher median index values for net prices (all aid) than the median for all institutions in the sector, while institutions with a high proportion of full-time freshmen receiving federal grant aid had lower median values.
- Institutions with high tuition had higher median index values for net prices (all aid) than the median for all institutions in that sector. In addition, public 4-year institutions with low tuition had a lower median index value for net prices.
- For private not-for-profit, 4-year institutions, those that were very selective had higher median index values for net prices (all aid) than the median for all institutions in that sector. However, the difference was not meaningful for public 4-year institutions.
- For public 4-year institutions, institutions with high enrollment had higher median index values for net prices (all aid) than the median for all institutions in that sector. However, the opposite was true for public 2-year institutions—institutions with low enrollment had higher median index values for net price (all aid).

Foreword

This report focuses on first-time, full-time, degree/certificate-seeking undergraduates in order to examine patterns of sticker prices, financial aid, and net prices from an institutional perspective. For the period 1999–2000 to 2001–02, the report examines how the price of attendance for full-time freshmen changed for various types of institutions. It also examines the percentages of full-time freshmen who received various forms of financial aid, and the median amount received by full-time freshmen at different types of institutions. To capture the interaction between price of attendance and financial aid patterns, the report describes net prices to measure the median price institutions charge after taking financial aid received by students into account. Finally, to further explore these issues over time and to take into account inflation during this period, indices of changes in three different types of prices—tuition, price of attendance, and net price—were developed for this report.

The primary dataset used for this report is the Integrated Postsecondary Education Data System (IPEDS), which collects annual data from all primary providers of postsecondary education; in 2002–03, data were collected for more than 7,500 institutions. The Institutional Characteristics component collects information on the price of tuition and fees (by residency status), books and supplies, and room and board (by housing status) for full-time freshmen. The Student Financial Aid component collects information on the percentage of full-time freshmen who receive federal grants, state grants, institutional grants, and loans, as well as the average amounts received. In addition, data from the IPEDS Fall Enrollment (EF) component and estimates derived from the National Postsecondary Student Aid Study for 1999–2000 (NPSAS: 2000) also were used in the analysis.

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Introduction

The interest in postsecondary education prices and financial aid has intensified, largely because increases in published tuition and fees continue to outpace the rate of inflation. Recent data from the College Board detail these price increases.¹ Public 4-year institutions raised tuitions by an average of 11 percent in 2004–05, bringing the average tuition at public 4-year institutions to \$5,132. Average tuition and fees at public 2-year institutions is \$2,076, up 9 percent—smaller than last year’s increase, but still higher than historical increases. Private not-for-profit, 4-year institutions also raised tuitions in 2002–03. Although the 6 percent increase at private not-for-profit, 4-year institutions is not startling, it does bring the average private not-for-profit, 4-year institutions tuition to \$20,082 and marks the fourth year in a row that private not-for-profit, 4-year institutions have increased tuition by at least 5 percent, more than twice the rate of inflation (The College Board 2004a). Previous reports by the National Center for Education Statistics (NCES) also have shown increases in tuition levels over the 1990s and into the current decade, with differences in the rate of change by institutional sector (Choy 2004; Cunningham et al. 2001).

At the same time, considerable increases in financial aid in recent years have helped students defray their postsecondary education expenses. Over \$122 billion of financial aid from federal, state, institutional, and private sources was made available to students in 2003–04, an increase from \$108 billion in the previous year (The College Board 2004b).² In 1999–2000, 55 percent of undergraduates received some type of financial aid from federal, state, institutional, or other sources, receiving about \$6,000 on average. The percentage of undergraduates receiving aid and the average amounts received varied by the type of institution attended (Berkner, He, and Cataldi 2002). In addition, the proportion of full-time undergraduates who received any type of financial aid increased between 1989–90 and 1999–2000 (Wei, Li, and Berkner 2004). Since then, it is likely that at least half of all undergraduates are still receiving financial aid, with higher average amounts given the increases in student loan borrowing in recent years.

Financial aid allows most students to pay less than the published (“sticker”) price for college. A recent NCES report (Horn, Wei, and Berker 2002) examined “net prices” (in other

¹ Note that the College Board data are weighted by enrollment. On the other hand, most of the data presented in this report are not weighted by enrollment.

² Note that the College Board data refer to all students, not just undergraduates or first-time undergraduates, and not just full-time students. The figure of \$108 billion refers to all types of financial aid, including work study and tax credits.

words, prices after subtracting financial aid) from the perspective of undergraduate students between the years 1992–93 and 1999–2000.³ The report found that net prices did not increase as rapidly as sticker prices; in fact, in some cases (depending on the definition of net price used, the institutional sector, and the income background of the student), net prices did not increase at all during this time period. This suggests that in order to address issues of student access and affordability, it is important to examine changes in net prices in addition to changes in sticker prices.

Furthermore, the issues surrounding college accountability suggest that it is important to examine pricing and aid from an institutional perspective. In response to a Congressional mandate requiring an examination of college costs and prices, one component of the final report of the NCES *Study of College Costs and Prices, 1988–89 to 1997–98* (Cunningham et al. 2001) looked at trends in prices and financial aid for different types of institutions and their association with various other financial variables. However, only one year of Integrated Postsecondary Education Data System (IPEDS) Student Financial Aid (SFA) data was available at the time of the report. The availability of subsequent years of IPEDS Student Financial Aid data now provides the opportunity to examine changes in financial aid patterns for first-time undergraduates in comparison with changes in both the price of attendance and net prices.

The IPEDS dataset is the most comprehensive that allows for an examination of price and financial aid patterns with the institution as the unit of analysis rather than the student. It is clear that the types and amounts of financial aid differ according to certain institutional characteristics, such as the missions and locations of colleges and universities, the composition of student attendance, and other factors. The IPEDS data also enable the construction of a price of attendance figure that takes into account the differing residency and housing patterns at each institution, and includes not only tuition and fees and room and board, but also books, supplies, and other expenses. Price of attendance also varies over time and according to various institutional characteristics. Taken together, the patterns of financial aid and sticker prices can be used to construct net prices at an institutional level, as well as changes in net prices over time.

This report focuses on first-time, full-time, degree/certificate-seeking undergraduates (referred to as “full-time freshmen”) in order to examine patterns of sticker prices, financial aid, and net prices from an institutional perspective. It addresses the following questions:

³ The report is based on data from the National Postsecondary Student Aid Study (NPSAS), which periodically surveys students enrolled in postsecondary education, and therefore uses the student as the unit of analysis. The report used the following definitions of net prices: net tuition 1 = total tuition minus federal grants; net tuition 2 = total tuition minus all grants; net price 1 = total price minus federal and state grants; net price 2 = total price minus all grants; and net price 3 = total price minus all grants and loans.

- How did the price of attendance for full-time freshmen change for various types of institutions during the years 1999–2000, 2000–01, and 2001–02? How did the changes differ for institutions with specific characteristics?
- During the same 3 years, what percentages of full-time freshmen received various forms of financial aid, and what was the median amount received by full-time freshmen at different types of institutions? How did these percentages change during this period?
- What was the median net price at various types of institutions during the years 1999–2000, 2000–01, and 2001–02, and how did it change over this period? How did net prices vary according to specific institutional characteristics?
- How can we compare changes in tuition and fees with changes in price of attendance and net prices over this period, for different institutional types?

To address the last question a new analysis was created for this report, involving a comparison of changes in prices and net prices with changes in the Consumer Price Index (CPI), a measure of inflation, over the same period. The analysis focuses on first-time freshmen, who made up 20 percent of undergraduates and 17 percent of all students enrolled in Title IV institutions in fall 2002 (Knapp et al. 2004). The analysis is conducted separately for specific sectors of postsecondary education.

It is important to point out that this report has important differences from those of other published sources that have examined prices and financial aid. As mentioned, the units of analysis are postsecondary institutions, rather than students, and the data on prices and financial aid were reported at an institutional level.⁴ The reported figures are therefore aggregates across groups of institutions, and attempt to explore how institutions with varying characteristics differ, not how different groups of students fare within those institutions. Second, the report provides information on three different types of prices—tuition and fees, price of attendance, and net price—and provides a mechanism to compare changes in these different prices over time. Finally, this report examines the median values (rather than averages) of prices and financial aid for various subgroups of institutions, reflecting the value of the “middle” institution in that sector or subgroup.⁵ Given these differences, the figures in this report may differ from those in other published sources.

Approach and Key Variables

To provide a meaningful description of patterns of prices and financial aid from an institutional perspective, it is important to take into account the type of institution, including the

⁴ In other words, the denominator of the calculations is the number of institutions.

⁵ More accurately, the median is the middle of a distribution of values—half the values are above the median and half are below.

level and control, the types of students served, the location, the selectivity level (as defined by a combination of admissions and test scores; see appendix E), and other characteristics. In addition, it is important to describe how key variables were defined. Therefore, descriptions of study universe, characteristics of institutions in the universe, definitions of particular variables used in the analysis and rationale for choosing them follow.

Study Universe

Institutions in the study universe were drawn from institutions participating in Title IV financial aid programs that are included in the 2002–03 IPEDS universe that are located in the 50 states and the District of Columbia. Four institutional sectors are included in the analysis: public 4-year; public 2-year; private not-for-profit, 4-year institutions; and private for-profit, less-than-4-year institutions. For the first three sectors, only degree-granting institutions were included in order to form relatively homogeneous comparison groups (few institutions in these sectors are non-degree-granting); this was not true for private for-profit, less-than-4-year institutions.⁶ Since full-time freshmen are the focus of the analysis, institutions that enroll less than 50 first-time, full-time, degree/certificate-seeking undergraduates (less than 25 at for-profit institutions) were excluded.⁷ The analysis includes data for only those public 4-year, public 2-year, and private not-for-profit, 4-year institutions that report by academic year. For private for-profit, less-than-4-year institutions, those that report by program year have been combined and included.

When taking these criteria into consideration, the institutional universe contains 4,135 institutions—559 public 4-year; 1,004 public 2-year; 1,009 private not-for-profit, 4-year; and 1,563 private for-profit, less-than-4-year. Although the final universe includes about three-fourths of the original number of Title IV institutions in the four sectors, the institutions remaining in the universe comprised 94 percent of the total reported enrollment of first-time, full-time, degree-seeking undergraduates in the four sectors under review.

Institution Types and Characteristics

All analyses were performed separately for each institutional sector because the groups are very different in terms of their institutional characteristics and in the types of students served (table 1). For example, virtually all public 2-year institutions are Associates or Baccalaureate/

⁶ Non-degree-granting institutions are included for private for-profit, less-than-4-year institutions, as degree-granting institutions in this category also tend to offer non-degree coursework and the two groups are not dissimilar.

⁷ Also, new institutions (primarily private for-profit) that did not exist in the early years of the analysis were excluded from the universe (about 100 institutions).

Table 1. Number of institutions in the analysis, percentage distribution by selected institutional characteristics, and medians for selected institutional characteristics, by sector

	Public 4-year	Private not-for- profit, 4-year	Public 2-year	Private for-profit, less-than- 4-year
Number of institutions				
Total	559	1,009	1,004	1,563
Percentage distribution				
Revised Carnegie classification				
Doctoral/Research Universities—Extensive	18	5	0	0
Doctoral/Research Universities—Intensive	11	4	0	0
Masters Colleges and Universities	48	30	0	0
Baccalaureate Colleges—Liberal Arts	4	19	0	0
Baccalaureate Colleges—General	10	25	0	0
Associates and Baccalaureate/Associates Colleges	6	5	99	27
Specialized institutions	3	13	1	0
Non-degree-granting institutions	†	†	†	73
Selectivity				
Very selective	17	23	†	†
Moderately selective	52	52	†	†
Minimally selective	19	15	†	†
Open admission	12	10	†	†
Bureau of Economic Analysis (BEA) region codes				
New England (CT, ME, MA, NH, RI, VT)	7	11	4	5
Mid East (DE, DC, MD, NJ, NY, PA)	19	21	9	18
Great Lakes (IL, IN, MI, OH, WI)	14	18	14	15
Plains (IA, KS, MN, MO, NE, ND, SD)	10	12	10	7
Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)	26	24	32	21
Southwest (AZ, NM, OK, TX)	10	5	11	13
Rocky Mountains (CO, ID, MT, UT, WY)	5	2	4	4
Far West (AK, CA, HI, NV, OR, WA)	9	8	16	18
Median				
Percentage of undergraduates who were first-time, full-time, degree/certificate-seeking, 2001–02 ¹	17	23	12	87
Percentage of first-time, full-time, degree/certificate-seeking undergraduates who were not White, Fall 2002	18	17	24	39
Percentage of first-time, full-time, degree/certificate-seeking undergraduates who received federal grants in 2001–02 ¹	29	29	39	66
Enrollment size (12-month headcount), Academic Year 2001–02	9,532	2,000	5,652	186

† Not applicable.

¹ Data are for academic year for institutions that were academic year reporters (including all public 4-year, private not-for-profit, 4-year, and public 2-year institutions), and program year for program year reporters.

NOTE: Detail may not sum to totals because of rounding. Selectivity is derived from a combination of the percent of applicants who were admitted, and median test scores (for 4-year institutions only). Revised Carnegie classification uses highest degree offered to redistribute institutions that had not been classified. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Student Financial Aid, and Enrollment, Collection Year 2002.

Associates colleges according to the Carnegie classification,⁸ and the majority of private for-profit, less-than-4-year institutions are non-degree-granting. The majority of public 4-year institutions are Masters or Doctoral/Research institutions, while the majority of private not-for-profit, 4-year institutions are Baccalaureate or Masters institutions. At the same time, public 2-year institutions and private for-profit, less-than-4-year institutions tended to have higher proportions of undergraduates who were not White and who received federal grants (a proxy for low-income status) than the two groups of 4-year institutions.

Data from other sources confirm that these sectors tend to serve students with differing characteristics. In 1999–2000, older undergraduates were concentrated in public 2-year institutions and were likely to attend part time, while younger undergraduates were more likely to attend 4-year institutions and enroll full time. Dependent undergraduates attending private for-profit institutions were more likely than those attending other types of institutions to come from low-income families (Horn, Peter, and Rooney 2002). The sectors are also quite different in how decisions are made about tuition levels, enrollment, and the use of institutional aid (Cunningham et al. 2001). Given these differences, the analysis in this report is conducted separately for each of the four institutional sectors under review.

Unless otherwise specified, all references to “full-time freshmen” in the text of this report refer to first-time, full-time, degree/certificate-seeking undergraduates—the focus of this analysis. According to table 1, the percentage of undergraduates who fell into this group varied by sector, from a median of 12 percent at public 2-year institutions to 87 percent at private for-profit, less-than-4-year institutions. Although these students are the focus of this report, it is important to keep in mind that they represent a portion of the undergraduate population and that their characteristics may differ from those of other undergraduates. For example, full-time students generally have higher educational expenses because they are charged the full tuition (as well as other expenses) for an entire academic year (Berkner, He, and Cataldi 2002).

Variable Definitions

For the analysis presented in this report, several variables were constructed for each institution in the universe to measure price of attendance, financial aid, net price, and other aspects of the issue.⁹ First, price of attendance includes both tuition charges and nontuition

⁸ The 2000 Carnegie classification classifies institutions based on their degree-granting activities into a number of categories: Doctoral/Research Universities (Extensive and Intensive); Master’s Colleges and Universities (I and II); Baccalaureate Colleges (Liberal Arts and General); Baccalaureate/Associates Colleges; Associates Colleges; and Specialized Institutions. For this report, the classification was modified slightly to redistribute institutions that had not been classified originally (see appendix A).

⁹ See appendix A for a glossary of variables referred to in this report. Also see appendix B for a full description of the methodology used in constructing variables for this report.

expenses that are charged to students.¹⁰ For this report, the price of attendance for full-time freshmen was defined as the sum of three components: tuition and fees, estimated books and supplies, and estimated housing expenses.

- Tuition and fees are the published amounts charged to full-time freshmen. They are reported for the full academic year, and public institutions provided tuition amounts for in-district, in-state, and out-of-state students separately.¹¹
- The estimated cost of books, supplies, and miscellaneous expenses also are reported for the full academic year.
- Housing expenses include the estimated cost of room and board and other expenses, which are reported separately for full-time freshmen living on campus and off campus. For students who live with family and do not contract with the school for room and board, only estimates of other expenses are reported. Housing expenses are for the full academic year.

Estimates of expenses for books and supplies, room and board, and other expenses are those used by financial aid offices for determining financial need. For public institutions, the tuition and fees were weighted by the percentage of full-time freshmen attending from in-district, in-state, and out-of-state. For all institutions, the cost of room, board, and/or living expenses was weighted by the percentage of full-time freshmen housed in each option.¹² These components were combined into an average price of attendance for each institution in the universe.¹³

Aid information in IPEDS was available on the percentages of full-time, first-time, degree/certificate-seeking undergraduates¹⁴ who received aid at any time during each academic year,¹⁵ as well as the average amounts received, for each institution in the study universe. Four types of financial aid were examined:

- Federal grants include Pell Grants, Supplemental Educational Opportunity Grants (SEOGs), and other grants provided by federal agencies or federally sponsored educational benefits programs.
- State/local grants include grants, scholarships and tuition waivers provided by the state or local governments, and include Leveraging Educational Assistance Partnerships (LEAP) and academic merit scholarships.

¹⁰ Price of attendance may also be referred to as the student budget, especially with regard to financial aid. Student budgets may also include transportation and other expenses that are not included in the definition of price of attendance used for this report.

¹¹ For program year institutions, tuition and fees are reported for entering students in the institution's largest program.

¹² See appendix B for details. Appendix C includes an alternative housing methodology for comparison purposes.

¹³ The price of attendance values were not weighted by enrollment. However, enrollment-weighted figures are provided in appendix D to this report for purposes of comparison.

¹⁴ Academic year reporting institutions provided information on a fall cohort of such students, while program year institutions reported for a 12-month cohort.

¹⁵ For program year institutions, aid received over the 12-month period.

- Institutional grants include scholarships and fellowships granted by the college and/or individual departments, as well as tuition and fee waivers.
- Loans to students include all Title IV subsidized and unsubsidized loans, as well as institutionally or privately sponsored loans, but exclude Parental Loans for Undergraduate Students (PLUS) and other loans made directly to parents.

The percentages of full-time freshmen receiving the four types of aid, as well as the average amounts of aid received, were combined into composite variables to measure total grants and total aid for each institution in the universe.¹⁶ It is important to note that other types of financial aid available to students, such as work study and tax credits, were not available for inclusion; however, these types of aid may be used to reduce the price paid by students. The variables included in this report measure only aid that has passed through the institution’s financial aid office. In addition, the loan variable measures all students loans from state, federal, and private sources.

Net prices can be defined as what students pay after financial aid is subtracted. They take into account both the price of attendance faced by students and the financial aid received by students; they therefore better reflect the “actual” prices being paid. In this report, net price is an aggregate figure measuring the difference between price of attendance and total amounts of financial aid across all full-time freshmen, for each institution in the study universe. For each of the 3 years under examination, two net prices were calculated: price of attendance less grants (federal, state, and institutional), and price of attendance less grants and loans. These are labeled as net price (grants) and net price (all aid), respectively. It is important to recognize that net price (all aid) reflects the net price students face when enrolling—but that the loan amounts must be repaid—while net price (grants) captures the net price to students in the longer term. Net prices were calculated at an aggregate, institutional level and are reported in current dollars.

“Price change indices” were then calculated for each institution in the universe. Indices are reported for each sector, and for four types of prices: tuition and fees; price of attendance; and the two definitions of net prices. In each case, the index was calculated as the rate of change in price between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Consumer Price Index (CPI) during this period. This formulation measures the difference between the rate of change in prices overall (inflation) and the rate of change in college prices, where an institution that raises its price over this period at the rate of inflation would have an index value of 0. An institution that raises its price faster than the rate of inflation over 3 years would have a positive index value, while an institution that raises its prices by lower than the rate of inflation

¹⁶ Percentages receiving aid and average amounts received were calculated across all institutions, including those that did not report a specific category of aid (i.e., the data include zeros). Average amounts were bounded. Composite variables reflect the percentage who received each type of aid multiplied by the average amount. See appendix B for details.

(or, decreases its price) would have a negative index value. To provide some context, the rate of inflation over the period 1999–2000 and 2001–02 was about 5.4 percent according to the CPI.¹⁷ In this report, the term “price change indices” may also be called “price index” or “price index value.”

Each of the variables described above was calculated at the institutional level. Median values were then reported for different groups of institutions (such as sector). Half of the institutions in a group have values above the median, and half have values below.

In addition to the differences between sectors described above, there are many differences in the characteristics of institutions within sectors. These differences may have an impact on the prices charged by institutions and/or the financial aid received by students attending these institutions. For example, more selective institutions may be more likely to charge higher prices, or to provide more aid to their students. Institutions with high enrollment sizes may have economies of scale that allow them to charge lower prices. Institutions that serve a relatively high proportion of low-income and disadvantaged students may attempt to keep tuitions as low as possible, and their students are likely to receive a different mix of financial aid than students at other types of institutions. In recognition of these differences, the analyses in the following chapters examine prices, financial aid, and net prices for groups of institutions with differing characteristics, including Carnegie Classification, selectivity, region, percentage of undergraduates who were full-time freshmen, enrollment size, percentage of full-time freshmen who were not White, percentage of full-time freshmen who received federal grants (which may be seen as a proxy for low income status), and the level of tuition and fees. For the last five variables, categories were determined within each sector, using ranges of centiles.¹⁸ The selectivity variable was created for this report for 4-year institutions only, and was derived from a combination of median test scores and the percent of applicants who were admitted to an institution. The categories include very selective, moderately selective, minimally selective, and open admission.¹⁹

¹⁷ For CPI figures, the Consumer Price Index for all urban dwellers (CPI-U, 1982-84 = 100) was used, by academic years.

¹⁸ See appendix B for details.

¹⁹ Open admission institutions are 4-year institutions that reported that they did not have restrictions on admission. Non-open admission institutions were classified based on an index of two variables: 1) the centile distribution of the percentage of students who were admitted (of those who applied); and 2) the centile distribution of the midpoint between the 25th and 75th percentile SAT/ACT combined scores reported by each institution (ACT scores were converted into SAT equivalents). The combined centile variable was divided into selectivity categories based on breaks in the distribution. See appendix E for details.

Data

The Integrated Postsecondary Education Data System collects data from all primary providers of postsecondary education; in 2002–03, data were collected for more than 7,500 institutions. The primary analysis for this report used the IPEDS Institutional Characteristics (IC) and Student Financial Aid (SFA) components. The Institutional Characteristics component collects information on the price of tuition and fees (by residency status), books and supplies, and room and board (by housing status) for full-time freshmen. The Student Financial Aid component collects information on the percentage of full-time freshmen who receive federal grants, state grants, institutional grants, and loans, as well as the average amounts received.²⁰ In addition, data from the IPEDS Enrollment (EF) component and estimates derived from the National Postsecondary Student Aid Study for 1999–2000 (NPSAS: 2000, a sample survey of postsecondary students) also were used in the analysis. The analysis focuses on data regarding full-time freshmen for the years 1999–2000, 2000–01, and 2001–02.

Price and aid amounts are nominal, i.e., not adjusted for inflation, when reporting on median prices, financial aid, and net prices. The price indices compare the change in prices and net prices to the rate of inflation over this period, using the Consumer Price Index. (An alternative measurement of changes in prices, the Higher Education Cost Adjustment (HECA) scale, is described in appendix F.)

Changes described in this report were calculated at the institutional level. Dollar changes over the periods 1999–2000 to 2000–01, 2000–01 to 2001–02, and 1999–2000 to 2001–02 were calculated as the difference between the values for the first and last years, in current dollar terms. Percentage changes for each of the three periods were calculated as the difference between the values divided by the value for the base year. Medians were then calculated for each group of institutions. As a result, the aggregate change in median values reported in tables may not be the same as the median dollar change over the same period. It is important to examine both dollar and percentage increases given that for institutions with low tuition or aid levels, a relatively small dollar increase may translate into a relatively high percentage increase. In addition, although the data presented in the tables of this report are for a universe of institutions and may show apparent differences (changes), all of the differences reported in the text of the report have been found to be “meaningful,” based on specific criteria. Any exceptions are stated in the text. The criteria for a meaningful difference are the following:²¹

²⁰ At the time this report was written, data from the Student Financial Aid component for 2001–02 had been edited but did not include imputations.

²¹ See appendix B for more discussion of methodologies.

- For percentage distributions, 5 percentage point difference.
- For median dollar amounts, \$500 difference.
- For changes (increases or decreases) in median dollar amounts, \$100 difference.
- For median percentage changes, 0.5 percentage points.
- For index changes, 0.5 index points.

Note that although the range of prices varies across sectors, the criteria for a meaningful difference are the same for all sectors.

Organization of the Report

The rest of the report begins with an examination of patterns in price of attendance, financial aid patterns, and net price for public 4-year institutions. The section also explores these patterns in terms of the change over time and the difference by type of institution. In addition, the section describes the price change indices and considers the relationships among the trends in prices, financial aid, and net prices. The subsequent sections report the findings from similar analyses of private not-for-profit, 4-year institutions, public 2-year institutions, and private for-profit, less-than-4-year institutions. Finally, the last section summarizes some of the findings and draws conclusions about patterns of price of attendance, financial aid, and net price.

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Public 4-Year Institutions

This section examines prices and aid for the public 4-year sector. It describes the median price of attendance, patterns of financial aid, and net prices (in current dollars) over the 3-year period, as well as the changes over time.

In considering prices at public institutions, it is important to note that in most cases a substantial proportion of revenues come from state and local appropriations. Decisions on tuition and fee levels are usually shared between state governments and institutional governing boards, and may fluctuate annually given the state appropriations and budget process. For many public institutions, decisions about student access and enrollment also are made at the state level. Taken together, these policy decisions may impact prices and aid.

An analysis of each of the components of price of attendance (sticker price) at public 4-year institutions, over the 3 years between 1999–2000 and 2001–02, is presented in table 2.²² The three components of price were used to construct an average price of attendance for each institution. In 2001–02, median tuition and fees were \$4,141 at public 4-year institutions, with out-of-state tuition and fee charges higher than charges for in-state or in-district residence (\$9,192 out-of-state compared with \$3,402 in-state in 2001–02). Public 4-year institutions had a median of \$783 for estimated books and supplies in 2001–02, while housing expenses were \$6,080. Although the median values of each of the components appeared to increase between 1999–2000 and 2001–02, the differences in out-of-state tuition and on-campus and off-campus housing expenses were meaningful. Together, these increases added up to an increase in the median price of attendance for public 4-year institutions, from \$10,230 in 1999–2000 to \$11,187 in 2001–02.

Meanwhile, total financial aid also increased over this period (table 3). At public 4-year institutions in 2001–02, a median percentage of 42 percent of full-time freshmen received loans, receiving an average amount of \$2,920. A median of 36 percent of full-time freshmen received state grants, followed by federal grants and institutional grants at 29 percent. The median values of aid amounts (for those who received aid) increased between 1999–2000 and 2001–02, but only

²² Non-composite categories of tuition and fees and housing costs reflect data only for institutions for which the category is relevant; for example, median amounts of on-campus housing costs refer only to institutions that had on-campus housing as an option. Composite variables take into account the percentage distribution of students by residency status and/or by housing status.

Table 2. Median tuition and fees, books and supplies, housing expenses, and price of attendance for first-time, full-time, degree/certificate-seeking undergraduates: Public 4-year institutions, academic year 1999–2000 to 2001–02

Components of price	1999–2000	2000–01	2001–02
Tuition and fees ¹	\$3,748	\$3,908	\$4,141
In-district	3,090	3,208	3,402
In-state	3,090	3,208	3,402
Out-of-state	8,560	8,909	9,192
Books and supplies	700	730	783
Housing expense ²	5,680	5,833	6,080
On campus	6,628	6,873	7,220
Off campus	7,504	7,753	8,058
Living with parents	2,472	2,500	2,590
Price of attendance ³	10,230	10,634	11,187

¹ Median tuition and fees is a composite variable that takes into account the percentage distribution of students by residency status. See methodology for details. On the other hand, the individual categories for in-district, in-state, and out-of-state tuition and fees reflect data only for institutions for which the category is relevant.

² Median housing expense is a composite variable that takes into account the percentage distribution of students by housing status. See methodology for details. The individual categories for on campus, off campus, and living with parents reflect data for institutions for which the category is relevant.

³ Median price of attendance is a composite variable that takes into account all three components of price and adjusts for the distribution of students by housing and residency status. See methodology for details.

NOTE: Note that the data for books and supplies and housing expenses are estimates, often based on estimates of student budgets by financial aid offices.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Collection Years 2000 to 2002; U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000).

the increase in the median amount of federal grants was meaningful. The median value of total aid (across all first-time freshmen, including nonrecipients) at public 4-year institutions increased from \$2,946 in 1999–2000 to \$3,554 in 2001–02. The median value of total grants increased, but not meaningfully.

Together, the changes in price of attendance and in financial aid impact the median net prices of public 4-year institutions (table 4). As mentioned, between 1999–2000 and 2001–02, the median values of both price of attendance and total aid at public 4-year institutions increased, in current dollar terms. Median dollar changes²³ in price of attendance were higher than the median dollar changes in total aid and total grants—a \$1,039 increase in median price of attendance over the 3-year period, compared to \$459 for total aid and \$359 for total grants.

²³ Changes were calculated at an institutional level, and then medians were calculated across all institutions. As a result, the aggregate change in median values may not be the same as the median dollar change over the same period.

Table 3. Median values of the percentage of first-time, full-time, degree/certificate-seeking undergraduates receiving financial aid, and average amounts received: Public 4-year institutions, academic year 1999–2000 to 2001–02

Type of aid	1999–2000	2000–01	2001–02
	Percentage receiving ¹		
Type of aid			
Federal grants	29	28	29
State grants	33	34	36
Institutional grants	26	27	29
Loans	42	42	42
	Average amount received, current dollars ¹		
Type of aid			
Federal grants	\$2,231	\$2,458	\$2,739
State grants	1,565	1,773	1,858
Institutional grants	1,795	1,920	1,989
Loans	2,777	2,859	2,920
	Composite aid amounts, in current dollars ²		
Type of aid			
Total aid	\$2,946	\$3,321	\$3,554
Total grants	1,759	2,006	2,224

¹ Percentages receiving aid and average amounts received were calculated across all institutions, including those that did not report a specific category of aid (i.e., the data include zeros). Average amounts were bounded.

² Composite variables reflect the percentage receiving multiplied by the average amount, i.e., amount of aid for those who received aid; see methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Student Financial Aid, Collection Years 2000 to 2002.

On the other hand, the median percentage changes in aid over the 3-year period were higher than median percentage change in price of attendance: a median of 20 percent increase for total grants and 14 percent increase for total aid, compared to a median of 10 percent increase for price of attendance. For context, inflation over this period (as measured by the CPI) was about 5 percent; in other words, the median percentage increases for both price of attendance and aid were higher than inflation.

Given these patterns in sticker prices and financial aid at public 4-year institutions, the median values for both types of net prices increased between 1999–2000 and 2001–02.²⁴ Median net price (all aid) increased from \$7,216 in 1999–2000 to \$7,712 in 2001–02; median net price (grants) increased from \$8,463 to \$9,056. The median percentage change in net price (all aid) over the 3-year period was lower than the median percentage change in price of attendance;

²⁴ The difference between the median values of net price (all aid) in 1999–2000 compared to 2001–02 was not meaningful.

Table 4. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates: Public 4-year institutions, academic years 1999–2000 to 2001–02

	Price of attendance	Total aid	Total grants	Net price (all aid)	Net price (grants)
Median values in current dollars					
Academic year					
1999–2000	\$10,230	\$2,946	\$1,759	\$7,216	\$8,463
2000–2001	10,634	3,321	2,006	7,435	8,731
2001–2002	11,187	3,554	2,224	7,712	9,056
Median dollar change					
Time period					
1999–2000 to 2000–2001	\$458	\$174	\$149	\$242	\$274
2000–2001 to 2001–2002	567	244	192	354	420
1999–2000 to 2001–2002	1,039	459	359	612	713
Median percentage change					
Time period					
1999–2000 to 2000–2001	4.1	5.5	8.3	3.2	3.1
2000–2001 to 2001–2002	5.4	8.0	9.7	4.6	4.5
1999–2000 to 2001–2002	9.8	14.4	19.6	8.6	8.1

NOTE: Aid amounts are composite variables derived from the percentage receiving aid multiplied by the average amount received. Thus, they are medians across all students at each institution. Dollar changes were calculated at an institutional level, and then medians were calculated across all institutions. As a result, the aggregate change in median values may not be the same as the median dollar change over the same period. Percentage changes also were calculated at an institutional level, and then medians were calculated. In a few cases, institutions had a zero value for financial aid in the base year. In these cases, the percentage change in total aid or total grants was left blank for the calculation.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Years 2000 to 2002.

the same was true in the case of net price (grants). In other words, increases in financial aid made it possible for net prices to increase at a slower rate than the price of attendance (sticker price) at public 4-year institutions.

To illustrate this point, the analysis has focused on median tuition and fees, price of attendance, aid, and net price for all public 4-year institutions in the study universe. However, varying patterns in prices and aid may reflect differences in the missions and goals of colleges and universities. In fact, the median price of attendance, total aid, total grants, and net prices for full-time freshmen in 2001–02 differed according to various institutional characteristics (table 5).

Table 5. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates, by selected institutional characteristics: Public 4-year institutions, academic year 2001–02

Institutional characteristics	Price of attendance	Total aid	Total grants	Net price (all aid)	Net price (grants)
Total	\$11,187	\$3,554	\$2,224	\$7,712	\$9,056
Revised Carnegie classification					
Doctoral/Research Universities—Extensive	13,429	3,891	2,600	9,782	11,160
Doctoral/Research Universities—Intensive	11,662	3,580	2,124	8,041	9,511
Masters Colleges and Universities	10,658	3,422	2,080	7,286	8,624
Baccalaureate Colleges—Liberal Arts	‡	‡	‡	‡	‡
Baccalaureate Colleges—General	10,736	3,505	2,299	6,442	8,047
Associates and Baccalaureate/Associates Colleges	10,056	2,988	1,884	6,388	7,909
Specialized institutions	‡	‡	‡	‡	‡
Non-degree-granting institutions	†	†	†	†	†
Selectivity					
Very selective	12,908	3,923	2,566	9,315	10,883
Moderately selective	11,276	3,492	2,150	7,888	9,179
Minimally selective	10,817	3,442	2,190	7,066	8,657
Open admission	9,809	3,399	2,046	6,176	7,540
Bureau of Economic Analysis (BEA) region codes					
New England (CT, ME, MA, NH, RI, VT)	12,407	3,678	1,961	8,079	10,011
Mid East (DE, DC, MD, NJ, NY, PA)	12,682	4,042	2,480	8,076	10,288
Great Lakes (IL, IN, MI, OH, WI)	11,227	3,449	2,021	7,940	8,988
Plains (IA, KS, MN, MO, NE, ND, SD)	10,387	3,840	1,875	6,815	8,624
Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)	10,652	3,443	2,386	7,187	8,296
Southwest (AZ, NM, OK, TX)	9,985	3,230	2,150	6,961	7,848
Rocky Mountains (CO, ID, MT, UT, WY)	‡	‡	‡	‡	‡
Far West (AK, CA, HI, NV, OR, WA)	11,515	3,361	2,176	8,406	9,807
Percentage of undergraduates who were first-time, full-time, deg/certif-seeking, 2001–02					
Low	10,451	3,138	2,141	7,320	8,486
Lower middle	11,048	3,464	2,117	7,698	8,987
Higher middle	11,194	3,966	2,319	7,351	9,046
High	12,471	3,710	2,304	8,662	10,161
Enrollment size (12-month headcount), 2001–02					
Low	10,736	3,814	2,370	7,122	8,500
Lower middle	10,717	3,473	1,997	7,271	8,675
Higher middle	10,957	3,471	2,143	7,518	8,943
High	12,321	3,572	2,237	9,083	10,249

See notes at end of table.

Table 5. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates, by selected institutional characteristics: Public 4-year institutions, academic year 2001–02—Continued

Institutional characteristics	Price of attendance	Total aid	Total grants	Net price (all aid)	Net price (grants)
Percentage of first-time, full-time, deg/certif-seeking undergraduates who were not White, Fall 2002					
Low	\$10,943	\$3,644	\$1,961	\$7,329	\$8,904
Lower middle	11,545	3,468	2,018	8,067	9,562
Higher middle	11,183	3,394	2,176	8,041	9,099
High	10,811	3,876	2,760	7,239	8,332
Percentage of first-time, full-time, deg/certif-seeking undergraduates who received federal grants, 2001–02					
Low	12,471	3,207	1,852	9,220	10,344
Lower middle	11,412	3,210	1,819	8,182	9,514
Higher middle	11,237	3,583	2,275	7,342	8,912
High	10,065	4,143	2,956	5,922	7,421
Tuition and fees 2001–02 (in-state)					
Low	9,599	3,165	2,303	6,330	7,377
Lower middle	10,416	3,399	2,038	7,042	8,384
Higher middle	11,481	3,676	2,132	7,855	9,378
High	14,198	4,082	2,380	10,096	11,779

† Not applicable.

‡ Not enough cases for a reliable estimate (less than 30 institutions in a cell).

NOTE: Categories for tuition, enrollment size, percent minority, percent receiving federal grants, and percentage first-time, full-time, degree-seeking undergraduate were determined within each sector, using centile ranges; low = 0–24th centile; lower middle = 25–49th centile; higher middle = 50–74th centile; and high = 75–99th centile. Selectivity is derived from a combination of the percent of applicants who were admitted, and median test scores (for 4-year institutions only). Revised Carnegie classification uses highest degree offered to redistribute institutions that had not been classified. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Student Financial Aid, and Enrollment, Collection Years 2002.

For example:

- Doctoral/Research Universities—Extensive had higher median prices of attendance, net prices (all aid), and net prices (grants) than other types of public 4-year institutions.
- Very selective public 4-year institutions had higher median prices of attendance, net prices (all aid), and net prices (grants) than those in the lower selectivity categories. These institutions also had higher aid amounts than open admission institutions.
- Public 4-year institutions with a low proportion of full-time freshmen receiving federal grants (receipt of federal grants may be considered a proxy for low-income students) had higher median prices of attendance, net prices (all aid), and net prices (grants)—

but lower median amounts of total aid and total grants—than their counterparts with a high proportion of these students.

- Public 4-year institutions with high enrollment sizes had higher median prices of attendance, net prices (all aid), and net prices (grants) than those with low enrollment.
- Institutions with high tuition had higher total aid amounts received by their full-time freshmen than their counterparts with low tuition, reflecting the fact that calculations of financial need take price of attendance into account; however, the difference in total grants was not meaningful. Despite the higher median total aid amounts, institutions with high tuition also had the higher median net price (all aid) and net price (grants) than institutions with low tuition.
- Among public 4-year institutions, median price of attendance, net prices (all aid) and net prices (grants) were higher for institutions with a high proportion of undergraduates who were full-time freshmen.

The price indices combine all of these patterns in price and aid together into one measure, which takes into account inflation during the 3-year period (table 6). For example, groups of institutions with net price index values close to zero increased their net prices at about the rate of inflation; those with higher values increased their net prices above the rate of inflation, while those with negative values either increased their net prices slower than the rate of inflation, or decreased their net prices.

For all public 4-year institutions, the difference between the rate of change in prices overall (inflation) and the rate of change in college prices varied depending upon the type of price measured. For example, the median index value for tuition and fees was higher than for price of attendance—public 4-year institutions raised their tuition and fees by a median of almost 7 percentage points higher than the rate of inflation over 3 years, but their prices of attendance raised by less—about 5 percentage points higher than the rate of inflation. At the same time, the median index values for net price (all aid) and net price (grants) were lower than for price of attendance—about 3 for both net price indices. This reflects the fact that for the typical institution, net prices increased at a slower rate than did sticker prices over the 3-year period.

The various indices also differ according to specific institutional characteristics. Only Associates and Baccalaureate/Associates Colleges had median price of attendance and tuition and fees index values that were negative or close to zero. For other groups of institutions, index values were positive, indicating that sticker prices had been raised above the rate of inflation. Certain groups of public 4-year institutions had median price of attendance index values that were relatively high, including minimally selective institutions (compared to institutions in other selectivity categories); institutions in the Southeast and Great Lakes regions (compared to

Table 6. Median values for indices of tuition and fees, price of attendance, and net price, by selected institutional characteristics: Public 4-year institutions, academic years 1999–2000 to 2001–02

Institutional characteristics	Tuition and fees	Price of attendance	Net price (all aid)	Net price (grants)
Total	6.8	4.5	3.3	2.8
Revised Carnegie classification				
Doctoral/Research Universities—Extensive	7.2	4.4	5.6	3.7
Doctoral/Research Universities—Intensive	6.7	3.6	-0.2	0.4
Masters Colleges and Universities	7.5	4.6	2.8	2.8
Baccalaureate Colleges—Liberal Arts	‡	‡	‡	‡
Baccalaureate Colleges—General	8.2	5.9	3.5	3.4
Associates and Baccalaureate/Associates Colleges	-3.2	-0.3	-8.9	-4.7
Specialized institutions	‡	‡	‡	‡
Non-degree-granting institutions	†	†	†	†
Selectivity				
Very selective	5.0	4.0	3.6	2.0
Moderately selective	6.6	4.4	3.5	3.1
Minimally selective	8.7	5.2	2.0	2.1
Open admission	5.9	3.7	2.3	2.0
Bureau of Economic Analysis (BEA) region codes				
New England (CT, ME, MA, NH, RI, VT)	3.3	1.5	4.7	1.1
Mid East (DE, DC, MD, NJ, NY, PA)	5.0	3.3	-0.7	0.5
Great Lakes (IL, IN, MI, OH, WI)	7.1	5.7	4.3	5.1
Plains (IA, KS, MN, MO, NE, ND, SD)	7.9	4.8	2.9	4.2
Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)	10.0	5.7	5.0	4.1
Southwest (AZ, NM, OK, TX)	9.6	4.2	3.6	1.0
Rocky Mountains (CO, ID, MT, UT, WY)	‡	‡	‡	‡
Far West (AK, CA, HI, NV, OR, WA)	1.9	3.0	2.1	0.3
Percentage of undergraduates who were first-time, full-time, deg/certif-seeking, 2001–02				
Low	5.8	2.4	0.0	-1.3
Lower middle	6.0	4.2	2.8	1.5
Higher middle	8.4	5.1	3.3	3.1
High	6.8	5.4	6.0	4.5
Enrollment size (12-month headcount), 2001–02				
Low	6.4	5.2	2.3	3.1
Lower middle	5.9	4.1	3.5	2.8
Higher middle	7.9	4.5	3.0	2.7
High	6.9	4.1	4.0	2.8

See notes at end of table.

Table 6. Median values for indices of tuition and fees, price of attendance, and net price, by selected institutional characteristics: Public 4-year institutions, academic years 1999–2000 to 2001–02
—Continued

Institutional characteristics	Tuition and fees	Price of attendance	Net price (all aid)	Net price (grants)
Percentage of first-time, full-time, deg/certif-seeking undergraduates who were not White, Fall 2002				
Low	6.6	4.9	2.7	3.1
Lower middle	7.0	4.8	4.8	3.5
Higher middle	6.6	4.5	4.1	2.7
High	6.4	3.7	0.8	0.4
Percentage of first-time, full-time, deg/certif-seeking undergraduates who received federal grants, 2001–02				
Low	7.7	4.6	5.8	3.6
Lower middle	6.6	4.8	5.3	4.0
Higher middle	6.7	4.8	1.9	1.5
High	5.8	3.4	-4.2	-2.2
Tuition and fees 2001–02 (in-state)				
Low	4.9	3.4	1.4	-0.8
Lower middle	6.2	3.3	-0.1	1.2
Higher middle	6.7	4.4	4.2	2.4
High	8.1	5.7	6.2	4.6

† Not applicable.

‡ Not enough cases for a reliable estimate (less than 30 institutions in a cell).

NOTE: Each index was calculated as the rate of change in price between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Consumer Price Index during this period. Therefore, an institution that raises its price over this period at the rate of inflation would have an index value of 0. Categories for tuition, enrollment size, percent minority, percent receiving federal grants, and percentage first-time, full-time, degree-seeking undergraduate were determined within each sector, using centile ranges; low = 0–24th centile; lower middle = 25–49th centile; higher middle = 50–74th centile; and high = 75–99th centile. Selectivity is derived from a combination of the percent of applicants who were admitted, and median test scores (for 4-year institutions only). Revised Carnegie classification uses highest degree offered to redistribute institutions that had not been classified. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Student Financial Aid, and Enrollment, Collection Years 2000 to 2002.

institutions in other regions); and institutions with low enrollment sizes (compared to those with higher enrollments),

Several groups of public 4-year institutions had median net price index values that were close to zero or even negative: Doctoral/Research Universities—Intensive and Associates-Baccalaureate/Associates Colleges;²⁵ institutions in the Mid East and Far West (for the latter, net

²⁵ According to the 2000 Carnegie Classification, Baccalaureate/Associates Colleges are undergraduate colleges where the majority of conferrals are at the subbaccalaureate level (associate's degrees and certificates), but bachelor's degrees account for at least 10 percent of undergraduate awards. In IPEDS, these are classified as 4-year institutions. For this report, they have been combined with Associate's colleges into one category in order to condense the number of categories in the analysis.

price [grants] only); institutions with a low proportion of undergraduates who were full-time freshmen; those with a high proportion of students who were not White; those with a high proportion of full-time freshmen receiving federal grants; and low-tuition institutions for net price (grants). These groups of institutions had net prices that increased at or below the rate of inflation, or decreased. Other groups of public 4-year institutions had median net price index values that were relatively high, such as institutions with a high percentage of undergraduates who were full-time freshmen; institutions with high tuition; and institutions with low or lower middle proportions of students receiving federal grants.

Private Not-For-Profit, 4-Year Institutions

This section examines the median price of attendance, patterns of financial aid, and net prices (in current dollars) for the private not for-profit, 4-year sector between 1999–2000 and 2001–02.

The components of price of attendance (sticker price) varied over the 3-year period (table 7). In 2001–02, median tuition and fees were \$14,770, median books and supplies were \$750, and median housing expenses were \$6,764. The median values of each of the components increased between 1999–2000 and 2001–02; the differences were meaningful in the cases of tuition and on-campus and off-campus housing expenses. Overall, the median price of attendance for private not-for-profit, 4-year institutions increased from \$20,157 in 1999–2000 to \$22,259 in 2001–02.

Table 7. Median tuition and fees, books and supplies, housing expenses, and price of attendance for first-time, full-time, degree/certificate-seeking undergraduates: Private not-for-profit, 4-year institutions, academic years 1999–2000 to 2001–02

Components of price	1999–2000	2000–01	2001–02
Tuition and fees	\$13,200	\$13,920	\$14,770
Books and supplies	700	700	750
Housing expense ¹	6,200	6,439	6,764
On campus	6,731	7,000	7,333
Off campus	6,900	7,200	7,500
Living with parents	2,100	2,157	2,250
Price of attendance ²	20,157	21,071	22,259

¹ Median housing expense is a composite variable that takes into account the percentage distribution of students by housing status. See methodology for details. The individual categories for on campus, off campus, and living with parents reflect data for institutions for which the category is relevant.

² Median price of attendance is a composite variable that takes into account all three components of price and adjusts for the distribution of students by housing and residency status. See methodology for details.

NOTE: Note that the data for books and supplies and housing expenses are estimates, often based on estimates of student budgets by financial aid offices.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Collection Years 2000 to 2002; U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000).

Total financial aid also increased over this period (table 8). At private not-for-profit, 4-year institutions, a median of 81 percent of full-time freshmen received institutional grants in 2001–02, receiving an average amount of \$5,996. A median percentage of 63 percent of full-time freshmen received loans, with an average amount of \$3,686. Full-time freshmen at private not-for-profit, 4-year institutions also received state grants (a median of 32 percent) and federal grants (29 percent). Median aid amounts for federal grants and institutional grants (for those who received such aid) increased during this period. Across all first-time freshmen, including nonrecipients, the median total aid at private not-for-profit, 4-year institutions increased from \$8,425 in 1999–2000 to \$9,280 in 2001–02, while the median value of total grants increased from \$5,862 to \$6,747.

Table 8. Median values of the percentage of first-time, full-time, degree/certificate-seeking undergraduates receiving financial aid, and average amounts received: Private not-for-profit, 4-year institutions, academic years 1999–2000 to 2001–02

Type of aid	1999–2000	2000–01	2001–02
Percentage receiving ¹			
Type of aid			
Federal grants	30	28	29
State grants	34	32	32
Institutional grants	81	81	81
Loans	64	63	63
Average amount received, current dollars ¹			
Type of aid			
Federal grants	\$2,527	\$2,765	\$3,040
State grants	2,473	2,668	2,736
Institutional grants	5,207	5,636	5,996
Loans	3,402	3,453	3,686
Composite aid amounts, in current dollars ²			
Type of aid			
Total aid	\$8,425	\$8,537	\$9,280
Total grants	5,862	6,299	6,747

¹ Percentages receiving aid and average amounts received were calculated across all institutions, including those that did not report a specific category of aid (i.e., the data include zeros). Average amounts were bounded.

² Composite variables reflect the percentage receiving multiplied by the average amount, i.e., amount of aid for those who received aid; see methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Student Financial Aid, Collection Years 2000 to 2002.

Dollar changes in price of attendance²⁶ were higher than dollar changes in total aid and total grants—a \$2,098 median increase in median price of attendance between 1999–2000 and 2001–02, compared to a median increase of \$798 for total aid and \$689 for total grants (table 9). The median percentage change in total grants over the 3-year period, an 11 percent increase, was higher than the median percentage change in price of attendance, a 10 percent increase; both of these percentage increases were higher than the rate of inflation at 5 percent.

Table 9. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates: Private not-for-profit, 4-year institutions, academic years 1999–2000 to 2001–02

	Price of attendance	Total aid	Total grants	Net price (all aid)	Net price (grants)
Median values in current dollars					
Academic year					
1999–2000	\$20,157	\$8,425	\$5,862	\$11,400	\$13,762
2000–2001	21,071	8,537	6,299	11,910	14,271
2001–2002	22,259	9,280	6,747	12,514	14,954
Median dollar change					
Time period					
1999–2000 to 2000–2001	\$956	\$256	\$288	\$698	\$645
2000–2001 to 2001–2002	1,112	508	348	613	754
1999–2000 to 2001–2002	2,098	798	689	1,264	1,406
Median percentage change					
Time period					
1999–2000 to 2000–2001	4.4	3.2	5.0	5.4	4.4
2000–2001 to 2001–2002	5.0	5.9	5.7	4.7	4.8
1999–2000 to 2001–2002	10.0	9.6	11.4	10.2	9.8

NOTE: Aid amounts are composite variables derived from the percentage receiving aid multiplied by the average amount received. Thus, they are medians across all students at each institution. Dollar changes were calculated at an institutional level, and then medians were calculated across all institutions. As a result, the aggregate change in median values may not be the same as the median dollar change over the same period. Percentage changes also were calculated at an institutional level, and then medians were calculated. In a few cases, institutions had a zero value for financial aid in the base year. In these cases, the percentage change in total aid or total grants was left blank for the calculation.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Years 2000 to 2002.

²⁶ Changes were calculated at an institutional level, and then medians were calculated across all institutions. As a result, the aggregate change in median values may not be the same as the median dollar change over the same period.

The changes in price of attendance and in financial aid were reflected in changes in the median net prices of private not-for-profit, 4-year institutions. Median net price (all aid) increased from \$11,400 in 1999–2000 to \$12,514 in 2001–02; median net price (grants) increased from \$13,762 to \$14,954. The median dollar change in net price (all aid) and in net price (grants) over the 3-year period was lower than the median dollar change in price of attendance. As was true for public 4-year institutions, the median percentage changes in price of attendance, aid, and net price (all aid) were higher during the period 2000–01 to 2001–02 than in the previous period, 1999–2000 to 2000–01.

The median price of attendance, total aid, total grants, and net prices for full-time freshmen in 2001–02 differed for various groups of private not-for-profit, 4-year institutions (table 10).

- Doctoral/Research Universities—Extensive had higher median prices of attendance, net prices (all aid), and net prices (grants) than other types of private not-for-profit, 4-year institutions.
- Very selective institutions had higher median prices of attendance, net prices (all aid), and net prices (grants) than those in the lower selectivity categories. Moderately selective institutions had the highest aid amounts.
- Private not-for-profit, 4-year institutions in New England, the Mid East, and the Far West had higher median prices of attendance, net prices (all aid), and net prices (grants) than institutions in other regions.
- Private not-for-profit, 4-year institutions with a low proportion of full-time freshmen receiving federal grants had higher median prices of attendance, net prices (all aid), and net prices (grants) than institutions in other categories, while institutions in the lower middle category of federal grant receipt among full-time freshmen had the highest median amounts of total aid and total grants.
- Institutions with high enrollment sizes had higher median prices of attendance, net prices (all aid), and net prices (grants) than those with low enrollment.
- Institutions with high and higher middle tuition had higher net prices (all aid) and net prices (grants), and higher total aid and grants, than their counterparts with lower tuition.

Price indices for private not-for-profit, 4-year institutions take into consideration inflation during the 3-year period (table 11). Groups of institutions with index values close to zero increased their prices at about the rate of inflation; those with higher values increased their prices above rate of inflation, while those with negative values either increased their prices more slowly than the rate of inflation, or decreased their prices. For all private not-for-profit, 4-year

Table 10. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates, by selected institutional characteristics: Private not-for-profit, 4-year institutions, academic year 2001–02

Institutional characteristics	Price of attendance	Total aid	Total grants	Net price (all aid)	Net price (grants)
Total	\$22,259	\$9,280	\$6,747	\$12,514	\$14,954
Revised Carnegie classification					
Doctoral/Research Universities—Extensive	34,795	8,389	6,578	25,761	27,681
Doctoral/Research Universities—Intensive	27,697	10,706	8,277	15,896	18,824
Masters Colleges and Universities	22,593	10,055	7,241	12,388	14,937
Baccalaureate Colleges—Liberal Arts	26,696	10,250	7,929	14,420	16,820
Baccalaureate Colleges—General	20,023	9,416	6,615	10,289	12,899
Associates and Baccalaureate/Associates Colleges	17,665	5,864	3,634	11,294	13,377
Specialized institutions	17,259	5,342	3,393	11,872	13,612
Non-degree-granting institutions	†	†	†	†	†
Selectivity					
Very selective	29,349	8,923	6,819	19,030	21,437
Moderately selective	22,004	10,252	7,450	11,635	14,498
Minimally selective	20,151	7,988	5,290	11,506	13,883
Open admission	14,993	5,241	3,379	10,401	12,170
Bureau of Economic Analysis (BEA) region codes					
New England (CT, ME, MA, NH, RI, VT)	27,189	9,545	5,885	16,699	19,768
Mid East (DE, DC, MD, NJ, NY, PA)	25,491	9,972	6,555	13,892	16,563
Great Lakes (IL, IN, MI, OH, WI)	21,842	9,851	6,622	12,176	14,528
Plains (IA, KS, MN, MO, NE, ND, SD)	20,540	9,771	5,975	10,168	13,115
Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)	19,212	8,061	4,922	11,018	12,903
Southwest (AZ, NM, OK, TX)	17,910	7,887	4,191	10,763	13,224
Rocky Mountains (CO, ID, MT, UT, WY)	‡	‡	‡	‡	‡
Far West (AK, CA, HI, NV, OR, WA)	26,005	9,936	6,887	16,101	18,735
Percentage of undergraduates who were first-time, full-time, deg/certif-seeking, 2001–02					
Low	20,560	8,805	6,305	11,347	13,890
Lower middle	22,047	9,760	7,027	12,178	14,729
Higher middle	24,906	9,273	6,825	14,102	16,632
High	22,962	9,359	6,688	12,809	15,335
Enrollment size (12-month headcount), 2001–02					
Low	19,137	7,606	5,486	10,458	12,955
Lower middle	22,174	10,000	7,363	11,609	14,425
Higher middle	22,940	9,599	7,069	13,185	15,803
High	25,310	9,642	6,887	14,770	17,450

See notes at end of table.

Table 10. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates, by selected institutional characteristics: Private not-for-profit, 4-year institutions, academic year 2001–02—Continued

Institutional characteristics	Price of attendance	Total aid	Total grants	Net price (all aid)	Net price (grants)
Percentage of first-time, full-time, deg/certif-seeking undergraduates who were not White, Fall 2002					
Low	\$21,462	\$9,596	\$6,849	\$11,566	\$14,234
Lower middle	22,359	9,624	7,175	12,917	15,123
Higher middle	22,670	9,478	6,771	12,766	15,426
High	22,423	8,202	5,825	13,183	15,676
Percentage of first-time, full-time, deg/certif-seeking undergraduates who received federal grants, 2001–02					
Low	28,598	8,734	6,710	18,835	21,026
Lower middle	23,582	10,155	7,460	12,941	15,355
Higher middle	20,630	9,600	6,814	11,078	13,736
High	18,450	8,255	5,508	9,370	12,170
Tuition and fees 2001–02 (in-state)					
Low	14,879	5,689	3,708	9,157	11,214
Lower middle	20,425	9,462	6,604	11,122	13,765
Higher middle	24,175	11,332	8,337	12,950	15,713
High	30,377	10,325	7,928	19,908	22,286

† Not applicable.

‡ Not enough cases for a reliable estimate (less than 30 institutions in a cell).

NOTE: Categories for tuition, enrollment size, percent minority, percent receiving federal grants, and percentage first-time, full-time, degree-seeking undergraduate were determined within each sector, using centile ranges; low = 0–24th centile; lower middle = 25–49th centile; higher middle = 50–74th centile; and high = 75–99th centile. Selectivity is derived from a combination of the percent of applicants who were admitted, and median test scores (for 4-year institutions only). Revised Carnegie classification uses highest degree offered to redistribute institutions that had not been classified. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Student Financial Aid, and Enrollment, Collection Years 2002.

institutions, the median index value for tuition and fees was slightly higher than for price of attendance. The median index value for net price (grants) was slightly lower.²⁷

None of the groups of private not-for-profit, 4-year institutions had median index values that were negative or close to zero. In fact, almost all of the institutional groups defined in the table had median index values for tuition and fees and price of attendance that ranged between

²⁷ Private not-for-profit, 4-year institutions have both higher median aid amounts and prices of attendance in comparison with other sectors. However, net prices make up a smaller proportion of price of attendance than in other sectors; in 2001–02, for example, the median net price (all aid) at all private not-for-profit, 4-year institutions made up slightly more than half of the median price of attendance, compared to two-thirds or more in other sectors. Given a specific price increase in all sectors (i.e., an increase in the denominator), the median amount of aid at private not-for-profit, 4-year institutions would need to increase by more dollars than in other sectors in order for net prices (the numerator) to match or exceed the increase in price.

Table 11. Median values for indices of tuition and fees, price of attendance, and net price, by selected institutional characteristics: Private not-for-profit, 4-year institutions, academic years 1999–2000 to 2001–02

Institutional characteristics	Tuition and fees	Price of attendance	Net price (all aid)	Net price (grants)
Total	5.2	4.6	4.8	4.4
Revised Carnegie classification				
Doctoral/Research Universities—Extensive	3.9	3.5	5.5	5.2
Doctoral/Research Universities—Intensive	4.6	4.2	4.0	4.5
Masters Colleges and Universities	5.5	4.8	4.2	3.4
Baccalaureate Colleges—Liberal Arts	4.4	3.9	5.2	5.0
Baccalaureate Colleges—General	5.6	5.1	4.2	4.1
Associates and Baccalaureate/Associates Colleges	6.5	6.3	9.2	7.9
Specialized institutions	5.6	4.7	4.2	4.8
Non-degree-granting institutions	†	†	†	†
Selectivity				
Very selective	4.5	4.0	6.1	5.5
Moderately selective	5.5	4.7	3.5	3.6
Minimally selective	5.3	4.7	4.2	3.6
Open admission	4.6	4.7	10.2	8.9
Bureau of Economic Analysis (BEA) region codes				
New England (CT, ME, MA, NH, RI, VT)	4.0	3.5	4.2	4.5
Mid East (DE, DC, MD, NJ, NY, PA)	4.8	4.2	4.4	3.9
Great Lakes (IL, IN, MI, OH, WI)	4.9	4.3	4.6	4.8
Plains (IA, KS, MN, MO, NE, ND, SD)	5.1	4.6	3.2	5.0
Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)	5.6	5.4	4.6	3.6
Southwest (AZ, NM, OK, TX)	6.7	6.1	3.3	4.2
Rocky Mountains (CO, ID, MT, UT, WY)	‡	‡	‡	‡
Far West (AK, CA, HI, NV, OR, WA)	5.4	4.7	7.4	4.6
Percentage of undergraduates who were first-time, full-time, deg/certif-seeking, 2001–02				
Low	5.6	4.4	4.4	4.1
Lower middle	5.6	5.0	4.6	4.5
Higher middle	4.9	4.3	5.1	4.6
High	4.8	4.3	4.6	3.9
Enrollment size (12-month headcount), 2001–02				
Low	5.1	5.0	4.5	3.8
Lower middle	5.1	4.2	4.4	4.1
Higher middle	5.2	4.3	5.7	4.9
High	5.3	4.6	4.2	4.3

See notes at end of table.

Table 11. Median values for indices of tuition and fees, price of attendance, and net price, by selected institutional characteristics: Private not-for-profit, 4-year institutions, academic years 1999–2000 to 2001–02—Continued

Institutional characteristics	Tuition and fees	Price of attendance	Net price (all aid)	Net price (grants)
Percentage of first-time, full-time, deg/certif-seeking undergraduates who were not White, Fall 2002				
Low	5.4	4.6	3.4	3.6
Lower middle	5.6	5.1	5.2	5.0
Higher middle	5.2	4.6	5.4	5.2
High	4.9	4.0	4.8	4.3
Percentage of first-time, full-time, deg/certif-seeking undergraduates who received federal grants, 2001–02				
Low	4.6	4.3	7.1	6.0
Lower middle	5.5	4.6	3.9	3.4
Higher middle	5.4	5.0	3.9	3.9
High	5.3	4.2	3.1	3.1
Tuition and fees 2001–02				
Low	5.6	5.2	7.3	6.0
Lower middle	5.6	5.0	4.3	3.8
Higher middle	5.6	4.7	2.9	3.0
High	4.4	4.0	5.5	5.1

† Not applicable.

‡ Not enough cases for a reliable estimate (less than 30 institutions in a cell).

NOTE: Each index was calculated as the rate of change in price between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Consumer Price Index during this period. Therefore, an institution that raises its price over this period at the rate of inflation would have an index value of 0. Categories for tuition, enrollment size, percent minority, percent receiving federal grants, and percentage first-time, full-time, degree-seeking undergraduate were determined within each sector, using centile ranges; low = 0–24th centile; lower middle = 25–49th centile; higher middle = 50–74th centile; and high = 75–99th centile. Selectivity is derived from a combination of the percent of applicants who were admitted, and median test scores (for 4-year institutions only). Revised Carnegie classification uses highest degree offered to redistribute institutions that had not been classified. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Student Financial Aid, and Enrollment, Collection Years 2000 to 2002.

4 and 6.²⁸ Nonetheless, in some cases index values differed according to specific institutional characteristics. Focusing on net prices, certain groups of institutions had index values that were lower than the values for all private not-for-profit, 4-year institutions, including: Masters Colleges and Universities, and Baccalaureate Colleges—General; moderately and minimally

²⁸ The exceptions were Doctoral/Research Universities—Extensive; Baccalaureate Colleges—Liberal Arts (for price of attendance); Associates and Baccalaureate/Associates Colleges; institutions in New England (price of attendance only); and institutions in the Southwest.

selective institutions; institutions with a low proportion of full-time freshmen who were not White; institutions in all but the lowest category of the proportion for students receiving federal grants; and institutions in the middle tuition categories.

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Public 2-Year Institutions

This section examines prices and aid for the public 2-year sector. It describes the median price of attendance, patterns of financial aid, and net prices (in current dollars) over the 3-year period, as well as the changes over time. As for public 4-year institutions, tuition and fee levels at public 2-year institutions are usually set in coordination with state and/or local agencies and may vary with state and local appropriations.

Table 12 presents each of the components of price of attendance (sticker price) over the 3 years between 1999–2000 and 2001–02. In 2001–02, median tuition and fees were \$1,679,

Table 12. Median tuition and fees, books and supplies, housing expenses, and price of attendance for first-time, full-time, degree/certificate-seeking undergraduates: Public 2-year institutions, academic years 1999–2000 to 2001–02

Components of price	1999–2000	2000–01	2001–02
Tuition and fees ¹	\$1,433	\$1,530	\$1,679
In-district	1,303	1,397	1,500
In-state	1,380	1,474	1,628
Out-of-state	3,838	3,989	4,316
Books and supplies	680	700	783
Housing expense ²	4,431	4,461	4,707
On campus	4,806	5,053	5,246
Off campus	7,155	7,265	7,682
Living with parents	2,385	2,400	2,548
Price of attendance ³	6,667	6,860	7,184

¹ Median tuition and fees is a composite variable that takes into account the percentage distribution of students by residency status. See methodology for details. On the other hand, the individual categories for in-district, in-state, and out-of-state tuition and fees reflect data only for institutions for which the category is relevant.

² Median housing expense is a composite variable that takes into account the percentage distribution of students by housing status. See methodology for details. The individual categories for on campus, off campus, and living with parents reflect data for institutions for which the category is relevant.

³ Median price of attendance is a composite variable that takes into account all three components of price and adjusts for the distribution of students by housing and residency status. See methodology for details.

NOTE: Note that the data for books and supplies and housing expenses are estimates, often based on estimates of student budgets by financial aid offices.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Collection Years 2000 to 2002; U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000).

with out-of-state tuition and fee charges two to three times higher than charges for in-state or in-district residence. Public 2-year institutions had a median of \$783 for estimated books and supplies in 2001–02, while housing expenses were \$4,707. Although the median values of each of the components increased between 1999–2000 and 2001–02, the increase was meaningful only in the case of off-campus housing expenses. The median price of attendance for public 2-year institutions increased from \$6,667 in 1999–2000 to \$7,184 in 2001–02.

Over this period, different types of financial aid at public 2-year institutions exhibited varying percentages of students receiving aid and average amounts (table 13). A median of 39 percent of full-time freshmen received federal grants in 2001–02, receiving an average amount of \$2,579. For those who received federal grants, the median amount increased over the 3-year

Table 13. Median values of the percentage of first-time, full-time, degree/certificate-seeking undergraduates receiving financial aid, and average amounts received: Public 2-year institutions, academic years 1999–2000 to 2001–02

Type of aid	1999–2000	2000–01	2001–02
Percentage receiving ¹			
Type of aid			
Federal grants	35	36	39
State grants	24	26	27
Institutional grants	9	9	9
Loans	7	7	7
Average amount received, current dollars ¹			
Type of aid			
Federal grants	\$2,064	\$2,267	\$2,579
State grants	730	820	868
Institutional grants	660	703	735
Loans	2,002	1,975	2,050
Composite aid amounts, in current dollars ²			
Type of aid			
Total aid	\$1,264	\$1,419	\$1,616
Total grants	1,013	1,170	1,330

¹ Percentages receiving aid and average amounts received were calculated across all institutions, including those that did not report a specific category of aid (i.e., the data include zeros). Average amounts were bounded.

² Composite variables reflect the percentage receiving multiplied by the average amount, i.e., amount of aid for those who received aid; see methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Student Financial Aid, Collection Years 2000 to 2002.

period. A median of 27 percent of full-time freshmen received state grants. The median percent receiving for institutional grants and loans were lower, at 9 and 7 percent, respectively. The median value of total aid and total grants (across all first-time freshmen, including nonrecipients) at public 2-year institutions increased, but not meaningfully.

At public 2-year institutions, median dollar changes²⁹ in price of attendance were higher than the median dollar changes in total aid and total grants—a \$509 increase in median price of attendance over the 3-year period, compared to \$285 for total aid and \$271 for total grants (table 14). Median percentage changes in aid over the 3-year period were higher than median

Table 14. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates: Public 2-year institutions, academic years 1999–2000 to 2001–02

	Price of attendance	Total aid	Total grants	Net price (all aid)	Net price (grants)
Median values in current dollars					
Academic year					
1999–2000	\$6,667	\$1,264	\$1,013	\$5,260	\$5,623
2000–2001	6,860	1,419	1,170	5,249	5,646
2001–2002	7,184	1,616	1,330	5,439	5,831
Median dollar change					
Time period					
1999–2000 to 2000–2001	\$170	\$97	\$107	\$89	\$87
2000–2001 to 2001–2002	284	178	157	133	152
1999–2000 to 2001–2002	509	285	271	223	236
Median percentage change					
Time period					
1999–2000 to 2000–2001	2.6	7.7	10.1	1.6	1.5
2000–2001 to 2001–2002	4.1	12.5	13.6	2.5	2.7
1999–2000 to 2001–2002	7.6	21.8	25.3	4.3	4.1

NOTE: Aid amounts are composite variables derived from the percentage receiving aid multiplied by the average amount received. Thus, they are medians across all students at each institution. Dollar changes were calculated at an institutional level, and then medians were calculated across all institutions. As a result, the aggregate change in median values may not be the same as the median dollar change over the same period. Percentage changes also were calculated at an institutional level, and then medians were calculated. In a few cases, institutions had a zero value for financial aid in the base year. In these cases, the percentage change in total aid or total grants was left blank for the calculation.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Years 2000 to 2002.

²⁹ Changes were calculated at an institutional level, and then medians were calculated across all institutions. As a result, the aggregate change in median values may not be the same as the median dollar change over the same period.

percentage change in price of attendance: a median of 25 percent increase for total grants and 22 percent increase for total aid, compared to a median of 8 percent increase for price of attendance.

With the impact of changes in sticker prices and financial aid at public 2-year institutions, the median values for both types of net prices increased between 1999–2000 and 2001–02 in current dollars; however, meaningful differences were not detected. Further, the median dollar changes in both net price (all aid) and net price (grants) over the 3-year period were lower than the median dollar change in price of attendance, and the median percentage changes in both types of net price were lower than the median percentage change in price of attendance. In fact, the percentage changes in net price (all aid) and net price (grants) were lower than the rate of inflation over this period (5 percent). Increases in financial aid at public 2-year institutions made it possible for net prices to increase at a slower rate than sticker prices, and than inflation. At the same time, the median percentage changes in price of attendance, aid, and net prices were higher during the period 2000–01 to 2001–02 than in the previous period, 1999–2000 to 2000–01.

The median price of attendance, total aid, total grants, and net prices for full-time freshmen at public 2-year institutions in 2001–02 differed according to various institutional characteristics (table 15). For example:

- Public 2-year institutions with a low proportion of full-time freshmen receiving federal grants had higher median net prices (all aid) and net prices (grants)—but lower median amounts of total aid and total grants—than their counterparts with a high proportion of these students.
- Public 2-year institutions with high enrollment sizes had higher median net prices (all aid) and net prices (grants) than those with low enrollment, and lower median amounts of total aid and total grants.
- Among public 2-year institutions, median net price (all aid) was higher for institutions with a low proportion of undergraduates who were full-time freshmen, and median total aid was lower.

The price indices help pull all of these patterns in price and aid together into one measure, which takes into account inflation during the 3-year period (table 16). For all public 2-year institutions, the difference between the rate of change in prices overall (inflation) and the rate of change in college prices varied depending upon the type of price measured. The median index value for tuition and fees, 4, was twice as high as the median index value for price of attendance, 2. At the same time, the median index values for net price (all aid) and net price (grants) were negative, reflecting the fact that institutions either increased their net prices slower than the rate of inflation, or decreased their net prices.

Table 15. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates, by selected institutional characteristics: Public 2-year institutions, academic year 2001–02

Institutional characteristics	Price of attendance	Total aid	Total grants	Net price (all aid)	Net price (grants)
Total	\$7,184	\$1,616	\$1,330	\$5,439	\$5,831
Revised Carnegie classification ¹					
Associates and Baccalaureate/Associates Colleges	7,184	1,611	1,328	5,442	5,834
Specialized institutions	‡	‡	‡	‡	‡
Bureau of Economic Analysis (BEA) region codes					
New England (CT, ME, MA, NH, RI, VT)	8,118	1,405	1,207	6,143	6,501
Mid East (DE, DC, MD, NJ, NY, PA)	7,485	1,748	1,193	5,660	6,089
Great Lakes (IL, IN, MI, OH, WI)	7,541	1,912	1,453	5,657	6,122
Plains (IA, KS, MN, MO, NE, ND, SD)	7,505	2,554	1,484	4,861	6,261
Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)	6,723	1,485	1,368	5,193	5,381
Southwest (AZ, NM, OK, TX)	6,401	1,680	1,420	4,574	4,780
Rocky Mountains (CO, ID, MT, UT, WY)	‡	‡	‡	‡	‡
Far West (AK, CA, HI, NV, OR, WA)	7,169	1,207	1,093	5,938	6,144
Percentage of undergraduates who were first-time, full-time, deg/certif-seeking, 2001–02					
Low	7,202	1,382	1,161	5,890	6,048
Lower middle	7,178	1,493	1,277	5,578	5,934
Higher middle	7,065	1,706	1,417	5,164	5,635
High	7,266	2,081	1,558	4,830	5,650
Enrollment size (12-month headcount), 2001–02					
Low	6,955	1,973	1,621	4,902	5,335
Lower middle	7,022	1,941	1,522	4,967	5,470
Higher middle	7,349	1,468	1,200	5,736	6,122
High	7,292	1,320	1,051	5,943	6,106

See notes at end of table.

Table 15. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates, by selected institutional characteristics: Public 2-year institutions, academic year 2001–02—Continued

Institutional characteristics	Price of attendance	Total aid	Total grants	Net price (all aid)	Net price (grants)
Percentage of first-time, full-time, deg/certif-seeking undergraduates who were not White, Fall 2002					
Low	\$7,290	\$2,026	\$1,447	\$5,038	\$5,929
Lower middle	7,328	1,572	1,190	5,567	5,992
Higher middle	6,961	1,461	1,284	5,576	5,804
High	7,172	1,530	1,451	5,598	5,713
Percentage of first-time, full-time, deg/certif-seeking undergraduates who received federal grants, 2001–02					
Low	7,379	853	756	6,392	6,574
Lower middle	7,325	1,513	1,200	5,696	5,998
Higher middle	6,925	1,943	1,577	4,909	5,286
High	7,144	2,397	2,073	4,439	4,865
Tuition and fees 2001–02 (in-state)					
Low	6,831	1,231	1,175	5,593	5,668
Lower middle	6,410	1,582	1,361	4,909	5,161
Higher middle	7,344	1,618	1,337	5,602	5,988
High	8,050	2,361	1,468	5,773	6,467

‡ Not enough cases for a reliable estimate (less than 30 institutions in a cell).

¹ All public 2-year institutions fall into one of the two categories presented.

NOTE: Categories for tuition, enrollment size, percent minority, percent receiving federal grants, and percentage first-time, full-time, degree-seeking undergraduate were determined within each sector, using centile ranges; low = 0–24th centile; lower middle = 25–49th centile; higher middle = 50–74th centile; and high = 75–99th centile. Selectivity is derived from a combination of the percent of applicants who were admitted, and median test scores (for 4-year institutions only). Revised Carnegie classification uses highest degree offered to redistribute institutions that had not been classified. Selectivity is not shown because it was calculated only for 4-year institutions. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Student Financial Aid, and Enrollment, Collection Years 2002.

Different groups of public 2-year institutions showed some differences in index values. Institutions in the Mid East and Great Lakes regions had negative median tuition and fees index values, and institutions in the Mid East had a negative index value for price of attendance as well. For other groups of institutions, index values for price of attendance and tuition and fees were positive, indicating that sticker prices had been raised above the rate of inflation. Certain groups of public 2-year institutions had median price of attendance index values that were relatively high (i.e., higher than the index value for all public 2-year institutions). These groups included institutions in the Plains and Southeast regions, institutions with high proportions of students who were full-time freshmen, and institutions with low enrollment sizes.

Table 16. Median values for indices of tuition and fees, price of attendance, and net price, by selected characteristics: Public 2-year institutions, academic years 1999–2000 to 2001–02

Institutional characteristics	Tuition and fees	Price of attendance	Net price (all aid)	Net price (grants)
Total	4.4	2.2	-1.1	-1.3
Revised Carnegie classification ¹				
Associates and Baccalaureate/Associates Colleges	4.5	2.2	-1.1	-1.3
Specialized institutions	‡	‡	‡	‡
Bureau of Economic Analysis (BEA) region codes				
New England (CT, ME, MA, NH, RI, VT)	2.5	2.1	1.0	-1.3
Mid East (DE, DC, MD, NJ, NY, PA)	-1.0	-2.6	-5.3	-4.5
Great Lakes (IL, IN, MI, OH, WI)	-0.8	1.0	-4.6	-2.9
Plains (IA, KS, MN, MO, NE, ND, SD)	8.1	3.9	-1.9	-0.4
Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)	10.0	3.5	1.3	0.5
Southwest (AZ, NM, OK, TX)	6.6	2.3	-2.4	-1.8
Rocky Mountains (CO, ID, MT, UT, WY)	‡	‡	‡	‡
Far West (AK, CA, HI, NV, OR, WA)	2.1	2.1	0.0	-0.3
Percentage of undergraduates who were first-time, full-time, deg/certif-seeking, 2001–02				
Low	2.9	2.0	-2.0	-1.7
Lower middle	4.2	1.7	-1.0	-1.8
Higher middle	5.8	3.0	-1.6	-1.2
High	4.7	3.0	1.1	-0.3
Enrollment size (12-month headcount), 2001–02				
Low	4.6	3.1	1.0	-1.2
Lower middle	6.5	3.0	-2.1	-2.1
Higher middle	4.8	1.8	-1.3	-1.1
High	2.2	1.4	-1.6	-1.1

See notes at end of table.

Table 16. Median values for indices of tuition and fees, price of attendance, and net price, by selected characteristics: Public 2-year institutions, academic years 1999–2000 to 2001–02—Continued

Institutional characteristics	Tuition and fees	Price of attendance	Net price (all aid)	Net price (grants)
Percentage of first-time, full-time, deg/certif-seeking undergraduates who were not White, Fall 2002				
Low	4.4	1.9	-0.5	-1.2
Lower middle	4.8	2.1	-0.3	-1.1
Higher middle	4.1	2.1	-1.1	-1.4
High	3.7	2.7	-2.0	-2.0
Percentage of first-time, full-time, deg/certif-seeking undergraduates who received federal grants, 2001–02				
Low	3.3	2.3	2.3	2.0
Lower middle	5.3	2.1	-1.4	-1.1
Higher middle	4.8	2.1	-3.2	-2.7
High	4.7	2.5	-7.7	-6.3
Tuition and fees 2001–02 (in-state)				
Low	1.9	2.4	-1.3	-2.1
Lower middle	9.2	3.8	0.5	-0.2
Higher middle	4.7	1.7	-2.3	-1.4
High	3.6	1.5	0.5	-1.0

‡ Not enough cases for a reliable estimate (less than 30 institutions in a cell).

¹ All public 2-year institutions fall into one of the two categories presented.

NOTE: Each index was calculated as the rate of change in price between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Consumer Price Index during this period. Therefore, an institution that raises its price over this period at the rate of inflation would have an index value of 0. Categories for tuition, enrollment size, percent minority, percent receiving federal grants, and percentage first-time, full-time, degree-seeking undergraduate were determined within each sector, using centile ranges; low = 0–24th centile; lower middle = 25–49th centile; higher middle = 50–74th centile; and high = 75–99th centile. Selectivity is derived from a combination of the percent of applicants who were admitted, and median test scores (for 4-year institutions only). Revised Carnegie classification uses highest degree offered to redistribute institutions that had not been classified. Selectivity is not shown because it was calculated only for 4-year institutions. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Student Financial Aid, and Enrollment, Collection Years 2000 to 2002.

Most groups of public 2-year institutions had median *net price* index values that were close to zero or even negative. Groups with the lowest median net price index values were institutions in the Mid East and Great Lakes, and those with a high proportion of full-time freshmen receiving federal grants.

Private For-Profit, Less-Than-4-Year Institutions

This section examines median price of attendance, patterns of financial aid, and net prices for private for-profit, less-than-4-year institutions between 1999–2000 and 2001–02.

In 2001–02, median tuition and fees were \$7,770, median books and supplies were \$550, and median housing expenses were \$5,875 (table 17). Median tuition and fees in 2001–02 were higher than in 1999–2000 (differences in the other components were not meaningful). In addition, the median price of attendance for private for-profit, less-than-4-year institutions increased from \$13,020 in 1999–2000 to \$14,514 in 2001–02.

Table 17. Median tuition and fees, books and supplies, housing expenses, and price of attendance for first-time, full-time, degree/certificate-seeking undergraduates: Private for-profit, less-than-4-year institutions, 1999–2000 to 2001–02

	1999–2000	2000–01	2001–02
Tuition and fees	\$6,900	\$7,200	\$7,770
Books and supplies	525	525	550
Housing expense ¹	5,568	5,532	5,875
On campus	6,421	6,405	6,704
Off campus	7,413	7,384	7,829
Living with parents	2,683	2,635	2,819
Price of attendance ²	13,020	13,653	14,514

¹ Median housing expense is a composite variable that takes into account the percentage distribution of students by housing status. See methodology for details. The individual categories for on campus, off campus, and living with parents reflect data for institutions for which the category is relevant.

² Median price of attendance is a composite variable that takes into account all three components of price and adjusts for the distribution of students by housing and residency status. See methodology for details.

NOTE: Price of attendance data are for academic year for institutions that were academic year reporters, program year for program year reporters. See methodology for details. Note that the data for books and supplies and housing expenses are estimates, often based on estimates of student budgets by financial aid offices.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Collection Years 2000 to 2002; U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000).

At private for-profit, less-than-4-year institutions, a median of 67 percent of full-time freshmen received loans in 2001–02, receiving an average amount of \$3,352 (table 18). A median percentage of 66 percent of full-time freshmen received federal grants, with an average amount of \$2,543. The median values for state and institutional grants were zero, as less than half of private for-profit, less-than-4-year institutions reported that first-time freshmen received these grants.³⁰ Across all first-time freshmen, including nonrecipients, the median total aid at private not-for-profit, 4-year institutions increased from \$3,369 in 1999–2000 to \$4,007 in 2001–02. The median value of total grants was \$1,783 in 2001–02.

Table 18. Median values of the percentage of first-time, full-time, degree/certificate-seeking undergraduates receiving financial aid, and average amounts received: Private for-profit, less-than-4-year institutions, 1999–2000 to 2001–02

Type of aid	1999–2000	2000–01	2001–02
Percentage receiving aid ¹			
Type of aid			
Federal grants	63	64	66
State grants	#	#	#
Institutional grants	#	#	#
Loans	62	64	67
Average amount received, current dollars ¹			
Type of aid			
Federal grants	\$2,097	\$2,291	\$2,543
State grants	#	#	#
Institutional grants	#	#	#
Loans	3,019	3,245	3,352
Composite aid amounts, in current dollars ²			
Type of aid			
Total aid	\$3,369	\$3,630	\$4,007
Total grants	1,434	1,557	1,783

Rounds to zero.

¹ Percentages receiving aid and average amounts received were calculated across all institutions, including those that did not report a specific category of aid (i.e., the data include zeros). Average amounts were bounded.

² Composite variables reflect the percentage receiving multiplied by the average amount, i.e., amount of aid for those who received aid; see methodology for details.

NOTE: Aid data are for academic year for institutions that were academic year reporters, program year for program year reporters. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Student Financial Aid, Collection Years 2000 to 2002.

³⁰ Less than 40 percent of private for-profit, less-than-4-year institutions reported any full-time freshmen receiving state or institutional grants in 2001–02.

Dollar changes in price of attendance³¹ were higher than dollar changes in total aid and total grants—a \$1,307 median increase in price of attendance between 1999–2000 and 2001–02, compared to a median of \$574 for total aid and \$355 for total grants (table 19). The median percentage changes in total aid and total grants over the 3-year period—an 18 percent increase and a 23 percent increase, respectively—were higher than the median percentage change in price of attendance, a 10 percent increase. All of these percentage increases were higher than the rate of inflation at 5 percent.

Table 19. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates: Private for-profit, less-than-4-year institutions, 1999–2000 to 2001–02

	Price of attendance	Total aid	Total grants	Net price (all aid)	Net price (grants)
Median values in current dollars					
Year ¹					
1999–2000	\$13,020	\$3,369	\$1,434	\$9,776	\$11,521
2000–2001	13,653	3,630	1,557	9,982	11,961
2001–2002	14,514	4,007	1,783	10,487	12,581
Median dollar change					
Time period					
1999–2000 to 2000–2001	\$496	\$217	\$105	\$244	\$412
2000–2001 to 2001–2002	725	301	218	465	529
1999–2000 to 2001–2002	1,307	574	355	764	1,020
Median percentage change					
Time period					
1999–2000 to 2000–2001	3.7	6.8	6.9	2.4	3.5
2000–2001 to 2001–2002	5.2	7.9	13.2	4.5	4.1
1999–2000 to 2001–2002	9.9	18.4	22.7	8.0	8.6

¹ Academic year for institutions that were academic year reporters, program year for program year reporters. See methodology for details.

NOTE: Aid amounts are composite variables derived from the percentage receiving aid multiplied by the average amount received. Thus, they are medians across all students at each institution. Dollar changes were calculated at an institutional level, and then medians were calculated across all institutions. As a result, the aggregate change in median values may not be the same as the median dollar change over the same period. Percentage changes also were calculated at an institutional level, and then medians were calculated. In a few cases, institutions had a zero value for financial aid in the base year. In these cases, the percentage change in total aid or total grants was left blank for the calculation.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Years 2000 to 2002.

³¹ Changes were calculated at an institutional level, and then medians were calculated across all institutions. As a result, the aggregate change in median values may not be the same as the median dollar change over the same period.

The changes in price of attendance and in financial aid were reflected in changes in the median net prices of private for-profit, less-than-4-year institutions. Median net price (all aid) increased from \$9,776 in 1999–2000 to \$10,487 in 2001–02; median net price (grants) increased from \$11,521 to \$12,581. Over the 3-year period, median dollar changes and percentage changes in both types of net price were lower than the median changes in price of attendance. In other words, net price (all aid) and net price (grants) increased at a slower rate than did sticker price. As was true for other sectors, the median percentage changes in price of attendance, aid, and net price were higher during the period 2000–01 to 2001–02 than in the previous period, 1999–2000 to 2000–01.

The median price of attendance, total aid, total grants, and net prices for full-time freshmen in 2001–02 differed for various groups of private for-profit, less-than-4-year institutions (table 20).

- Institutions with high enrollment sizes had higher median prices of attendance, net prices (all aid), and net prices (grants) than those with low enrollment. They also had higher median amounts of total aid, but not total grants—likely reflecting higher loan amounts.
- As would be expected, private for-profit, less-than-4-year institutions with a high proportion of full-time freshmen receiving federal grants had higher median aid amounts than institutions with a low proportion. In addition, these institutions had lower median net price (all aid) and net price (grants).
- Institutions with high tuition had higher net prices (all aid) and net prices (grants) than their counterparts with low tuition. They also had higher median amounts of total aid, likely reflecting higher loan amounts.

Table 21 takes inflation into account. The table shows price indices for private for-profit, less-than-4-year institutions, where groups of institutions with index values close to zero increased their prices at about the rate of inflation.

For all private for-profit, less-than-4-year institutions, the median index value for tuition and fees was higher than the median value for price of attendance; institutions raised their tuition and fees by a median of almost 7 percentage points higher than the rate of inflation over 3 years, compared to about 5 percentage points for price of attendance. The median index values for net price (all aid) and net price (grants) were even lower at around 3.

None of the groups of private for-profit, less-than-4-year institutions had median index values for tuition and fees or price of attendance that were negative or close to zero. Rather, index values were positive, indicating that sticker prices had been raised above the rate of inflation. Certain groups had median price of attendance index values that were relatively high

Table 20. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates, by selected institutional characteristics: Private for-profit, less-than-4-year institutions, 2001–02

Institutional characteristics	Price of attendance	Total aid	Total grants	Net price (all aid)	Net price (grants)
Total ¹	\$14,514	\$4,007	\$1,783	\$10,487	\$12,581
Revised Carnegie classification ²					
Associates and Baccalaureate/Associates Colleges	16,685	5,338	1,865	11,356	14,439
Non-degree-granting institutions	13,897	3,686	1,757	10,115	11,987
Bureau of Economic Analysis (BEA) region codes					
New England (CT, ME, MA, NH, RI, VT)	16,488	4,197	1,509	11,751	14,652
Mid East (DE, DC, MD, NJ, NY, PA)	15,455	4,441	1,917	10,955	13,452
Great Lakes (IL, IN, MI, OH, WI)	13,870	3,729	1,720	10,620	12,188
Plains (IA, KS, MN, MO, NE, ND, SD)	14,671	4,730	1,766	10,193	12,991
Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)	13,571	3,750	1,886	9,665	11,512
Southwest (AZ, NM, OK, TX)	13,840	4,066	1,804	9,593	11,634
Rocky Mountains (CO, ID, MT, UT, WY)	14,212	3,646	1,372	9,870	12,891
Far West (AK, CA, HI, NV, OR, WA)	15,207	3,818	1,681	11,431	13,329
Percentage of undergraduates who were first-time, full-time, deg/certif-seeking, 2001–02					
Low	14,750	4,195	1,776	10,831	12,776
Lower middle	15,164	4,339	1,876	10,625	13,028
Higher middle	13,799	3,751	1,801	10,197	11,786
High	14,281	3,748	1,725	10,261	12,496
Enrollment size (12-month headcount), 2001–02					
Low	12,972	3,230	1,810	9,660	11,071
Lower middle	13,975	3,739	1,811	10,163	11,983
Higher middle	15,400	4,674	1,853	10,707	13,203
High	16,589	4,888	1,698	11,481	14,419

See notes at end of table.

Table 20. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates, by selected institutional characteristics: Private for-profit, less-than-4-year institutions, 2001–02—Continued

Institutional characteristics	Price of attendance	Total aid	Total grants	Net price (all aid)	Net price (grants)
Percentage of first-time, full-time, deg/certif-seeking undergraduates who were not White, Fall 2002					
Low	\$14,180	\$3,907	\$1,655	\$10,585	\$12,585
Lower middle	14,504	3,919	1,607	10,373	12,742
Higher middle	15,047	4,313	1,792	10,678	13,161
High	14,123	3,951	2,166	10,319	11,822
Percentage of first-time, full-time, deg/certif-seeking undergraduates who received federal grants, 2001–02					
Low	14,780	2,897	910	11,980	13,858
Lower middle	15,251	4,138	1,628	10,991	13,576
Higher middle	14,511	4,283	2,022	9,999	12,165
High	13,640	4,548	2,640	8,985	10,956
Tuition and fees 2001–02 (in-state)					
Low	11,964	2,805	1,789	8,612	9,728
Lower middle	13,495	3,760	1,956	9,658	11,515
Higher middle	15,387	4,462	1,817	10,960	13,379
High	19,333	5,242	1,552	14,340	17,381

¹ Data are by academic year for institutions that were academic year reporters, program year for program year reporters. See methodology for details.

² All private for-profit, less-than-4-year institutions fall into one of the two categories presented.

NOTE: Categories for tuition, enrollment size, percent minority, percent receiving federal grants, and percentage first-time, full-time, degree-seeking undergraduate were determined within each sector, using centile ranges; low = 0–24th centile; lower middle = 25–49th centile; higher middle = 50–74th centile; and high = 75–99th centile. Selectivity is derived from a combination of the percent of applicants who were admitted, and median test scores (for 4-year institutions only). Revised Carnegie classification uses highest degree offered to redistribute institutions that had not been classified. Selectivity is not shown because it was calculated only for 4-year institutions. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Student Financial Aid, and Enrollment, Collection Years 2002.

(i.e., higher than the index value for all private for-profit, less-than-4-year institutions), including Associates and Baccalaureate/Associates Colleges, institutions in the Plains, Southeast, and Rocky Mountains regions, and institutions with high tuition and fees.

On the other hand, some groups of private for-profit, less-than-4-year institutions had median net price index values that were close to zero or even negative. Groups with the lowest median net price (all aid) index values were institutions in the Mid East and Southwest, institutions in the lower middle category of percentage students who were full-time freshmen, institutions with a high proportion of full-time freshmen receiving federal grants, and institutions

Table 21. Median values for indices of tuition and fees, price of attendance, and net price, by selected characteristics: Private for-profit, less-than-4-year institutions, 1999–2000 to 2001–02

Institutional characteristics	Tuition and fees	Price of attendance	Net price (all aid)	Net price (grants)
Total ¹	7.0	4.6	2.6	3.2
Revised Carnegie classification ²				
Associates and Baccalaureate/Associates Colleges	8.8	5.9	4.6	4.3
Non-degree-granting institutions	6.8	4.1	2.1	2.8
Bureau of Economic Analysis (BEA) region codes				
New England (CT, ME, MA, NH, RI, VT)	4.2	4.3	3.2	4.8
Mid East (DE, DC, MD, NJ, NY, PA)	5.7	3.8	0.4	2.0
Great Lakes (IL, IN, MI, OH, WI)	5.8	4.4	3.2	2.8
Plains (IA, KS, MN, MO, NE, ND, SD)	8.4	5.4	5.8	4.2
Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)	9.7	5.9	3.7	3.9
Southwest (AZ, NM, OK, TX)	7.1	4.4	0.6	2.8
Rocky Mountains (CO, ID, MT, UT, WY)	9.3	8.7	1.9	6.5
Far West (AK, CA, HI, NV, OR, WA)	7.2	3.9	3.4	3.6
Percentage of undergraduates who were first-time, full-time, deg/certif-seeking, 2001–02				
Low	6.3	4.6	3.8	2.9
Lower middle	7.0	4.8	0.4	2.9
Higher middle	9.3	4.4	2.1	4.1
High	6.9	4.4	3.3	3.4
Enrollment size (12-month headcount), 2001–02				
Low	7.6	4.1	1.7	2.6
Lower middle	7.6	4.8	2.4	3.1
Higher middle	6.3	4.6	5.8	3.4
High	7.2	4.9	2.0	3.4
Percentage of first-time, full-time, deg/certif-seeking undergraduates who were not White, Fall 2002				
Low	7.4	4.6	4.3	3.5
Lower middle	6.8	4.5	2.1	2.9
Higher middle	6.9	4.6	2.7	3.6
High	7.4	4.2	1.6	2.5

See notes at end of table.

Table 21. Median values for indices of tuition and fees, price of attendance, and net price, by selected characteristics: Private for-profit, less-than-4-year institutions, 1999–2000 to 2001–02—Continued

Institutional characteristics	Tuition and fees	Price of attendance	Net price (all aid)	Net price (grants)
Percentage of first-time, full-time, deg/certif-seeking undergraduates who received federal grants, 2001–02				
Low	7.2	4.3	5.5	5.8
Lower middle	6.9	4.6	3.3	3.4
Higher middle	6.6	4.9	2.1	3.0
High	7.1	4.2	-0.4	0.7
Tuition and fees 2001–02				
Low	5.2	2.9	1.3	1.1
Lower middle	6.8	4.4	3.2	3.2
Higher middle	7.6	4.2	-1.0	0.8
High	9.2	6.4	6.8	6.5

¹ Data are by academic year for institutions that were academic year reporters, program year for program year reporters. See methodology for details.

² All private for-profit, less-than-4-year institutions fall into one of the two categories presented.

NOTE: Each index was calculated as the rate of change in price between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Consumer Price Index during this period. Therefore, an institution that raises its price over this period at the rate of inflation would have an index value of 0. Categories for tuition, enrollment size, percent minority, percent receiving federal grants, and percentage first-time, full-time, degree-seeking undergraduate were determined within each sector, using centile ranges; low = 0–24th centile; lower middle = 25–49th centile; higher middle = 50–74th centile; and high = 75–99th centile.

Selectivity is derived from a combination of the percent of applicants who were admitted, and median test scores (for 4-year institutions only). Revised Carnegie classification uses highest degree offered to redistribute institutions that had not been classified. Selectivity is not shown because it was calculated only for 4-year institutions. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Student Financial Aid, and Enrollment, Collection Years 2000 to 2002.

in the higher middle category of tuition and fees. Other groups of private for-profit, less-than-4-year institutions had median index value for net price (all aid) and net price (grants) that were higher than their counterparts: for example, institutions with a low proportion of full-time freshmen receiving federal grants (compared to those with higher proportions), and institutions with higher tuition (compared to those with low tuition).

Prices and Aid: Conclusions

This report has examined prices, financial aid, and net prices over the period 1999–2000 to 2001–02. These patterns were examined with colleges and universities as the units of analysis, and reflect the individual circumstances of each institution. It was therefore important to take into account the type of institution, including the level and control, the types of students served, the location, the selectivity, and other characteristics. Given the increases in both prices and financial aid over this period, it also was essential to measure how these variables have changed over time.

The four institutional sectors studied in this report—public 4-year; public 2-year; private not-for-profit, 4-year; and for-profit, less-than-4-year institutions—face different circumstances that impact their patterns of prices, financial aid, and net prices. These differences relate to the roles, missions, governance, and student bodies of these institutions, and reflect such considerations as the proportion of students who attend schools in state, the amount of appropriations provided to public institutions by states, the way tuition levels are set by governing bodies or other agencies, the income distribution or attendance patterns of an institution’s students, and other factors. Therefore, the analysis was conducted separately for each of the four sectors under review.

The analysis examined each of the components of price of attendance (tuition and fees, books and supplies, housing expenses), as well as several types of financial aid (federal grants, state grants, institutional grants, and loans). However, price of attendance and financial aid patterns interact in important ways. In order to capture this interaction, net prices were constructed, which measure the median price institutions charge after taking financial aid received by students into account. Within an institution, not all students are charged the median net price—in fact, half of them are charged more, and half of them are charged less—and for students who do not receive aid, the net price is the same as the sticker price. Nonetheless, median net prices can reflect all factors influencing both prices and financial aid at an institutional level.

To further explore these issues over time and to take into account inflation during this period, indices of changes in three different types of prices—tuition, price of attendance, and net price—were developed for this report. The indices make it clear that trends in various types of prices over time are quite different depending on the sector under consideration.

The analysis found many similarities across sectors in how prices, aid, and net prices changed during the period under review. For example, for public 4-year institutions, private not-for-profit, 4-year institutions, and private for-profit, less-than-4-year institutions, the median price of attendance for full-time freshmen increased between 1999–2000 and 2001–02. The median value of total aid also increased during this time,³² and median aid amounts increased at a faster rate than did median price of attendance.³³ Further, both sticker prices and aid increased at a faster rate than inflation over this period.

Given increases in both sticker prices and financial aid, net price calculations allow a better understanding of the prices postsecondary institutions actually charge to students. The analysis demonstrated that in these sectors, the median value of net price (all aid) and net price (grants) increased between 1999–2000 and 2001–02. However, in most cases, the median percentage changes were lower than the median percentage change in price of attendance.³⁴ In other words, as a result of financial aid, net prices did not rise as rapidly as price of attendance. It is important to keep in mind that the net price variables calculated for this report do not include all types and sources of financial aid to full-time freshmen (for example, work-study funds are not included), and might actually be lower.

The public 2-year sector exhibited slightly different patterns in price, aid, and net price over this period. The median price of attendance for full-time freshmen increased between 1999–2000 and 2001–02, but median aid amounts increased at a faster rate than did median price of attendance. However, the changes in the median value of net prices for public 2-year institutions were not meaningful. Net prices not only increased at a slower rate than did sticker prices, but they also increased at a slower rate than inflation.

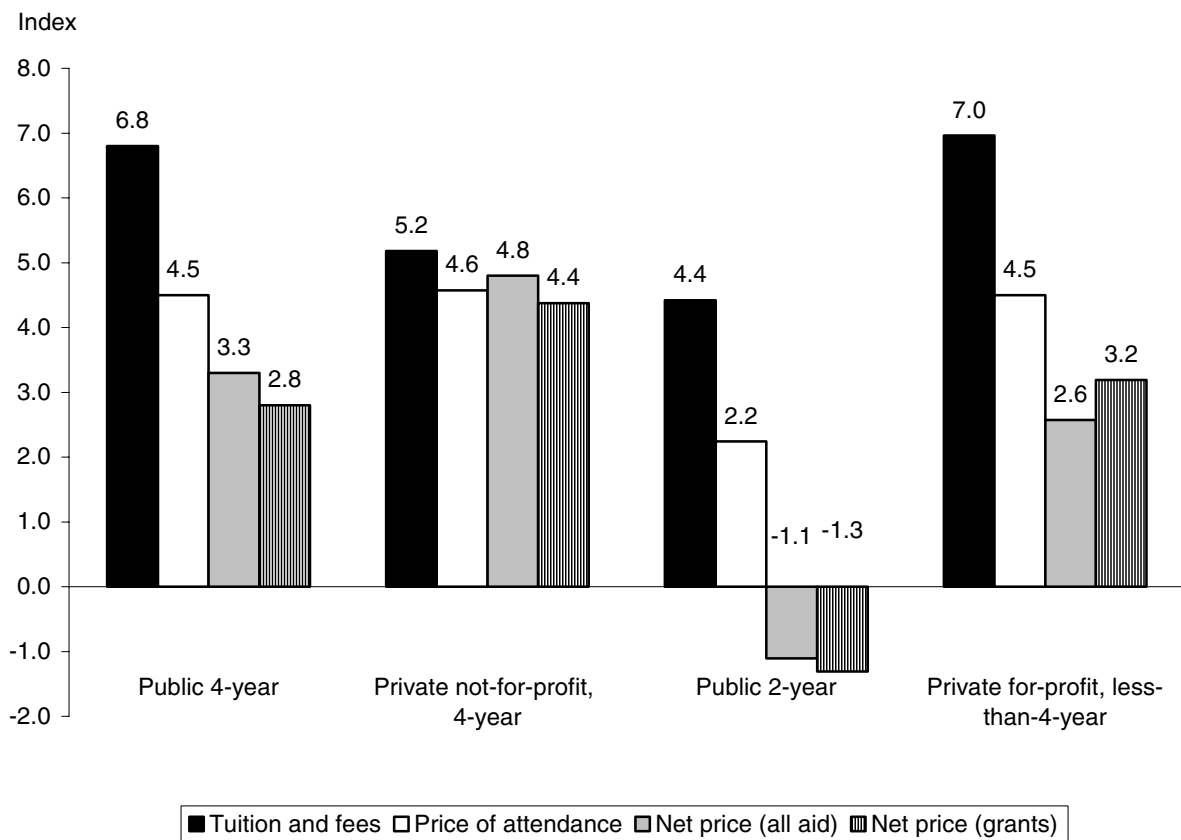
By using the price indices as a mechanism for comparing changes in tuition and fees, price of attendance, and net price over time (as well as comparing these changes to the rate of inflation over the period under review) the analysis confirmed that examining different types of prices and net prices may lead to different conclusions (figure 1). In all institutional sectors, *increases in median tuition and fee levels tended to be greater than increases in median price of attendance*. For example, public 4-year institutions raised their tuition and fees by a median of almost 7 percentage points higher than the rate of inflation over 3 years, but raised their price of attendance by less (a median of 5 percentage points higher than inflation).

³² The difference in the total grant amount between 1999–2000 and 2001–02 was meaningful for private not-for-profit, 4-year institutions, but not meaningful for public 4-year institutions or for private for-profit, less-than-4-year institutions.

³³ An exception is the median percentage change in total aid for private not-for-profit, 4-year institutions.

³⁴ For private not-for-profit, 4-year institutions, the differences were not meaningful.

Figure 1. Median values for indices of tuition and fees, price of attendance, and net price, by sector: 1999–2000 to 2001–02



NOTE: Each index was calculated as the rate of change in price between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Consumer Price Index during this period. Therefore, an institution that raises its price over this period at the rate of inflation would have an index value of 0. Data are for academic year for institutions that were academic year reporters (including all public 4-year, private not-for-profit, 4-year, and public 2-year institutions), and program year for program year reporters. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Years 2000 to 2002.

Furthermore, *increases in price of attendance tended to be greater than increases in net prices*. In most sectors, median net prices increased at a slower rate than did sticker prices over the 3-year period reviewed in this report. For example, for private for-profit, less-than-4-year institutions, the median index value for price of attendance was about 5, compared to a median value of 3 for net price (all aid) and net price (grants). In the public 2-year sector, net prices increased at a slower rate than inflation or even decreased. This is consistent with a previous NCES report (Horn, Wei, and Berker 2002), which found that generally net prices did not

increase as rapidly as total prices in the 1990s, and in fact net prices did not increase at all for some groups of students.³⁵

Finally, there are several common findings across sectors with regard to the variation in prices, aid, and net prices according to certain institutional characteristics. To illustrate this variation, one might focus on net price (all aid), which takes into account loans as well as grants, thereby capturing the net price students face when enrolling—but not taking into account the fact that loans must be repaid. In 2001–02, certain types of institutions had median net price (all aid) amounts that were lower (or higher) than the median value for all institutions in the sector in that year (table 22):

- Across sectors, institutions with high enrollment had higher median net prices (all aid) than the median for all institutions, while institutions with low enrollment had lower median net prices (all aid).
- Institutions with a low proportion of full-time freshmen receiving federal aid had higher median net prices (all aid) than the median for all institutions, while institutions with a high proportion had lower median net prices (all aid).
- Institutions with high tuition had higher median net prices (all aid) than the median for all institutions (with the exception of public 2-year institutions).
- Among 4-year institutions, those that were very selective had higher median net prices (all aid) than the median for all institutions. In addition, Doctoral/Research Universities—Extensive had higher median net prices (all aid) than the median for all institutions.

When taking into account inflation over the 3 years, some of these differences were reflected in the values of net price indices for various groups of institutions, while other differences were not. For example, table 23 shows the median index values for net price (all aid) for groups of institutions with specific characteristics in comparison to the median index value for all institutions in each sector (unlike the previous table, which compared median dollar amounts for net price (all aid)). The following comparisons were found:

- Across sectors, institutions with a low proportion of full-time freshmen receiving federal grants had higher median index values for net prices (all aid) than the median for all institutions in the sector, while institutions with a high proportion of full-time freshmen receiving federal grants had lower median values.

³⁵ Note that the report had a quite different methodology, including using students as the unit of analysis.

Table 22. Comparison between median dollar amounts for net price (all aid) for all institutions in a sector, and groups of institutions by various institutional characteristics: 2001–02

Institutional characteristics	Public 4-year	Private not-for- profit, 4-year	Public 2-year	Private for-profit, less-than- 4-year
Revised Carnegie classification				
Doctoral/Research Universities—Extensive	+	+	†	†
Doctoral/Research Universities—Intensive	0	+	†	†
Masters Colleges and Universities	0	0	†	†
Baccalaureate Colleges—Liberal Arts	‡	+	†	†
Baccalaureate Colleges—General	–	–	†	†
Associates and Baccalaureate/Associates Colleges	–	–	0	+
Specialized institutions	‡	–	‡	†
Non-degree-granting institutions	†	†	†	0
Selectivity				
Very selective	+	+	†	†
Moderately selective	0	–	†	†
Minimally selective	–	–	†	†
Open admission	–	–	†	†
Bureau of Economic Analysis (BEA) region codes				
New England (CT, ME, MA, NH, RI, VT)	0	+	+	+
Mid East (DE, DC, MD, NJ, NY, PA)	0	+	0	0
Great Lakes (IL, IN, MI, OH, WI)	0	0	0	0
Plains (IA, KS, MN, MO, NE, ND, SD)	–	–	–	0
Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)	–	–	0	–
Southwest (AZ, NM, OK, TX)	–	–	–	–
Rocky Mountains (CO, ID, MT, UT, WY)	‡	‡	‡	–
Far West (AK, CA, HI, NV, OR, WA)	+	+	0	+
Percentage of undergraduates who were first-time, full-time, deg/certif-seeking, 2001–02				
Low	0	–	0	0
Lower middle	0	0	0	0
Higher middle	0	+	0	0
High	+	0	–	0
Enrollment size (12-month headcount), 2001–02				
Low	–	–	–	–
Lower middle	0	–	0	0
Higher middle	0	+	0	0
High	+	+	+	+

See notes at end of table.

Table 22. Comparison between median dollar amounts for net price (all aid) for all institutions in a sector, and groups of institutions by various institutional characteristics: 2001–02—Continued

Institutional characteristics	Public 4-year	Private not-for- profit, 4-year	Public 2-year	Private for-profit, less-than- 4-year
Percentage of first-time, full-time, deg/certif-seeking undergraduates who were not White, Fall 2002				
Low	0	–	0	0
Lower middle	0	0	0	0
Higher middle	0	0	0	0
High	0	+	0	0
Percentage of first-time, full-time, deg/certif-seeking undergraduates who received federal grants, 2001–02				
Low	+	+	+	+
Lower middle	0	0	0	+
Higher middle	0	–	–	0
High	–	–	–	–
Tuition and fees 2001–02 (in-state)				
Low	–	–	0	–
Lower middle	–	–	–	–
Higher middle	0	0	0	0
High	+	+	0	+

† Not applicable.

‡ Not enough cases for a reliable estimate (less than 30 institutions in a cell).

+ Signifies that the median amount is higher than the median value for all institutions in a sector.

0 Signifies that the median amount is not different from the median value for all institutions in a sector (i.e., within plus or minus \$500).

– Signifies that the median amount is lower than the median value for all institutions in a sector.

NOTE: Categories for tuition, enrollment size, percent minority, percent receiving federal grants, and percentage first-time, full-time, degree-seeking undergraduate were determined within each sector, using centile ranges; low = 0–24th centile; lower middle = 25–49th centile; higher middle = 50–74th centile; and high = 75–99th centile. Selectivity is derived from a combination of the percent of applicants who were admitted, and median test scores (for 4-year institutions only). Revised Carnegie classification uses highest degree offered to redistribute institutions that had not been classified. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Student Financial Aid, and Enrollment, Collection Years 2000 to 2002.

- Institutions with high tuition had higher median index values for net prices (all aid) than the median for all institutions in that sector. In addition, public 4-year institutions with low tuition had a lower median index value for net prices.
- In both sectors of 4-year institutions, Doctoral/Research Universities—Extensive had higher median index values for net prices (all aid) than the median for all institutions in the sector, while Doctoral/Research—Intensive and Master’s Colleges and Universities had lower median index values.

Table 23. Comparison between median index values for net price (all aid) for all institutions in a sector, and groups of institutions by various institutional characteristics: 2001–02

Institutional characteristics	Public 4-year	Private not-for- profit, 4-year	Public 2-year	Private for-profit, less-than- 4-year
Revised Carnegie classification				
Doctoral/Research Universities—Extensive	+	+	†	†
Doctoral/Research Universities—Intensive	–	–	†	†
Masters Colleges and Universities	–	–	†	†
Baccalaureate Colleges—Liberal Arts	‡	+	†	†
Baccalaureate Colleges—General	0	–	†	†
Associates and Baccalaureate/Associates Colleges	–	+	0	+
Specialized institutions	‡	–	‡	†
Non-degree-granting institutions	†	†	†	–
Selectivity				
Very selective	0	+	†	†
Moderately selective	0	–	†	†
Minimally selective	–	–	†	†
Open admission	–	+	†	†
Bureau of Economic Analysis (BEA) region codes				
New England (CT, ME, MA, NH, RI, VT)	+	–	+	+
Mid East (DE, DC, MD, NJ, NY, PA)	–	0	–	–
Great Lakes (IL, IN, MI, OH, WI)	+	0	–	+
Plains (IA, KS, MN, MO, NE, ND, SD)	0	–	–	+
Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)	+	0	+	+
Southwest (AZ, NM, OK, TX)	0	–	–	–
Rocky Mountains (CO, ID, MT, UT, WY)	‡	‡	‡	–
Far West (AK, CA, HI, NV, OR, WA)	–	+	+	+
Percentage of undergraduates who were first-time, full-time, deg/certif-seeking, 2001–02				
Low	–	0	–	+
Lower middle	–	0	0	–
Higher middle	0	0	–	–
High	+	0	+	+
Enrollment size (12-month headcount), 2001–02				
Low	–	0	+	–
Lower middle	0	0	–	0
Higher middle	0	+	0	+
High	+	–	–	–

See notes at end of table.

Table 23. Comparison between median index values for net price (all aid) for all institutions in a sector, and groups of institutions by various institutional characteristics: 2001–02—Continued

Institutional characteristics	Public 4-year	Private not-for- profit, 4-year	Public 2-year	Private for-profit, less-than- 4-year
Percentage of first-time, full-time, deg/certif-seeking undergraduates who were not White, Fall 2002				
Low	–	–	+	+
Lower middle	+	0	+	–
Higher middle	+	+	0	0
High	–	0	–	–
Percentage of first-time, full-time, deg/certif-seeking undergraduates who received federal grants, 2001–02				
Low	+	+	+	+
Lower middle	+	–	0	+
Higher middle	–	–	–	–
High	–	–	–	–
Tuition and fees 2001–02 (in-state)				
Low	–	+	0	–
Lower middle	–	–	+	+
Higher middle	+	–	–	–
High	+	+	+	+

† Not applicable.

‡ Not enough cases for a reliable estimate (less than 30 institutions in a cell).

+ Signifies that the median index value is higher than the median value for all institutions in a sector.

0 Signifies that the median index value is not different from the median value for all institutions in a sector (i.e., within plus or minus .5 points).

– Signifies that the median index value is lower than the median value for all institutions in a sector.

NOTE: The net price (all aid) index was calculated as the rate of change in net price (all aid) between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Consumer Price Index during this period. Categories for tuition, enrollment size, percent minority, percent receiving federal grants, and percentage first-time, full-time, degree-seeking undergraduate were determined within each sector, using centile ranges; low = 0–24th centile; lower middle = 25–49th centile; higher middle = 50–74th centile; and high = 75–99th centile. Selectivity is derived from a combination of the percent of applicants who were admitted, and median test scores (for 4-year institutions only). Revised Carnegie classification uses highest degree offered to redistribute institutions that had not been classified. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Student Financial Aid, and Enrollment, Collection Years 2000 to 2002.

- For private not-for-profit, 4-year institutions, those that were very selective had higher median index values for net prices (all aid) than the median for all institutions in that sector. However, the same difference was not meaningful for public 4-year institutions.
- Among public 4-year and 2-year institutions, institutions with a high proportion of students who were full-time freshmen had higher median index values for net prices (all aid) than the median for all institutions in the sector, while institutions with a low proportion had lower median index values for net prices (all aid).

- For public 4-year institutions, institutions with high enrollment had higher median index values for net prices (all aid) than the median for all institutions in that sector. However, the opposite was true for public 2-year institutions—institutions with low enrollment had higher median index values for net price (all aid).

Also of note, several groups of institutions had median index values for net price (all aid) that were close to the rate of inflation, or even negative. In other words, for these groups of institutions, net prices increased at a slower rate than inflation over the 3-year period, or even decreased. These institutions included most types of public 2-year institutions; public 4-year institutions with a high percentage of full-time freshmen who received federal grants or who were not White; and private for-profit, less-than 4-year institutions with a high proportion of students receiving federal grants.

Net price (grants) differs from net price (all aid) in that none of the grant aid needs to be repaid. Certain types of institutions had median net price (grants) dollar amounts that were higher than the median value for all institutions in the sector (see table 24), including: Doctoral/Research Universities—Extensive, very selective 4-year institutions, institutions in all sectors with high tuition and fees, institutions in all sectors with a low percentage of first-time freshmen receiving federal grants, and institutions with high enrollment except public 2-year institutions). When taking inflation into account through the net price (grants) index values (table 25), institutions in all sectors with a low percentage of first-time freshmen receiving federal grants had median index values or net price (grants) that were higher than the median value for all institutions in that sector, as did institutions with high tuition and fees in all sectors except public 2-year. Very selective private not-for-profit, 4-year institutions also had median index values for net price (grants) that were higher than the median value for all private not-for-profit, 4-year institutions.

Table 24. Comparison between median dollar amounts for net price (grants) for all institutions in a sector, and groups of institutions by various institutional characteristics: 2001–02

Institutional characteristics	Public 4-year	Private not-for- profit, 4-year	Public 2-year	Private for-profit, less-than- 4-year
Revised Carnegie classification				
Doctoral/Research Universities—Extensive	+	+	†	†
Doctoral/Research Universities—Intensive	0	+	†	†
Masters Colleges and Universities	0	0	†	†
Baccalaureate Colleges—Liberal Arts	‡	+	†	†
Baccalaureate Colleges—General	–	–	†	†
Associates and Baccalaureate/Associates Colleges	–	–	0	+
Specialized institutions	‡	–	‡	†
Non-degree-granting institutions	†	†	†	–
Selectivity				
Very selective	+	+	†	†
Moderately selective	0	0	†	†
Minimally selective	–	–	†	†
Open admission	0	–	†	†
Bureau of Economic Analysis (BEA) region codes				
New England (CT, ME, MA, NH, RI, VT)	+	+	+	+
Mid East (DE, DC, MD, NJ, NY, PA)	+	+	+	+
Great Lakes (IL, IN, MI, OH, WI)	0	0	0	0
Plains (IA, KS, MN, MO, NE, ND, SD)	0	–	0	0
Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)	–	–	0	–
Southwest (AZ, NM, OK, TX)	–	–	–	–
Rocky Mountains (CO, ID, MT, UT, WY)	‡	‡	‡	0
Far West (AK, CA, HI, NV, OR, WA)	+	+	0	+
Percentage of undergraduates who were first-time, full-time, deg/certif-seeking, 2001–02				
Low	–	–	0	0
Lower middle	0	0	0	0
Higher middle	0	+	0	–
High	+	0	0	0
Enrollment size (12-month headcount), 2001–02				
Low	–	–	0	–
Lower middle	0	–	0	–
Higher middle	0	+	0	+
High	+	+	0	+

See notes at end of table.

Table 24. Comparison between median dollar amounts for net price (grants) for all institutions in a sector, and groups of institutions by various institutional characteristics: 2001–02—Continued

Institutional characteristics	Public 4-year	Private not-for- profit, 4-year	Public 2-year	Private for-profit, less-than- 4-year
Percentage of first-time, full-time, deg/certif-seeking undergraduates who were not White, Fall 2002				
Low	0	–	0	0
Lower middle	+	0	0	+
Higher middle	0	0	0	+
High	–	+	0	–
Percentage of first-time, full-time, deg/certif-seeking undergraduates who received federal grants, 2001–02				
Low	+	+	+	+
Lower middle	+	0	0	+
Higher middle	0	–	–	0
High	–	–	–	–
Tuition and fees 2001–02 (in-state)				
Low	–	–	0	–
Lower middle	–	–	–	–
Higher middle	0	+	0	+
High	+	+	+	+

† Not applicable.

‡ Not enough cases for a reliable estimate (less than 30 institutions in a cell).

+ Signifies that the median amount is higher than the median value for all institutions in a sector.

0 Signifies that the median amount is not different from the median value for all institutions in a sector (i.e., within plus or minus \$500).

– Signifies that the median amount is lower than the median value for all institutions in a sector.

NOTE: Categories for tuition, enrollment size, percent minority, percent receiving federal grants, and percentage first-time, full-time, degree-seeking undergraduate were determined within each sector, using centile ranges; low = 0–24th centile; lower middle = 25–49th centile; higher middle = 50–74th centile; and high = 75–99th centile. Selectivity is derived from a combination of the percent of applicants who were admitted, and median test scores (for 4-year institutions only). Revised Carnegie classification uses highest degree offered to redistribute institutions that had not been classified. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Student Financial Aid, and Enrollment, Collection Years 2000 to 2002.

Table 25. Comparison between median index values for net price (grants) for all institutions in a sector, and groups of institutions by various institutional characteristics: 2001–02

Institutional characteristics	Public 4-year	Private not-for- profit, 4-year	Public 2-year	Private for-profit, less-than- 4-year
Revised Carnegie classification				
Doctoral/Research Universities—Extensive	+	+	†	†
Doctoral/Research Universities—Intensive	–	0	†	†
Masters Colleges and Universities	0	–	†	†
Baccalaureate Colleges—Liberal Arts	‡	0	†	†
Baccalaureate Colleges—General	+	0	†	†
Associates and Baccalaureate/Associates Colleges	–	+	–	+
Specialized institutions	‡	0	‡	†
Non-degree-granting institutions	†	†	†	0
Selectivity				
Very selective	–	+	†	†
Moderately selective	0	–	†	†
Minimally selective	–	–	†	†
Open admission	–	+	†	†
Bureau of Economic Analysis (BEA) region codes				
New England (CT, ME, MA, NH, RI, VT)	–	0	–	+
Mid East (DE, DC, MD, NJ, NY, PA)	–	–	–	–
Great Lakes (IL, IN, MI, OH, WI)	+	+	–	0
Plains (IA, KS, MN, MO, NE, ND, SD)	+	+	0	+
Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)	+	–	–	+
Southwest (AZ, NM, OK, TX)	–	0	–	0
Rocky Mountains (CO, ID, MT, UT, WY)	‡	‡	‡	+
Far West (AK, CA, HI, NV, OR, WA)	–	0	0	0
Percentage of undergraduates who were first-time, full-time, deg/certif-seeking, 2001–02				
Low	–	0	–	0
Lower middle	–	0	–	0
Higher middle	0	0	–	+
High	+	0	0	0
Enrollment size (12-month headcount), 2001–02				
Low	0	0	–	–
Lower middle	0	0	–	0
Higher middle	0	+	–	0
High	0	0	–	0

See notes at end of table.

Table 25. Comparison between median index values for net price (grants) for all institutions in a sector, and groups of institutions by various institutional characteristics: 2001–02—Continued

Institutional characteristics	Public 4-year	Private not-for- profit, 4-year	Public 2-year	Private for-profit, less-than- 4-year
Percentage of first-time, full-time, deg/certif-seeking undergraduates who were not White, Fall 2002				
Low	0	–	–	0
Lower middle	+	+	–	0
Higher middle	0	+	–	0
High	–	0	–	–
Percentage of first-time, full-time, deg/certif-seeking undergraduates who received federal grants, 2001–02				
Low	+	+	+	+
Lower middle	+	–	–	0
Higher middle	–	–	–	0
High	–	–	–	–
Tuition and fees 2001–02 (in-state)				
Low	–	+	–	–
Lower middle	–	–	0	0
Higher middle	0	–	–	–
High	+	+	–	+

† Not applicable.

‡ Not enough cases for a reliable estimate (less than 30 institutions in a cell).

+ Signifies that the median index value is higher than the median value for all institutions in a sector.

0 Signifies that the median index value is not different from the median value for all institutions in a sector (i.e., within plus or minus .5 points).

– Signifies that the median index value is lower than the median value for all institutions in a sector.

NOTE: The net price (grants) index was calculated as the rate of change in net price (grants) between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Consumer Price Index during this period. Categories for tuition, enrollment size, percent minority, percent receiving federal grants, and percentage first-time, full-time, degree-seeking undergraduate were determined within each sector, using centile ranges; low = 0–24th centile; lower middle = 25–49th centile; higher middle = 50–74th centile; and high = 75–99th centile. Selectivity is derived from a combination of the percent of applicants who were admitted, and median test scores (for 4-year institutions only). Revised Carnegie classification uses highest degree offered to redistribute institutions that had not been classified. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Student Financial Aid, and Enrollment, Collection Years 2000 to 2002.

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Appendix A—Glossary

This glossary describes the variables used in this report. The items were taken from the NCES Integrated Postsecondary Education Data System (IPEDS). The variables were imported, manipulated, and relabeled using SPSS statistical software. The glossary is in alphabetical order by the variable label in SPSS, shown in bold, capital letters and displayed along the right-hand column. Underscores at the end of variable names signify the variable is duplicated for each relevant year or time period of data; variable names without an underscore (such as institutional characteristics) are for one year/period (mentioned in the variable description) or are derived from other variables.

The variables listed in the index below are approximately in the order they appear in the report. The glossary is in alphabetical order by variable name.

Glossary Index

INITIAL VARIABLES

First-time, full-time, degree/certificate-seeking
 undergraduatesS__AP1N
 OPE eligibility indicator OPEFLAG
 State code FIPS
 Degree granting statusDEGGRANT
 Sector of institution..... SECTOR
 Revised sector SECTREV
 Highest degree offered.....HDEGOFFR
 Carnegie classification code.....CARNEGIE
 Revised Carnegie classification code..... CARNEGR2
 Selectivity (4-year institutions) SELECTV2
 Region code OBEREG
 Urbanicity LOCALE
 Percentage of undergraduates who
 were full-time freshmen S__AP1P
 Percentage of full-time freshmen who
 were non-white.....PCTMIN_1
 Percentage of full-time freshmen who
 received federal grants FED__P
 12-month enrollment..... FYTOTALL

PRICE OF ATTENDANCE VARIABLES

Tuition and fees composite AVGTF__
 In-district tuition and fees CHG1AP__
 In-state tuition and fees CHG2AP__
 Out-of-state tuition and fees..... CHG3AP__
 Percent of students in-district..... INDIS__
 Percent of students in-state INSTA__
 Percent of students out-of-state..... OUTSTA__
 Books and supplies CHG4AP__
 Housing expenses compositeAVGHOU__

On-campus room and board and
 other expenses for relevant institutionsONAP__Z
 On-campus room and board and
 other expenses ONAP__
 Off-campus (not with family) room and
 board and other expenses for
 relevant institutions OFFAP__Z
 Off-campus (not with family) room and
 board and other expenses OFFAP__
 Off-campus (with family),
 other expenses, for relevant institutions .PARAP__Z
 Off-campus (with family)
 other expenses PAR_AP__
 Percent of students living on campusPCTON__
 Percent of students living
 off campus (not with family)..... PCTOFF__
 Percent of students
 living off campus (with family)PCTPAR__
 Price of attendance composite AVGCOA__
 Dollar change in price of attendance,
 1999–2000 to 2000–01 DC9900
 Dollar change in price of attendance,
 2000–01 to 2001–02 DC0001
 Dollar change in price of attendance,
 1999–2000 to 2001–02 DC9901
 Percentage change in price of attendance,
 1999–2000 to 2000–01 C9900PC
 Percentage change in price of attendance,
 2000–01 to 2001–02 C0001PC
 Percentage change in price of attendance,
 1999–2000 to 2001–02 C9901PC

Percentage of undergraduates who were full-time freshmen, centile ranges FTFTPCQR
 Percentage of full-time freshmen who were non-white, centile ranges PCTMINQR
 Percentage of full-time freshmen who received federal grants, centile ranges FED01QR
 12-month enrollment, centile ranges FYENRQR
 Tuition and fees, centile ranges TUIT01QR

FINANCIAL AID VARIABLES

Percentage of full-time freshmen receiving federal grants FED__P
 Percentage of full-time freshmen receiving state grants STA__P
 Percentage of full-time freshmen receiving institutional grants INST__P
 Percentage of full-time freshmen receiving loans LOAN__P
 Average amount of federal grants received FED__AR
 Average amount of state grants received STA__AR
 Average amount of institutional grants received INST__AR
 Average amount of loans received LOAN__AR
 Total aid composite TOTAL__R
 Total grants composite TOTGR__R
 Dollar change in total aid, 1999–2000 to 2000–01 ALL1DCR
 Dollar change in total aid, 2000–01 to 2001–02 ALL2DCR
 Dollar change in total aid, 1999–2000 to 2001–02 ALL3DCR
 Percentage change in total aid, 1999–2000 to 2000–01 ALL1PCR
 Percentage change in total aid, 2000–01 to 2001–02 ALL2PCR
 Percentage change in total aid, 1999–2000 to 2001–02 ALL3PCR
 Dollar change in total grants, 1999–2000 to 2000–01 GRAN1DCR
 Dollar change in total grants, 2000–01 to 2001–02 GRAN2DCR
 Dollar change in total grants, 1999–2000 to 2001–02 GRAN3DCR
 Percentage change in total grants, 1999–2000 to 2000–01 GRAN1PCR

Percentage change in total grants, 2000–01 to 2001–02 GRAN2PCR
 Percentage change in total grants, 1999–2000 to 2001–02 GRAN3PCR

NET PRICE VARIABLES

Net price (all aid) NETTA__R
 Net price (grants) NETGR__R
 Dollar change in net price (all aid), 1999–2000 to 2000–01 NTTA1DCR
 Dollar change in net price (all aid), 2000–01 to 2001–02 NTTA2DCR
 Dollar change in net price (all aid), 1999–2000 to 2001–02 NTTA3DCR
 Percentage change in net price (all aid), 1999–2000 to 2000–01 NTTA1PCR
 Percentage change in net price (all aid), 2000–01 to 2001–02 NTTA2PCR
 Percentage change in net price (all aid), 1999–2000 to 2001–02 NTTA3PCR
 Dollar change in net price (grants), 1999–2000 to 2000–01 NTGR1DCR
 Dollar change in net price (grants), 2000–01 to 2001–02 NTGR2DCR
 Dollar change in net price (grants), 1999–2000 to 2001–02 NTGR3DCR
 Percentage change in net price (grants), 1999–2000 to 2000–01 NTGR1PCR
 Percentage change in net price (grants), 2000–01 to 2001–02 NTGR2PCR
 Percentage change in net price (grants), 1999–2000 to 2001–02 NTGR3PCR

PRICE INDEX VARIABLES

Index of change in tuition and fees TFINDX
 Index of change in price of attendance COAINDX
 Index of change in net price (all aid) NTTAINDX
 Index of change in net price (grants) NTGRINDX

APPENDICES

Index of change in tuition and fees, using HECA TFINDX2
 Index of change in price of attendance, using HECA COAINDX2
 Index of change in net price (all aid), using HECA NTTAINDX2
 Index of change in net price (grants), using HECA NTGRINDX2

IPEDS VARIABLES

Dollar change in total aid, 1999–2000 to 2000–01 **ALL1DCR**

Dollar change in the total aid composite variable, in current dollars, between 1999–2000 and 2000–01. This is a derived variable; see methodology for details.

Percentage change in total aid, 1999–2000 to 2000–01 **ALL1PCR**

Percentage change in the total aid composite variable between 1999–2000 and 2000–01. This is a derived variable; see methodology for details.

Dollar change in total aid, 2000–01 to 2001–02 **ALL2DCR**

Dollar change in the total aid composite variable, in current dollars, between 2000–01 and 2001–02. This is a derived variable; see methodology for details.

Percentage change in total aid, 2000–01 to 2001–02 **ALL2PCR**

Percentage change in the total aid composite variable between 2000–01 and 2001–02. This is a derived variable; see methodology for details.

Dollar change in total aid, 1999–2000 to 2001–02 **ALL3DCR**

Dollar change in the total aid composite variable, in current dollars, between 2000–01 and 2001–02. This is a derived variable; see methodology for details.

Percentage change in total aid, 1999–2000 to 2001–02 **ALL3PCR**

Percentage change in the total aid composite variable between 2000–01 and 2001–02. This is a derived variable; see methodology for details.

Price of attendance composite **AVGCOA__**

Average price of attendance for first-time, full-time undergraduate students for the full academic year, in current dollars. The variable is a weighted composite of three components: average tuition and fees; average books and supplies; and average housing expenses. This is a derived variable; see methodology for details.

Housing expenses composite **AVGHOU__**

Average housing expenses for first-time, full-time undergraduate students for the full academic year, in current dollars. The variable is a composite calculated by weighting room and board and other expenses by the proportion of students, for each residency option (on-campus, off-campus not with family, and off-campus with family). The variable is one component of average price of attendance. This is a derived variable; see methodology for details.

Tuition and fees composite **AVGTF__**

Average tuition and fees for first-time, full-time undergraduate students for the full academic year, in current dollars. For public institutions, the variable is a composite calculated by weighting in-district, in-state, and out-of-state tuition and fees by the proportion of students in each option; for private institutions, it is the reported tuition and fee amount. The variable is one component of average price of attendance. This is a derived variable; see methodology for details.

IPEDS VARIABLES

Percentage change in price of attendance, 1999–00 to 2000–01***C9900PC***

Percentage change in the price of attendance composite variable between 1999–2000 and 2000–01. This is a derived variable; see methodology for details.

Percentage change in price of attendance, 2000–01 to 2001–02***C0001PC***

Percentage change in the price of attendance composite variable between 2000–01 and 2001–02. This is a derived variable; see methodology for details.

Percentage change in price of attendance, 1999–2000 to 2001–02***C9901PC***

Percentage change in the price of attendance composite variable between 1999–2000 and 2001–02. This is a derived variable; see methodology for details.

Carnegie classification code***CARNEGIE***

Indicates the 2000 Carnegie Classification code of the reporting institution. The 2000 Carnegie Classification includes all colleges and universities in the United States that are degree-granting and accredited by an agency recognized by the U.S. Secretary of Education. The 2000 edition classifies institutions based on their degree-granting activities from 1995–96 through 1997–98. This variable was revised to create CARNEGR2, which better groups the institutions in the study universe.

- *Doctoral/Research Universities—Extensive*: These institutions typically offer a wide range of baccalaureate programs, and they are committed to graduate education through the doctorate. They award 50 or more doctoral degrees per year across at least 15 disciplines
- *Doctoral/Research Universities—Intensive*: These institutions typically offer a wide range of baccalaureate programs, and they are committed to graduate education through the doctorate. They award at least ten doctoral degrees/1 per year across three or more disciplines, 2 or at least 20 doctoral degrees per year overall.
- *Master’s Colleges and Universities I*: These institutions typically offer a wide range of baccalaureate programs, and they are committed to graduate education through the master’s degree. They award 40 or more master’s degrees per year across three or more disciplines.
- *Master’s (Comprehensive) Colleges and Universities II*: These institutions typically offer a wide range of baccalaureate programs, and they are committed to graduate education through the master’s degree. They award 20 or more master’s degrees per year.
- *Baccalaureate Colleges—Liberal Arts*: These institutions are primarily undergraduate colleges with major emphasis on baccalaureate programs. They award at least half of their baccalaureate degrees in liberal arts fields.
- *Baccalaureate Colleges—General*: These institutions are primarily undergraduate colleges with major emphasis on baccalaureate programs. They award less than half of their baccalaureate degrees in liberal arts fields.
- *Baccalaureate/Associate’s Colleges*: These institutions are undergraduate colleges where the majority of conferrals are at the subbaccalaureate level (associate’s degrees and certificates), but bachelor’s degrees account for at least ten percent of undergraduate awards.

IPEDS VARIABLES

Carnegie classification code—continued

CARNEGIE

- *Associate's Colleges:* These institutions offer associate's degree and certificate programs but, with few exceptions, award no baccalaureate degrees.
- *Specialized Institutions:* These institutions offer degrees ranging from the bachelor's to the doctorate, and typically award a majority of degrees in a single field. Examples of specialized institutions include theological seminaries, medical schools, schools of engineering, law schools, and teachers colleges. This group of institutions also includes tribal colleges.

Revised Carnegie classification code

CARNEGR2

Revised Carnegie Classification code for the reporting institution, derived from CARNEGIE. Categories were lumped together, and highest degree offered was used to redistribute institutions that had not been classified originally.

Doctoral/Research Universities—Extensive
 Doctoral/Research Universities—Intensive
 Master's Colleges and Universities
 Baccalaureate Colleges—Liberal Arts
 Baccalaureate Colleges—General
 Associate's and Baccalaureate/Associate's Colleges
 Specialized Institutions
 Non-Degree-Granting Institutions

In-district tuition and fees

CHGIAP__

For private institutions, the published tuition and fees for full-time, first-time undergraduate students for the full academic year, in current dollars. For public institutions, the published in-district tuition and fees for full-time, first-time undergraduate students. (Tuition and fees, books and supplies, room and board, and other expenses are those amounts used by your financial aid office for determining eligibility for student financial assistance.) In-district charges are those charged by institutions to those students residing in the locality in which they attend school. This variable was weighted by the percentage of full-time freshmen who were in-district in the calculation of average tuition and fees for each public institution. This variable combines the charges of academic year and program year reporting institutions into one (private for-profit, less-than-4-year institutions only). This is a derived variable; see methodology for details.

In-state tuition and fees

CHG2AP__

For private institutions, the published tuition and fees for full-time, first-time undergraduate students for the full academic year, in current dollars. For public institutions, the published in-state tuition and fees for full-time, first-time undergraduate students. (Tuition and fees, books and supplies, room and board, and other expenses are those amounts used by your financial aid office for determining eligibility for student financial assistance.) In-state charges are those charged by institutions to those students who meet the state's or institution's residency requirements. This variable was weighted by the percentage of full-time freshmen who were in-state in the calculation of average tuition and fees for each public institution. This variable combines the charges of academic year and program year reporting institutions into one (private for-profit, less-than-4-year institutions only). This is a derived variable; see methodology for details.

Out-of-state tuition and fees***CHG3AP__***

For private institutions, the published tuition and fees for full-time, first-time undergraduate students for the full academic year, in current dollars. Published out-of-state tuition and fees for full-time, first-time undergraduate students. (Tuition and fees, books and supplies, room and board, and other expenses are those amounts used by your financial aid office for determining eligibility for student financial assistance.) Out-of-state charges are those charged by institutions to those students who do not meet the state's or institution's residency requirements. This variable was weighted by the percentage of full-time freshmen who were out-of-state in the calculation of average tuition and fees for each public institution. This variable combines the charges of academic year and program year reporting institutions into one (private for-profit, less-than-4-year institutions only). This is a derived variable; see methodology for details.

Books and supplies***CHG4AP__***

The average cost of books and supplies for full-time, first-time undergraduates for an entire academic year (or program), in current dollars. (Tuition and fees, books and supplies, room and board, and other expenses are those amounts used by your financial aid office for determining eligibility for student financial assistance.) This variable combines the charges of academic year and program year reporting institutions into one (private for-profit, less-than-4-year institutions only).

Index of change in price of attendance, using HECA***COAIND2***

Index of change in average price of attendance for each institution in the study universe. Calculated as the rate of change in price of attendance between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Higher Education Cost Adjustment (HECA) during this period. This is a derived variable; see methodology for details.

Index of change in price of attendance***COAINDX***

Index of change in average price of attendance for each institution in the study universe. Calculated as the rate of change in price of attendance between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Consumer Price Index during this period. This is a derived variable; see methodology for details.

Dollar change in price of attendance, 1999–00 to 2000–01***DC9900***

Dollar change in the price of attendance composite variable between 1999–2000 and 2000–01, in current dollars. This is a derived variable; see methodology for details.

Dollar change in price of attendance, 2000–01 to 2001–02***DC0001***

Dollar change in the price of attendance composite variable between 2000–01 and 2001–02, in current dollars. This is a derived variable; see methodology for details.

Dollar change in price of attendance, 1999–00 to 2001–02***DC9901***

Dollar change in the price of attendance composite variable between 1999–2000 and 2001–02, in current dollars. This is a derived variable; see methodology for details.

IPEDS VARIABLES

Degree granting status***DEGRANT***

An indicator of whether an institution granted degrees in 2002–03. Degree-granting institutions offer an associate's, bachelor's, master's, doctor's or a first-professional degree. Non-degree-granting offers certificates or other formal awards. This variable was used to eliminate institutions that were not degree granting from the study universe.

Percentage of full-time freshmen who received federal grants, centile ranges***FED01QR***

Percentage of first-time, full-time, degree/certificate-seeking undergraduates receiving federal grants at the reporting institution in 2001–02, in centile ranges. Categories were determined within each sector, using centile ranges.

Low = 0–24th centile

Lower middle = 25–49th centile

Higher middle = 50–74th centile

High = 75–99th centile.

Percentage of full-time freshmen receiving federal grants***FED_P***

Percentage of first-time, full-time, degree/certificate-seeking undergraduates receiving federal grants at the reporting institution. Federal grants include those provided by federal agencies such as the U.S. Department of Education, such Title IV Pell Grants and Supplemental Educational Opportunity Grants (SEOGs). Also includes need-based and merit-based educational assistance funds and training vouchers provided from other federal agencies and/or federally-sponsored educational benefits programs, including the Veteran's Administration, Department of Labor, and other federal agencies.

Average amount of federal grants received***FED_AR***

Average amount of federal grants received by first-time, full-time, degree/certificate-seeking undergraduates for the reporting institution. Values are bounded to a maximum value using the sum of federal legislated maximums for Pell Grants and SEOG for each year. See methodology for details.

State code***FIPS***

Federal Information Processing Standards (FIPS) code issued by the federal government to identify U.S. states and territories in 2002–03. This variable was used in the process of selecting the study universe.

Percentage of undergraduates who were full-time freshmen, centile ranges***FTFTPCQR***

Percentage of undergraduates who were first-time, full-time, degree/certificate-seeking at the reporting institution in 2001–02, in centile ranges. Categories were determined within each sector, using centile ranges.

Low = 0–24th centile

Lower middle = 25–49th centile

Higher middle = 50–74th centile

High = 75–99th centile.

12-month enrollment, centile ranges***FYENRQR***

Number of all students at the reporting institution in 2001–02, in centile ranges. Categories were determined within each sector, using centile ranges.

Low = 0–24th centile
 Lower middle = 25–49th centile
 Higher middle = 50–74th centile
 High = 75–99th centile.

12-month enrollment***FYTOTALL***

Unduplicated headcount of all students at the reporting institution during the 12-month period of 2001–02.

Dollar change in total grants, 1999–2000 to 2000–01***GRANIDCR***

Dollar change in the total grants composite variable, in current dollars, between 1999–2000 and 2000–01. This is a derived variable; see methodology for details.

Percentage change in total grants, 1999–2000 to 2000–01***GRANIPCR***

Percentage change in the total grants composite variable between 1999–2000 and 2000–01. This is a derived variable; see methodology for details.

Dollar change in total grants, 2000–01 to 2001–02***GRAN2DCR***

Dollar change in the total grants composite variable, in current dollars, between 2000–01 and 2001–02. This is a derived variable; see methodology for details.

Percentage change in total grants, 2000–01 to 2001–02***GRAN2PCR***

Percentage change in the total grants composite variable between 2000–01 and 2001–02. This is a derived variable; see methodology for details.

Dollar change in total grants, 1999–2000 to 2001–02***GRAN3DCR***

Dollar change in the total grants composite variable, in current dollars, between 1999–2000 and 2001–02. This is a derived variable; see methodology for details.

Percentage change in total grants, 1999–2000 to 2001–02***GRAN3PCR***

Percentage change in the total grants composite variable between 1999–2000 and 2001–02. This is a derived variable; see methodology for details.

Highest degree offered***HDEGOFFR***

The highest degree offered at the reporting institution, 2002–03.

Non-Degree-Granting (Certificates only) = 0
 First-professional degrees only = 1
 Doctoral = 10
 Doctoral and First-professional = 11

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Highest degree offered—continued***HDEGOFFR***

Master's = 20
 Master's and First-professional = 21
 Bachelor's = 30
 Bachelor's and First-professional = 31
 Associate's = 40
 Associate's and First-professional = 41

Percent of students in-district***INDIS__***

For public institutions, the percentage of full-time, first-time, degree/certificate-seeking undergraduates that are in-district (students whose residency was unknown were excluded from the calculation of the percentage). This variable was used as a weight in the calculation of average tuition and fees for each public institution. This is a derived variable; see methodology for details.

Percent of students in-state***INSTA__***

For public institutions, the percentage of full-time, first-time, degree/certificate-seeking undergraduates that are in-state (students whose residency was unknown were excluded from the calculation of the percentage). This variable was used as a weight in the calculation of average tuition and fees for each public institution. This is a derived variable; see methodology for details.

Average amount of institutional grants received***INST_AR***

Average amount of institutional grants received by first-time, full-time, degree/certificate-seeking undergraduates for the reporting institution. Values are bounded to a maximum value using the 85th centile of the distribution of average amounts received in 1999–2000 (increased by 5 percent for each consecutive year), using estimates from NPSAS:2000 by sector. See methodology for details.

Percentage of full-time freshmen receiving institutional grants***INST_P***

Percentage of first-time, full-time, degree/certificate-seeking undergraduates receiving institutional grants at the reporting institution. Institutional grants include scholarships and fellowships granted and funded by the institution and/or individual departments within the institution that are limited to students attending the institution. Also included are tuition and fee waivers granted by the institution (for which the institution is not reimbursed from another source). Also includes scholarships targeted to certain individuals (e.g., based on state of residence or major) for which the institution designates the recipient; athletic scholarships; and the like. Does not include College Work Study programs.

Average amount of loans received***LOAN_AR***

Average amount of loans received by first-time, full-time, degree/certificate-seeking undergraduates for the reporting institution. Values are bounded to a maximum value using federal legislated loan limits for first-year students in the Stafford loan program (\$6,625), although this variable may include other loans. See methodology for details.

Percentage of full-time freshmen receiving loans***LOAN_P***

Percentage of first-time, full-time, degree/certificate-seeking undergraduates receiving loans at the reporting institution. Loans include any monies that must be repaid to the lending institution for which the student is the designated borrower. Includes all Title IV subsidized and unsubsidized loans and all institutionally- and privately-sponsored loans. Does not include PLUS and other loans made directly to parents.

Degree of urbanization of the location of the institution***LOCALE***

The degree of urbanization of the reporting institution's location in 2002–03, based on U.S. Census Bureau designations.

Large city = 1

A central city of a CMSA or MSA having a population greater than or equal to 250,000.

Mid-size city = 2

A central city of a CMSA or MSA, having a population less than 250,000.

Urban fringe of a large city = 3

Any incorporated place, CDP, or non-place territory within a CMSA or MSA of a large city and defined as urban by the Census Bureau.

Urban fringe of a mid-size city = 4

Any incorporated place, CDP, or non-place territory within a CMSA or MSA of a mid-size city and defined as urban by the Census Bureau.

Large town = 5

Any incorporated place or CDP with a population greater than or equal to 25,000 and located outside a CMSA or MSA.

Small town = 6

Any incorporated place or CDP with a population less than 25,000 and greater than or equal to 2,500 and located outside a CMSA or MSA.

Rural = 7

Any incorporated place, CDP, or non-place territory designated as rural by the Census Bureau.

Not Assigned = 9

Net price (all aid)***NETTA__R***

Net price calculated as the difference between price of attendance and total aid for each institution. The variable was calculated using financial aid composites based on data that were bounded to maximum values. This is a derived variable; see methodology for details.

Net price (grants)***NETGR__R***

Net price calculated as the difference between price of attendance and total grants for each institution. The variable was calculated using financial aid composites based on data that were bounded to maximum values. This is a derived variable; see methodology for details.

Dollar change in net price (grants), 1999–2000 to 2000–01***NTGR1DCR***

Dollar change in net price (grants), in current dollars, between 1999–2000 and 2000–01. This is a derived variable; see methodology for details.

Percentage change in net price (grants), 1999–2000 to 2000–01***NTGR1PCR***

Percentage change in net price (grants) between 1999–2000 and 2000–01. This is a derived variable; see methodology for details.

Dollar change in net price (grants), 2000–01 to 2001–02***NTGR2DCR***

Dollar change in net price (grants), in current dollars, between 2000–01 and 2001–02. This is a derived variable; see methodology for details.

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Percentage change in net price (grants), 2000–01 to 2001–02 **NTGR2PCR**

Percentage change in net price (grants) between 2000–01 and 2001–02. This is a derived variable; see methodology for details.

Dollar change in net price (grants), 1999–2000 to 2001–02 **NTGR3DCR**

Dollar change in net price (grants), in current dollars, between 1999–2000 and 2001–02. This is a derived variable; see methodology for details.

Percentage change in net price (grants), 1999–2000 to 2001–02 **NTGR3PCR**

Percentage change in net price (grants) between 1999–2000 and 2001–02. This is a derived variable; see methodology for details.

Index of change in net price (grants), using HECA **NTGRIND2**

Index of change in net price (grants) for each institution in the study universe. Calculated as the rate of change in net price (grants) between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Higher Education Cost Adjustment (HECA) during this period. This is a derived variable; see methodology for details.

Index of change in net price (grants) **NTGRINDX**

Index of change in net price (grants) for each institution in the study universe. Calculated as the rate of change in net price (grants) between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Consumer Price Index during this period. This is a derived variable; see methodology for details.

Dollar change in net price (all aid), 1999–2000 to 2000–01 **NTTAIDCR**

Dollar change in net price (all aid), in current dollars, between 1999–2000 and 2000–01. This is a derived variable; see methodology for details.

Percentage change in net price (all aid), 1999–2000 to 2000–01 **NTTA1PCR**

Percentage change in net price (all aid) between 1999–2000 and 2000–01. This is a derived variable; see methodology for details.

Dollar change in net price (all aid), 2000–01 to 2001–02 **NTTA2DCR**

Dollar change in net price (all aid), in current dollars, between 2000–01 and 2001–02. This is a derived variable; see methodology for details.

Percentage change in net price (all aid), 2000–01 to 2001–02 **NTTA2PCR**

Percentage change in net price (all aid) between 2000–01 and 2001–02. This is a derived variable; see methodology for details.

Dollar change in net price (all aid), 1999–2000 to 2001–02 **NTTA3DCR**

Dollar change in net price (all aid), in current dollars, between 1999–2000 and 2001–02. This is a derived variable; see methodology for details.

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Percentage change in net price (all aid), 1999–2000 to 2001–02***NTTA3PCR***

Percentage change in net price (all aid) between 1999–2000 and 2001–02. This is a derived variable; see methodology for details.

Index of change in net price (all aid), using HECA***NTTAIND2***

Index of change in net price (all aid) for each institution in the study universe. Calculated as the rate of change in net price (all aid) between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Higher Education Cost Adjustment (HECA) during this period. This is a derived variable; see methodology for details.

Index of change in net price (all aid)***NTTAINDX***

Index of change in net price (all aid) for each institution in the study universe. Calculated as the rate of change in net price (all aid) between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Consumer Price Index during this period. This is a derived variable; see methodology for details.

Region code***OBEREG***

Geographic region code in 2002–03, used to characterize institutions in the study universe.

New England (CT ME MA NH RI VT)
 Mid East (DE DC MD NJ NY PA)
 Great Lakes (IL IN MI OH WI)
 Plains (IA KS MN MO NE ND SD)
 Southeast (AL AR FL GA KY LA MS NC SC TN VA WV)
 Southwest (AZ NM OK TX)
 Rocky Mountains (CO ID MT UT WY)
 Far West (AK CA HI NV OR WA)
 Outlying Areas (AS FM GU MH MP PR PW VI)

On-campus room and board and other expenses***ONAP__***

The average cost of on-campus room and board and other expenses for full-time, first-time undergraduates for an entire academic year (or program) in current dollars. This variable combines the charges of academic year and program year reporting institutions into one (private for-profit, less-than-4-year institutions only). This variable was weighted by the percentage of full-time freshmen who lived on-campus, in the calculation of average housing expenses for each institution. The variable is zero if this residency option is not applicable for the reporting institution. This is a derived variable; see methodology for details.

On-campus room and board and other expenses, for relevant institutions***ONAP_Z***

The average cost of on-campus room and board and other expenses for full-time, first-time undergraduates for an entire academic year (or program), in current dollars. This variable combines the charges of academic year and program year reporting institutions into one (private for-profit, less-than-4-year institutions only). This variable is similar to ONAP__, but the variable is blank if this residency option is not applicable for the reporting institution and is not weighted by the percentage of full-time freshmen using this housing option. See methodology for details.

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Off-campus (not with family) room and board and other expenses***OFFAP__***

The average cost of off-campus (not with family) room and board and other expenses for full-time, first-time undergraduates for an entire academic year (or program) in current dollars. This variable combines the charges of academic year and program year reporting institutions into one (private for-profit, less-than-4-year institutions only). This variable was weighted by the percentage of full-time freshmen who lived off-campus, in the calculation of average housing expenses for each institution. The variable is zero if this residency option is not applicable for the reporting institution. This is a derived variable; see methodology for details.

Off-campus (not with family) room and board and other expenses, for relevant institutions***OFFAP_Z***

The average cost of off-campus (not with family) room and board and other expenses for full-time, first-time undergraduates for an entire academic year (or program), in current dollars. This variable combines the charges of academic year and program year reporting institutions into one (private for-profit, less-than-4-year institutions only). This variable is similar to OFFAP__, but the variable is blank if this residency option is not applicable for the reporting institution and is not weighted by the percentage of full-time freshmen using this housing option. See methodology for details.

OPE eligibility indicator***OPEFLAG***

Indicates Office of Postsecondary Education (OPE) eligibility status of reporting institution, i.e., whether institutions have participation agreements with the U.S. Education Department for Title IV student aid programs, in 2002–03.

- Participates in Title IV federal financial aid programs
- Branch campus of a main campus that participates in Title IV
- Deferment only—limited participation
- New participants (became eligible during the fall collection period)
- Not currently participating in Title IV, has an OPE ID number
- Not currently participating in Title IV, does not have an OPE ID number

Institutions in the first two categories are considered to be eligible by NCES.

Percent of students out-of-state***OUTSTA__***

For public institutions, the percentage of full-time, first-time, degree/certificate-seeking undergraduates that are out-of-state (students whose residency was unknown were excluded from the calculation of the percentage). This variable was used as a weight in the calculation of average tuition and fees for each public institution. This is a derived variable; see methodology for details.

Off-campus living with family, other expenses***PARAP__***

The average cost of other expenses for full-time, first-time undergraduates living off-campus (with family) for an entire academic year (or program), in current dollars. This variable combines the charges of academic year and program year reporting institutions into one (private for-profit, less-than-4-year institutions only). This variable was weighted by the percentage of full-time freshmen who lived off-campus with family, in the calculation of average housing expenses for each institution. The variable is zero if this residency option is not applicable for the reporting institution. This is a derived variable; see methodology for details.

Off-campus living with family, other expenses, for relevant institutions **PARAP__Z**

The average cost of other expenses for full-time, first-time undergraduates living off-campus (with family) for an entire academic year (or program), in current dollars. This variable combines the charges of academic year and program year reporting institutions into one (private for-profit, less-than-4-year institutions only). This variable is similar to PARAP__, but the variable is blank if this residency option is not applicable for the reporting institution and is not weighted by the percentage of full-time freshmen using this housing option. See methodology for details.

Percentage of full-time freshmen who were non-white **PCTMIN_1**

Percentage of first-time, full-time undergraduates who were non-white at the reporting institution in fall 2002. Undergraduates whose race/ethnicity was unknown were excluded from the calculation.

Percentage of full-time freshmen who were non-white, centile ranges **PCTMINQR**

Percentage of first-time, full-time undergraduates who were non-white at the reporting institution in fall 2002, in centile ranges. Categories were determined within each sector, using centile ranges. This is a derived variable; see methodology for details.

Low = 0–24th centile

Lower middle = 25–49th centile

Higher middle = 50–74th centile

High = 75–99th centile.

Percent of students living on campus **PCTON__**

The percentage of full-time, first-time undergraduates living on campus. The percentages are estimates derived from NPSAS:2000, and vary depending on sector and by the pattern residency options reported by each institution. This variable was used as a weight in the calculation of average housing expenses for each institution. This is a derived variable; see methodology for details.

Percent of students living off campus (not with family) **PCTOFF__**

The percentage of full-time, first-time undergraduates living off campus (not with family). The percentages are estimates derived from NPSAS:2000, and vary depending on sector and by the pattern residency options reported by each institution. This variable was used as a weight in the calculation of average housing expenses for each institution. This is a derived variable; see methodology for details.

Percent of students living off campus (with family) **PCTPAR__**

The percentage of full-time, first-time undergraduates living off-campus (with family). The percentages are estimates derived from NPSAS:2000, and vary depending on sector and by the pattern residency options reported by each institution. This variable was used as a weight in the calculation of average housing expenses for each institution. This is a derived variable; see methodology for details.

First-time, full-time, degree/certificate-seeking undergraduates **S__APIN**

Number of first-time, full-time, degree/certificate-seeking undergraduates at the reporting institution. This variable combines the charges of academic year and program year reporting institutions into one (private for-profit, less-than-4-year institutions only).

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Percentage of undergraduates who were full-time freshmen***S_APIP***

Percentage of all undergraduates who are first-time, full-time, degree/certificate-seeking undergraduates at the reporting institution. This variable combines the charges of academic year and program year reporting institutions into one (private for-profit, less-than-4-year institutions only).

Sector of institution***SECTOR***

Indicates the sector—level and control—of the reporting institution in 2002–03. In this report, the following codes were used:

- Public 4-year
- Private not-for-profit, 4-year
- Public 2-year
- Private for-profit, 2-year
- Private for-profit, less-than-2-year

Revised sector***SECTREV***

Recode of the sector of the reporting institution, with private for-profit, 2-year and less-than-2-year institutions combined.

- Public 4-year
- Private not-for-profit, 4-year
- Public 2-year
- Private for-profit, less-than-4-year

Selectivity (4-year institutions)***SELECTV2***

Indicates the level of selectivity of the 4-year institutions in the study universe. The variable was derived from a combination of variables from the Institutional Characteristics component. Open admission 4-year institutions were formed into a separate category. For non-open admission institutions, an index was created from two variables: 1) the centile distribution of the percentage of students who were admitted to each institution (of those who applied); and 2) the centile distribution of the midpoint between the 25th and 75th percentile SAT/ACT combined scores reported by each institution (see Appendix E).

- Very selective
- Moderately selective
- Minimally selective
- Open admission

Average amount of state grants received***STA_AR***

Average amount of state grants received by first-time, full-time, degree/certificate-seeking undergraduates for the reporting institution. Values are bounded to a maximum value using the 85th centile of the distribution of average amounts received in 1999–2000 (increased by 5 percent for each consecutive year), using estimates from NPSAS:2000 by sector. See methodology for details.

Percentage of full-time freshmen receiving state grants***STA__P***

Percentage of first-time, full-time, degree/certificate-seeking undergraduates receiving state grants at the reporting institution. State grants include monies provided by the state or locality such as the state portion of Leveraging Educational Assistance Partnerships (LEAP); merit scholarships provided by the state; and tuition and fee waivers for which the institution was reimbursed by a state agency. Local grants include any local government or privately-sponsored grants, scholarships or gift-aid awarded directly to the student (and valid at any institution the student may choose to attend).

Index of change in tuition and fees, using HECA***TFINDX2***

Index of change in average tuition and fees for each institution in the study universe. Calculated as the rate of change in tuition and fees between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Higher Education Cost Adjustment (HECA) during this period. This is a derived variable; see methodology for details.

Index of change in tuition and fees***TFINDX***

Index of change in average tuition and fees for each institution in the study universe. Calculated as the rate of change in tuition and fees between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Consumer Price Index during this period. This is a derived variable; see methodology for details.

Total aid composite***TOTAL__R***

Average amount of total financial aid received by first-time, full-time, degree/certificate-seeking undergraduates at each institution. The variable is a composite of four components: federal grants, state grants, institutional grants, and loans. For each of these components, the percentage of full-time freshmen receiving aid was multiplied by the average amount received. Average amounts of aid were bounded to maximum values. This is a derived variable; see methodology for details.

Total grants composite***TOTGR__R***

Average amount of grants received by first-time, full-time, degree/certificate-seeking undergraduates at each institution. The variable is a composite of three components: federal grants, state grants, and institutional grants. For each of these components, the percentage of full-time freshmen receiving aid was multiplied by the average amount received. Average amounts of aid were bounded to maximum values. This is a derived variable; see methodology for details.

Tuition and fees, centile ranges***TUIT01QR***

Tuition and fees in 2001–02, in centile ranges. For public institutions, in-state tuition and fee charges were used. Categories were determined within each sector, using centile ranges. This is a derived variable; see methodology for details.

Low = 0–24th centile
 Lower middle = 25–49th centile
 Higher middle = 50–74th centile
 High = 75–99th centile.

Appendix B—Technical Notes and Methodology

Integrated Postsecondary Education Data System

The Integrated Postsecondary Education Data System is a comprehensive database that encompasses all identified institutions whose primary purpose is to provide postsecondary education. IPEDS consists of institutional-level data that can be used to describe trends in higher education at the institutional, state, and/or national levels.

Postsecondary education is defined within IPEDS as the provision of formal instructional programs whose curriculum is designed primarily for students who have completed the requirements for a high school diploma or its equivalent. This includes academic, vocational, and continuing professional education programs, and excludes avocational and adult basic education programs.

IPEDS includes information about baccalaureate or higher degree-granting institutions, 2-year award institutions, and less-than-2-year institutions (i.e., institutions whose awards usually result in terminal occupational awards or are creditable toward a formal 2-year or higher award). Each of these three categories is further disaggregated by control (public; private not-for-profit; and private for-profit), resulting in nine institutional categories or sectors.

Specialized, but compatible, reporting formats have been developed for these nine sectors of postsecondary education providers. In general, the components/reports developed for postsecondary institutions granting baccalaureate and higher degrees are the most extensive; forms for the 2-year and less-than-2-year awards granting sectors request less data. This design feature accommodates the varied operating characteristics, program offerings, and reporting capabilities that differentiate postsecondary institutional sectors while yielding comparable statistics for all sectors.

Data are collected from over 10,000 postsecondary institutions. IPEDS has been designed to produce national-, state-, and institutional-level data for most postsecondary institutions, although the universe of interest includes about 6,700 Title IV participating institutions. Prior to 1993, only national-level estimates from a sample of institutions were available for the private, less-than-2-year institutions.

Until recently, data in IPEDS were organized into several areas, which are now broken into various components collected in one or more of the three data collection periods.¹ For this report, the most important components include the following:

- *Institutional Characteristics (IC)*, including institutional names and addresses; congressional districts; counties; telephone numbers; tuition, books and supplies, room and board, and other expenses; control or affiliation; calendar systems; levels of degrees and awards offered; types of programs; and accreditation for all postsecondary education institutions in the United States and outlying territories.
- *Student Financial Aid (SFA)*, including the number and percentage of first-time, full-time, degree/certificate-seeking undergraduates, the percentage of first-time, full-time degree/certificate-seeking undergraduates receiving federal grants, state grants, institutional grants, and loan aid, as well as the average amounts of aid received.
- *Enrollment (EF)*, including information about full- and part-time enrollment by racial/ethnic category and sex for undergraduates, first-professional, and graduate students. Age distributions by level of enrollment and sex were collected in odd-numbered years, and first-time degree-seeking student enrollments by residence status were collected in even-numbered years. This component also includes 12-month unduplicated headcount data for the prior academic year.

Other components of IPEDS provide data on fall staff, finances, and degrees and certificates awarded. Detailed information about IPEDS is available at the National Center for Education Statistics website (<http://nces.ed.gov/ipeds/>), including variable descriptions and data collection screens.

For this report, the universe of institutions was drawn from the 2002–03 Institutional Characteristics component, part of the 2002 collection cycle. The IC component collects tuition and price information for the current year as well as two prior years.² This report used tuition and other price data from the most recent IC component in which they were available; in other words, data for 2001–02 and 2000–01 were drawn from the 2002–03 IC component (2002 collection cycle), while data for 1999–2000 were drawn from the 2001–02 IC collection (2001 collection cycle). At the time the report was written, the data for price of attendance in the IC component of the 2002 collection cycle had been edited, but response flags for each variable were not available (imputations had not been calculated for missing data). The variable response rates provided in table B-1 for those variables were calculated as those cases in which data were reported. The missing values for these variables were treated the same as missing values in other variables during the imputation process used for this report (see section below on Missing Data).

¹ In 1999–2000, the IPEDS collection framework was converted to a web-based system, and changes were made to the fields collected.

² Prior year data may be corrected by the reporting institution.

Table B-1. Response rates for IPEDS collections, survey components, and selected variables for institutions in the study universe, by sector: 2000 to 2002

	Public 4-year			Private not-for-profit, 4-year			Public 2-year			Private for-profit, less-than-4-year		
	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
Survey response rates												
Fall Collection	99.5	100.0	100.0	99.2	99.8	100.0	98.9	99.9	100.0	89.8	97.1	100.0
Institutional Characteristics	100.0	99.6	100.0	99.6	99.7	100.0	99.8	99.8	100.0	93.1	97.1	100.0
Spring Collection	87.1	100.0	100.0	68.7	99.5	100.0	97.7	99.8	100.0	78.7	97.4	100.0
Student Financial Aid	99.1	98.6	100.0	96.5	96.6	100.0	98.3	98.4	100.0	85.5	92.1	100.0
Enrollment	87.3	65.3	95.7	69.7	57.4	93.1	98.8	62.5	96.6	83.0	35.3	98.3
Variable response rates												
Academic Year reporters, SFA survey												
Number of first-time, full-time, degree/certificate-seeking undergraduates	98.9	98.6	100.0	96.5	96.8	100.0	98.3	98.3	100.0	21.2	22.3	25.7
Number that are in-district	76.2	34.7	100.0	†	†	†	90.3	63.1	65.4	†	†	†
Number that are in-state	98.2	93.2	100.0	†	†	†	97.6	92.6	96.6	†	†	†
Number that are out-of-state	98.2	92.8	100.0	†	†	†	97.6	90.6	94.2	†	†	†
Number unknown	98.9	98.6	100.0	†	†	†	98.3	98.3	100.0	†	†	†
Percentage of all undergraduates	98.9	98.6	100.0	96.5	96.8	100.0	98.3	98.3	100.0	21.1	22.3	25.7
Program Year reporters, SFA survey												
Number of first-time, full-time, degree/certificate-seeking undergraduates	†	†	†	†	†	†	†	†	†	64.9	70.2	74.3
Percentage of all undergraduates	†	†	†	†	†	†	†	†	†	64.8	70.2	74.3
Federal grants												
Percentage of students receiving	99.1	98.4	99.8	96.5	96.5	99.7	98.4	97.9	99.6	85.4	92.0	99.4
Average amount received	98.9	98.4	99.9	96.4	96.4	99.1	98.4	97.8	99.1	85.2	91.3	97.2
State grants												
Percentage of students receiving	98.9	98.0	99.6	96.2	95.8	99.1	98.3	96.4	99.4	83.8	78.3	84.6
Average amount received	98.6	97.9	99.1	95.2	95.5	94.4	96.5	94.5	95.8	79.0	68.5	33.5
Institutional grants												
Percentage of students receiving	98.9	98.2	99.8	96.5	96.2	99.4	97.4	90.3	92.6	86.5	80.6	84.8
Average amount received	98.6	97.7	98.6	95.8	95.8	97.6	93.8	86.2	81.4	75.5	69.7	32.9

See notes at end of table.

Table B-1. Response rates for IPEDS collections, survey components, and selected variables for institutions in the study universe, by sector: 2000 to 2002—Continued

	Public 4-year			Private not-for-profit, 4-year			Public 2-year			Private for-profit, less-than-4-year		
	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
Loans												
Percentage of students receiving	98.9	98.4	99.6	96.5	95.5	98.8	97.0	91.6	94.0	84.6	86.8	95.1
Average amount received	98.4	98.4	98.9	96.3	95.4	97.0	94.6	86.8	76.6	83.9	85.3	80.6
Academic Year reporters, IC survey												
Tuition and fees (private)	†	†	†	99.1	97.7	97.8	†	†	†	22.9	23.0	23.4
In-district tuition and fees (public)	99.3	98.2	98.0	†	†	†	98.8	98.0	97.5	†	†	†
In-state tuition and fees (public)	99.3	99.1	99.3	†	†	†	98.4	99.1	98.8	†	†	†
Out-of-state tuition and fees (public)	98.2	99.1	99.3	†	†	†	96.5	99.1	98.8	†	†	†
Books and supplies	85.9	98.7	99.1	92.5	97.1	97.1	21.1	98.7	98.4	2.2	22.1	22.5
On campus, room and board	85.2	85.3	85.9	93.2	91.7	91.9	20.3	21.3	21.5	2.0	3.5	3.6
On campus, other expenses	84.4	84.8	85.3	92.0	91.3	91.5	20.2	21.2	21.3	1.9	3.5	3.6
Off campus, room and board	95.0	95.3	97.0	90.1	90.5	91.1	91.1	92.3	93.4	16.6	18.4	18.8
Off campus, other expenses	95.7	95.5	97.1	89.5	90.4	91.1	90.2	91.7	91.7	15.6	17.7	18.2
Living with parents, other expenses	95.5	95.5	97.1	90.9	91.3	91.7	91.1	92.9	92.2	16.4	18.3	18.7
Program Year reporters, IC survey												
Tuition and fees	†	†	†	†	†	†	†	†	†	71.8	70.3	71.6
Books and supplies	†	†	†	†	†	†	†	†	†	67.8	67.6	68.7
On campus, room and board	†	†	†	†	†	†	†	†	†	0.8	5.2	5.5
On campus, other expenses	†	†	†	†	†	†	†	†	†	0.7	5.2	5.4
Off campus, room and board	†	†	†	†	†	†	†	†	†	44.0	45.2	47.6
Off campus, other expenses	†	†	†	†	†	†	†	†	†	43.0	44.7	47.0
Living with parents, other expenses	†	†	†	†	†	†	†	†	†	44.0	45.3	47.5

† Not applicable.

¹ Enrollment data from the 2000 and 2001 collection cycles were not used for the analysis in this report. Response rates are presented only for consistency.

NOTE: Component and collection rates were calculated from the response status variables in the Institutional Characteristics survey, and equal the cases coded as “respondents” as a percentage of all institutions. Variable rates generally were calculated from item imputation flags, where respondents are cases that reported data (coded R). Years denote collection cycles, not the years of data. Price data were derived from the 2001 and 2002 collection cycles; financial aid data were derived from the 2000, 2001, and 2002 collection cycles. For the 2002 collection cycle, imputation flags were not available for price of attendance data; therefore, respondents were calculated as those cases in which data were reported. Private for-profit, less-than-4-year institutions reported on either an academic year or a program year basis for price of attendance and financial aid; therefore, the total response rates would be the sum of those reported under each component.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Student Financial Aid, and Enrollment, Collection Years 2000 to 2002.

Enrollment data were drawn from the 2002–03 Enrollment component (2002 collection cycle), including fall 2002 headcount data as well as 12-month unduplicated headcount data for the prior academic year, 2001–02.

The Student Financial Aid component (SFA) was first administered by NCES in the 1999–2000 data collection cycle to collect institutional information on price of attendance, student financial aid, and other characteristics. The original component was planned as a pilot study to test institutions’ ability both to provide data on these issues and to submit data via the Web. In 2000–01, the various components were incorporated into the redesigned IPEDS survey, and are now administered through a Web-based data collection process. Each of the SFA components collect financial aid data for the prior year; therefore, this report used data collected in the 2002, 2001, and 2000 collection cycles to obtain aid information for 2001–02, 2000–01, and 1999–2000.

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1999–2000 National Postsecondary Student Aid Study

The 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000) is a comprehensive study of the United States and Puerto Rico conducted by the U.S. Department of Education’s National Center for Education Statistics (NCES) to determine how students and their families pay for postsecondary education.³ It also describes demographic and other characteristics of students enrolled. The institutional sampling frame for NPSAS:2000 was constructed from the 1998–99 Integrated Postsecondary Education Data System (IPEDS) Institutional Characteristics (IC) file and, because NPSAS:2000 also served as the base-year survey for a longitudinal study of baccalaureate recipients, the 1996–97 IPEDS Completions file. Eligible institutions were partitioned into 22 institutional strata based on institutional control, highest level of offering, and percentage of baccalaureate degrees awarded in education. Approximately 1,100 institutions were initially selected for NPSAS:2000, and all but 10 of these institutions were found to be eligible. Sampling frames for selecting students consisted of enrollment lists or data files provided by the institutions for those students enrolled during the NPSAS:2000 year. The study is based on a nationally representative sample of all students in postsecondary education institutions, including undergraduate, graduate, and first-professional students. For

³ For more information on the NPSAS survey, consult U.S. Department of Education (2001). Additional information is also available at the NPSAS website: <http://nces.ed.gov/npsas>.

NPSAS, information was obtained from more than 900 postsecondary institutions on approximately 50,000 undergraduate, 9,000 graduate, and 3,000 first-professional students. They represented about 16.5 million undergraduates, 2.4 million graduate students, and 300,000 first professional students who were enrolled at some time between July 1, 1999 and June 30, 2000.

Accuracy of Estimates

The IPEDS statistics in this report are derived from a population. In using a census of an entire population there is not a sampling error, but there is still the possibility of nonsampling error.

Nonsampling errors can be attributed to a number of sources: inability to obtain complete information about all institutions (i.e., some institutions refused to participate, or participated but answered only certain items); ambiguous definitions; differences in interpreting questions; inability or unwillingness to give correct information; mistakes in recording or coding data; and other errors of collecting, processing, and imputing missing data. Response rates for the universe of institutions in this study, by institutional type, are described in table B-1.

To compensate for nonresponse, adjustments are often made, referred to as imputations. Imputations are usually made separately within various groups of institutions that have similar characteristics. If a particular institution responded in previous and later years, those values may also be used to substitute for a missing response.⁴

In addition to nonsampling errors, sampling errors may have occurred in the use of estimates derived from a sample. Estimates generated from the 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000) were used to weight housing expenses when calculating price of attendance for this report. The standard error is a measure of the variability due to sampling when estimating a parameter; very small standard errors signify that a high level of precision would be expected from a particular sample.

Most of the estimates in this report were produced using the SPSS 11.5 software package. SPSS makes it possible for users to specify and generate a variety of univariate and multivariate analyses, including linear regression analysis.

⁴ See IPEDS ED TABS (Knapp et al. 2003) produced by NCES for illustrations of imputation methodologies. For example, <http://nces.ed.gov/pubs2004/2004155.pdf>.

Data Cleaning and Other Issues

Selection Criteria

Institutions in the study universe were drawn from all Title IV participating institutions located in the 50 states and the District of Columbia that are listed in the 2002–03 IPEDS universe (Puerto Rico was excluded from the analysis). Four institutional sectors were included in the analysis: public 4-year; public 2-year; private not-for-profit, 4-year; and for-profit, less-than-4-year institutions. For the first three sectors, only degree-granting institutions were included in order to form relatively homogeneous comparison groups (few institutions in these sectors are non-degree-granting); this was not true for private for-profit, less-than-4-year institutions.⁵ Institutions that enroll less than 50 first-time, full-time, degree/certificate-seeking undergraduates (less than 25 at for-profit institutions) were excluded from the analysis.⁶

It is also important to note that for relevant portions of the Student Financial Aid and Institutional Characteristics components, institutions file separate forms depending on whether they report academic year (AY) or program year (PY) data. Academic year reporters provide information for a fall cohort of full-time freshmen, while program year reporters provide data for a 12-month cohort of students. This report includes data for only those public 4-year, public 2-year, and private not-for-profit, 4-year institutions that report by academic year, which was true for most of the institutions in these sectors.⁷ For private for-profit, less-than-4-year institutions, those that report by academic year and program year were combined in order to avoid the problem of low cell sizes.⁸ Assignment as an AY or PY reporter was based on institutions' responses to the Student Financial Aid component.

Parent/Child Institutions

The IPEDS components allow “parent” institutions to report data for campuses or branch institutions, or the “child” institutions may report information on their own. In many cases,

⁵ In the first three sectors, only one public 4-year institution, 20 private not-for-profit, 4-year institutions, and 74 public 2-year institutions in the original universe were non-degree-granting. Both types of institutions were included for private for-profit, less-than-4-year institutions, as degree-granting institutions in this category also tend to offer non-degree coursework and the two groups are not dissimilar.

⁶ Also, new institutions (primarily private for-profit) that did not exist in the early years of the analysis were excluded from the universe (about 100 institutions).

⁷ Program year reporters for SFA in these sectors included 46 public 2-year institutions and 7 private not-for-profit, 4-year institutions.

⁸ About 74 percent of the private for-profit, less-than-4-year institutions included in the study universe were program year reporters for the SFA component; the balance of 26 percent were academic year reporters. A similar breakdown was true for price of attendance data in the IC component. Institutions in this category are all Title IV participating institutions; the program lengths for most of the program year reporters in the category are typically slightly less than a year, or slightly more than a year. The reported tuition and aid figures for these institutions would therefore not differ greatly from academic year data.

schools reported data separately for campuses or branch institutions for some IPEDS components but not others, or reported data separately in certain years but in the aggregate in other years. To deal with these inconsistencies across components and/or years, either data for the child institution(s) was folded up to the level of the parent (and the child(ren) were deleted), or parent data was reallocated to the children. When discrepancies could not be resolved, institutions were eliminated from the analysis.

Missing Data and Outliers

In order to ensure that institutions had data for critical variables in all three years of analysis, procedures were necessary to address missing data. In some cases, recoding for implied zeros (for example, where a specific cell was missing data but should have had a zero) was used. In other cases, missing data were imputed using a combination of methods, including averages of values for prior and subsequent years, carrying forward/backward (adjusting by the rate of sector change for financial variables), and sector averages.

After the imputation of missing data, the distributions of all of the variables were examined to identify any errors caused by imputations or estimations. Errors in imputation were corrected whenever possible. In most cases, data reported by the institutions were not altered, even in the case of outliers. An exception occurred in the case of average aid amounts (discussed below).

The Student Financial Aid (SFA) data showed substantial variation in the financial aid variables over time for certain institutions, especially as reflected in the dollar change and percentage change variables. This may have occurred because financial aid is impacted by a number of factors year to year, including participation in specific aid programs, college endowment trends, changes in legislated maximums, and so on. The use of medians in this report mitigates the variability issue by focusing on the aid and price patterns of institutions at the middle of the distribution in each category.

In addition, in some cases the average amounts of financial aid reported by institutions in the SFA collection were substantially higher than what might be reasonably expected. These outliers affected the calculations of total aid amounts and net prices. To address this issue, the average amounts received were bounded to a maximum value (using federal legislated maximums as well as estimates from NPSAS as a guideline⁹). Composite aid and net price variables were calculated using the bounded data.

⁹ The bounds were as follows: for federal grants, the sum of Pell Grant and SEOG maximums for each year; for loans, the loan limit for first year independent students (\$6,625), under the assumption that federal loans make up the overwhelming majority of that category; for state and institutional grants, the 85th centile of the distribution of average amounts received (increased by 5

Variable Definition

After the panels of institutions were created and imputations were made, composites and other derived variables were created. The variables computed for this report will be available for the institutions in the study universe through the IPEDS Peer Analysis System (PAS), in the computed variables section.

Price of attendance was defined as the sum of several components, each derived from the Institutional Characteristics component: 1) tuition and fees for first-time, full-time undergraduates; 2) the estimated cost of room and board, or the living expenses for students who do not contract with the school for room and board, for this group of full-time freshmen; and 3) the estimated cost of books, supplies, and miscellaneous expenses. (Note that the estimates for books and supplies and housing expenses are those used by financial aid offices for determining financial need.)

For public institutions, the tuition and fees were weighted by the percentage of first-time, full-time, degree/certificate-seeking undergraduates attending from in-district, in-state, and out-of-state. These percentages were taken from the student counts in the SFA component.¹⁰ These percentages were multiplied by the reported tuition and fee amounts in each category to create composite variables for in-district, in-state, and out-of-state tuition and fees that were added together to create a composite tuition and fees variable (AVGTF__). Tuition and fees for private institutions were not weighted because the in-state versus out-of-state distinction does not exist in private institutions.

The total cost of room and board or living expenses was weighted for all institutions. The composite variable was calculated by multiplying the estimated cost for each type of housing (on-campus, off-campus not with family, and off-campus with family) by the percentage of full-time freshmen housed in each option and adding the three.¹¹ The percentage of students housed in each option was based on estimates from NPSAS:2000—the percentage of first-time, full-time undergraduates attending Title IV institutions in the 50 states was derived for each housing combination, by sector.¹² Composite variables on the expenses of on-campus, off-campus not

percent for each consecutive year), using estimates for students attending Title IV institutions in the 50 states and DC from NPSAS:2000, by sector.

¹⁰ Students whose residency was unknown were excluded from the calculations. The final variables (INDIS__, INSTA__, and OUTSTA__) are therefore percentages of those who residency was known, and the variables add to 100 for each institution.

¹¹ The estimated costs for each type of housing (ONAP__, OFFAP__, and PARAP__) include zeros where a type is not applicable. Each of these costs was multiplied by the percentage of first-time freshmen housed in that option (PCTON__, PCTOFF__, and PCTPAR__), which also included zeros when not applicable. See next note for additional explanation.

¹² The percentage of students living on campus, off-campus (not with family), and off-campus (with family) in each sector in 1999–2000 were computed from NPSAS. These percentages were then applied using each institution's reported pattern of housing expenses—on campus only, off campus (not with family) only, off campus (with family) only, on campus and off campus (not with family), off campus (not with family) and off campus (with family), on campus and off campus (with family),

with family, and off-campus with family were then summed to form a composite housing variable (AVGHOU__). (An alternative housing methodology is presented in appendix C for comparison purposes.) The distribution of the weighting factors across sectors is described in table B-2.¹³

Table B-2. Median values of weighting factors for calculation of total price of attendance, by sector: 2001–02

Sector	Median housing percentages			Median residency percentages		
	On campus	Off campus	parents	In-district	In-state	Out-of-state
Public 4-year	61	16	23	0	88	11
Private not-for-profit, 4-year	78	10	12	†	†	†
Public 2-year	0	40	60	12	72	3
Private for-profit, less-than-4-year	0	61	39	†	†	†

† Not applicable.

NOTE: Figures reflect percentages after data cleaning and recoding process. Percentages reflect data for all institutions, including those that did not have a particular option.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Years 2002; U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000).

After tuition and fees and housing expenses were weighted and composite variables were constructed, the components were combined into a price of attendance for each institution in the universe by adding composite tuition and fees, composite housing expenses, and reported books and supplies (AVGCOA__).

Financial aid variables (federal grants, state grants, institutional grants, and loans) were derived from the Student Financial Aid component. The reported percentages of first-time, full-time, degree/certificate-seeking students receiving aid, and the average amounts received, were calculated across all institutions, including those that did not report a specific category of aid (i.e., the data include zeros). Average amounts were bounded as described above. Composite

and all three. When an institution did not report having a particular housing option (usually in the case of on-campus housing), then the NPSAS estimates were redistributed to the remaining options and a zero was inserted for the non-applicable option. For example, if a public 4-year institution reported expenses for off-campus (not with family) and off-campus (with family)—but not on campus—and the NPSAS estimates for public 4-year institutions were 20 percent on campus, 40 percent off-campus (not with family), and 40 percent off-campus (with family), then the last two estimates would be reallocated to equal 100 percent in the appropriate proportions (50 percent and 50 percent, in this case), and the variable for on campus percentage would be set to zero. The reallocated percentages for each institution (PCTON__, PCTOFF__, and PCTPAR__) would then be multiplied by the estimated costs (ONAP__, OFFAP__, and PARAP__) for each institution.

¹³ Note that in several of the tables, composite housing variables are presented along with the individual sub-categories. In these cases, the categories—on-campus (ONAP__Z), off-campus not with family (OFFAP__Z), and off-campus with family (PARAP__Z)—reflect data for institutions for which the category is relevant.

variables reflect the percentage receiving aid multiplied by the average amount; in addition, variables were created for total aid and total grants.¹⁴

Net prices for this report were calculated at an institutional level, using the composite price of attendance and aid variables described above. Two net prices were calculated: price of attendance less grants (federal, state, and institutional), and price of attendance less grants and loans. These are labeled as net price (grants) and net price (all aid), respectively.¹⁵ Dollar change and percentage change variables were computed for price, aid, and net price variables (see below).

“Price change indices” were also calculated for each institution in the universe. Indices were calculated for each sector, and for four types of prices: tuition and fees; price of attendance; and the two definitions of net prices. In each case, the index is calculated as the rate of change in price between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Consumer Price Index during this period.¹⁶ This formulation measures the difference between the rate of inflation and the rate of change in college prices:

$$\left\{ [(price_3 - price_1) / price_1] - [(CPI_3 - CPI_1) / CPI_1] \right\} = index\ value$$

This means that an institution that raises its price over this period at the rate of inflation would have an index value of 0. Index values were calculated at the institution level, and then median values were calculated for each group of institutions.

Several institutional characteristics variables were recoded into categories based upon their centile distributions within each sector. In this, the focus was placed on variation within sectors, not between sectors, given that previous reports have concluded that the sectors are quite different in their funding and pricing mechanisms. The categories are defined as follows: low includes the 0–24th centiles; lower middle includes the 25–49th centiles; higher middle includes the 50–74th centiles; and high includes the 75–99th centiles. The median values of the centile ranges for each variable differ by sector (table B-3). Where these variables are used as row variables, the relevant year of data from variable the variable was calculated is noted in the table.

¹⁴ Composite aid variables for each type of aid (FED__R, STA__R, INST__R, and LOAN__R) were calculated as the percentage of first-time freshmen receiving aid times the average amount received (for example, FED__P multiplied by FED__AR), for each institution. The four aid composites were then summed to create total aid (TOTAL__R) and total grants (TOTGR__R).

¹⁵ Net prices were calculated at the institutional level using composite variables. Thus, NETTA__R is AVGCOA__ minus TOTAL__R, and NTGR__R is AVGCOA__R minus TOTGR__R.

¹⁶ The rate of inflation for the study period (1999–2000 to 2001–02) was about 5.4 percent according to the CPI. The value of the term $[(CPI_3 - CPI_1) / CPI_1]$ used in the equation is .0538. The composite tuition and fees, price of attendance, and net price variables described above were used in the index calculations.

Table B-3. Median values of centile range categories, by sector: 2001–02

Institutional characteristics	Public 4-year	Private not-for-profit, 4-year	Public 2-year	Private for-profit, less-than- 4-year
Percentage of undergraduates who were first-time, full-time, degree/certificate-seeking, 2001–02				
Low	11	13	5	36
Lower middle	16	20	9	71
Higher middle	19	25	14	94
High	24	29	26	100
Percentage of first-time, full-time, degree/certificate-seeking undergraduates who were not White, Fall 2002				
Low	7	7	6	7
Lower middle	13	13	18	26
Higher middle	26	23	35	54
High	66	51	64	88
Percentage of first-time, full-time, degree/certificate-seeking undergraduates who received federal grants in 2001–02				
Low	16	13	20	34
Lower middle	25	25	33	57
Higher middle	34	35	44	73
High	54	58	61	89
Tuition and fees 2001–02 (in-state)				
Low	\$2,744	\$7,950	\$661	\$5,750
Lower middle	3,748	13,111	1,430	7,080
Higher middle	4,654	16,374	1,899	8,500
High	6,977	21,654	2,726	11,700
Enrollment size (12-month headcount), 2001–02				
Low	2,481	720	1,678	54
Lower middle	6,800	1,545	3,885	123
Higher middle	13,181	2,628	7,688	277
High	27,949	6,154	18,643	686

NOTE: Categories for tuition, enrollment size, percent minority, percent receiving federal grants, and percentage first-time, full-time, degree-seeking undergraduate were determined within each sector, using centile ranges; low = 0–24th centile; lower middle = 25–49th centile; higher middle = 50–74th centile; and high = 75–99th centile. Figures reflect percentages after data cleaning and recoding process.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Student Financial Aid, and Enrollment, Collection Year 2002.

Final Universe

The various procedures described above—especially the use of selection criteria to narrow the universe to relatively homogenous groups of institutions—eliminated some institutions from the original dataset (table B-4). The final dataset is comprised of a panel of 4,135 institutions with data for all years of the period under review. The total numbers of institutions remaining are 559 public 4-year institutions, 1,004 public 2-year institutions, 1,009 private not-for-profit, 4-year institutions, and 1,563 private for-profit, less-than-4-year institutions.

Table B-4. Final universe of institutions

	Number	Percentage of total
Total number of Title IV institutions in IPEDS in 2002 header file	6,772	100
Less institutions not in the 50 states/DC	350	5
Less institutions removed due to data problems		
Parent/child procedure	45	1
Not active in all three years	257	4
Subtotal	302	4
Less institutions removed through selection criteria		
Institutions not in sectors of interest	954	14
Below enrollment cut-off	959	14
Non-degree-granting and Program Year reporters (except for private for-profit institutions)	72	1
Subtotal	1,985	29
Final universe	4,135	61

NOTE: Selection criteria were: Title IV participation, location in the 50 states or the District of Columbia, in one of the four sectors under review, degree-granting status (except for-profit institutions), Academic Year reporting (except for for-profit institutions), enrollment (at least 50 first-time, full-time, degree/certificate-seeking undergraduates, or 25 at for-profit institutions), and in the IPEDS universe for all three years. U.S. Service Schools were not included because students do not pay tuition.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Year 2002.

Although the final universe includes 61 percent of the original number of 6,772 Title IV institutions, the institutions remaining in the universe comprised 88 percent of the total reported enrollment of first-time, full-time, degree-seeking undergraduates in the original Title IV universe.¹⁷ The final universe includes 86 percent of the original number of public 4-year Title

¹⁷ In other words, the cohort requested for the Student Financial Aid component. Only data in the original files were considered; 1,095 institutions did not report.

IV institutions; 86 percent of the original number of public 2-year Title IV institutions; 63 percent of the original number of private not-for-profit, 4-year Title IV institutions; and 72 percent of the original number of private not-for-profit, less-than-4-year Title IV institutions. Overall, the final universe includes 74 percent of the original number of Title IV institutions in the four sectors, and about 94 percent of the total reported enrollment of full-time freshmen in these sectors.

In order to examine differences between the final universe and the institutions that were excluded, a bias analysis was performed for each institutional sector, using the original IPEDS data files.¹⁸ In general, the institutions excluded from the analysis as a result of the selection criteria were somewhat similar to those included in the final universe on a range of variables measuring enrollment, financial aid, and the various components of price of attendance (tables B-5 to B-8). Often, excluded institutions had lower median enrollments than institutions in the final universe, and in some cases the patterns of financial aid and price of attendance differed. For example:

- Of public 4-year institutions, the excluded institutions tended to have smaller enrollment sizes for full-time freshmen (table B-5). A higher median proportion of full-time freshmen at excluded institutions received federal grants, while lower proportions received the other types of aid. Tuition and fees were lower at excluded institutions, especially for out-of-state students.¹⁹ Some of these differences may reflect differences in the roles and missions of these institutions; for example, 28 percent of excluded institutions were medical schools, and 31 percent were located in large cities (compared to 14 percent of those in the final universe).

¹⁸ Note that many institutions had missing data for the variables examined; no attempts were made to impute for missing data, for either the included institutions or the eliminated institutions.

¹⁹ Note that a high proportion of excluded institutions in this sector did not report data for these variables—at least 72 percent, depending on the variable.

Table B-5. Final universe of public 4-year institutions compared to excluded institutions: 2001–02

	Final universe	N	Excluded institutions	N
Total		559		105
Median enrollment:				
Academic year reporters				
Number of first-time, full-time, degree/ certificate-seeking undergraduates	1,026	559	30	7
Percentage that are in-district	0	559	0	7
Percentage that are in-state	88	559	89	7
Percentage that are out-of-state	10	559	11	7
Percent unknown	0	559	0	7
Percentage of all undergraduates	17	559	1	7
Number of all undergraduates	6,212	559	1499	7
Program year reporters				
Number of first-time, full-time, degree/ certificate-seeking undergraduates	†	0	†	0
Percentage of all undergraduates	†	0	†	0
Number of all undergraduates	†	0	†	0
Median financial aid:				
Any aid				
Percentage of students receiving	78	559	67	7
Federal grants				
Percentage of students receiving	29	559	22	7
Average amount received	\$2,740	558	\$2,762	4
State grants				
Percentage of students receiving	36	558	20	7
Average amount received	\$1,874	554	\$840	3
Institutional grants				
Percentage of students receiving	29	558	10	7
Average amount received	\$2,000	551	\$2,000	5
Loans				
Percentage of students receiving	42	558	20	7
Average amount received	\$2,929	553	\$3,301	3

See notes at end of table.

Table B-5. Final universe of public 4-year institutions compared to excluded institutions: 2001–02
—Continued

	Final universe	N	Excluded institutions	N
Median tuition, books and supplies, and room and board for first-time, full-time, degree/certificate-seeking undergraduates				
Academic year reporters				
In-district tuition and fees	\$3,404	548	\$2,953	10
In-state tuition and fees	3,403	555	2,953	10
Out-of-state tuition and fees	9,192	555	6,437	10
Books and supplies	782	554	600	10
On campus, room and board	5,055	480	4,740	3
On campus, other expenses	2,214	477	2,992	3
Off campus, room and board	5,587	542	5,554	10
Off campus, other expenses	2,515	543	2,835	10
Living with parents, other expenses	2,582	543	2,674	10
Program year reporters				
Tuition and fees	†	0	8,273	1
Books and supplies	†	0	1,229	1
On campus, room and board	†	0	†	0
On campus, other expenses	†	0	†	0
Off campus, room and board	†	0	9,450	1
Off campus, other expenses	†	0	8,323	1
Living with parents, other expenses	†	0	4,725	1

† Not applicable.

NOTE: This analysis was conducted using the original data files; no attempts were made to recode or impute for missing data, for either the included institutions or the eliminated institutions. Therefore, the number of institutions presented differs for the variables measured, depending how many institutions were missing data for that variable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Year 2002.

- Of public 2-year institutions, the excluded institutions had substantially lower median enrollment than institutions in the final universe, but had higher median percentages of full-time freshmen as a proportion of all undergraduates (table B-6). Excluded institutions had lower median proportions of full-time freshmen receiving state grants, and slightly lower median amounts for out-of-state tuition and fees as well as on-campus and off-campus room and board costs. In addition, 43 percent of excluded institutions were non-degree-granting institutions (none were included in the final universe).

Table B-6. Final universe of public 2-year institutions compared to excluded institutions: 2001–02

	Final universe	N	Excluded institutions	N
Total		1004		210
Median enrollment:				
Academic year reporters				
Number of first-time, full-time, degree/ certificate-seeking undergraduates	401	1004	45	74
Percentage that are in-district	0	1004	50	74
Percentage that are in-state	69	1004	35	74
Percentage that are out-of-state	3	1004	0	74
Percent unknown	0	1004	0	74
Percentage of all undergraduates	12	1004	18	74
Number of all undergraduates	3,666	1004	352	74
Program year reporters				
Number of first-time, full-time, degree/ certificate-seeking undergraduates	†	0	207	45
Percentage of all undergraduates	†	0	47	45
Number of all undergraduates	†	0	395	45
Median financial aid:				
Any aid				
Percentage of students receiving	64	1004	69	119
Federal grants				
Percentage of students receiving	39	1004	41	119
Average amount received	\$2,581	998	\$2,283	113
State grants				
Percentage of students receiving	27	1004	9	119
Average amount received	\$899	964	\$788	77
Institutional grants				
Percentage of students receiving	9	1004	7	118
Average amount received	\$849	820	\$681	74
Loans				
Percentage of students receiving	7	1004	0	118
Average amount received	\$2,300	771	\$3,055	33

See notes at end of table.

Table B-6. Final universe of public 2-year institutions compared to excluded institutions: 2001–02
—Continued

	Final universe	N	Excluded institutions	N
Median tuition, books and supplies, and room and board for first-time, full-time, degree/certificate-seeking undergraduates				
Academic year reporters				
In-district tuition and fees	\$1,488	979	\$1,692	91
In-state tuition and fees	1,620	992	1,872	93
Out-of-state tuition and fees	4,320	992	3,190	93
Books and supplies	775	988	700	93
On campus, room and board	3,391	216	3,075	18
On campus, other expenses	1,882	214	1,300	17
Off campus, room and board	5,219	938	4,680	79
Off campus, other expenses	2,502	933	2,450	82
Living with parents, other expenses	2,486	939	2,500	83
Program year reporters				
Tuition and fees	†	0	2,004	42
Books and supplies	†	0	765	42
On campus, room and board	†	0	4,330	6
On campus, other expenses	†	0	1,518	6
Off campus, room and board	†	0	5,794	33
Off campus, other expenses	†	0	2,800	33
Living with parents, other expenses	†	0	2,925	33

† Not applicable.

NOTE: This analysis was conducted using the original data files; no attempts were made to recode or impute for missing data, for either the included institutions or the eliminated institutions. Therefore, the number of institutions presented differs for the variables measured, depending how many institutions were missing data for that variable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Year 2002.

- Of private not-for-profit, 4-year institutions, the excluded institutions had lower enrollment sizes and lower percentages of full-time freshmen as a proportion of all undergraduates (table B-7). Excluded institutions had lower median percentage of full-time freshmen receiving state grants, institutional grants, and loans, but higher proportions of full-time freshmen receiving federal grants. Excluded institutions also had median tuitions and fees that were substantially lower than those of institutions in the final universe.²⁰ At the same time, more than half (56 percent) of excluded institutions were Specialized institutions such as medical schools.

²⁰ Note that at least 60 percent of excluded institutions in this sector did not report data, depending on the variable.

Table B-7. Final universe of private not-for-profit, 4-year institutions compared to excluded institutions: 2001–02

	Final universe	N	Excluded institutions	N
Total		1009		779
Median enrollment:				
Academic year reporters				
Number of first-time, full-time, degree/certificate-seeking undergraduates	299	1009	21	187
Percentage that are in-district	†	0	†	0
Percentage that are in-state	†	0	†	0
Percentage that are out-of-state	†	0	†	0
Percent unknown	†	0	†	0
Percentage of all undergraduates	23	1009	15	187
Number of all undergraduates	1,390	1009	127	187
Program year reporters				
Number of first-time, full-time, degree/certificate-seeking undergraduates	†	0	132	6
Percentage of all undergraduates	†	0	98	6
Number of all undergraduates	†	0	168.5	6
Median financial aid:				
Any aid				
Percentage of students receiving	92	1009	85	193
Federal grants				
Percentage of students receiving	29	1009	45	193
Average amount received	\$3,040	1003	\$2,841	146
State grants				
Percentage of students receiving	32	1009	0	193
Average amount received	\$2,823	956	\$2,136	72
Institutional grants				
Percentage of students receiving	81	1009	41	193
Average amount received	\$6,064	989	\$1,891	122
Loans				
Percentage of students receiving	63	1009	34	193
Average amount received	\$3,737	981	\$3,333	113

See notes at end of table.

Table B-7. Final universe of private not-for-profit, 4-year institutions compared to excluded institutions: 2001–02—Continued

	Final universe	N	Excluded institutions	N
Median tuition, books and supplies, and room and board for first-time, full-time, degree/certificate-seeking undergraduates				
Academic year reporters				
Tuition and fees	\$14,750	987	\$7,230	219
Books and supplies	750	980	690	213
On campus, room and board	5,520	927	3,955	138
On campus, other expenses	1,630	923	2,550	136
Off campus, room and board	5,465	919	7,362	186
Off campus, other expenses	1,930	919	2,800	182
Living with parents, other expenses	2,245	925	3,000	191
Program year reporters				
Tuition and fees	†	0	10,989	17
Books and supplies	†	0	980	17
On campus, room and board	†	0	5,700	2
On campus, other expenses	†	0	6,003	2
Off campus, room and board	†	0	9,120	11
Off campus, other expenses	†	0	4,650	10
Living with parents, other expenses	†	0	4,822	8

† Not applicable.

NOTE: This analysis was conducted using the original data files; no attempts were made to recode or impute for missing data, for either the included institutions or the eliminated institutions. Therefore, the number of institutions presented differs for the variables measured, depending how many institutions were missing data for that variable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Year 2002.

- Of private not-for-profit, less-than-4-year institutions, excluded institutions had lower enrollment sizes than institutions in the final universe; they also had higher proportions of full-time freshmen receiving federal grants, lower proportions of full-time freshmen receiving loans, and median tuition and fees that were slightly lower (table B-8).

Table B-8. Final universe of private for-profit, less-than-4-year institutions compared to excluded institutions: 2001–02

	Final universe	Excluded N institutions		N
Total		1563		1001
Median enrollment:				
Academic year reporters				
Number of first-time, full-time, degree/certificate-seeking undergraduates	126	401	21	69
Percentage that are in-district	†	0	†	0
Percentage that are in-state	†	0	†	0
Percentage that are out-of-state	†	0	†	0
Percent unknown	†	0	†	0
Percentage of all undergraduates	61	401	40	69
Number of all undergraduates	261	401	101	69
Program year reporters				
Number of first-time, full-time, degree/certificate-seeking undergraduates	111	1162	23	196
Percentage of all undergraduates	95	1162	75	196
Number of all undergraduates	145	1162	57	196
Median financial aid:				
Any aid				
Percentage of students receiving	85	1563	85	265
Federal grants				
Percentage of students receiving	66	1561	65	265
Average amount received	\$2,550	1544	\$2,760	237
State grants				
Percentage of students receiving	0	1561	0	264
Average amount received	\$2,122	530	\$1,934	52
Institutional grants				
Percentage of students receiving	0	1562	0	264
Average amount received	\$1,000	515	\$983	31
Loans				
Percentage of students receiving	67	1561	56	264
Average amount received	\$3,811	1278	\$4,000	171

See notes at end of table.

Table B-8. Final universe of private for-profit, less-than-4-year institutions compared to excluded institutions: 2001–02—Continued

	Final universe		Excluded N institutions	N
Median tuition, books and supplies, and room and board for first-time, full-time, degree/certificate-seeking undergraduates				
Academic year reporters				
Tuition and fees	\$8,740	365	\$7,875	93
Books and supplies	825	351	663	84
On campus, room and board	3,055	58	0	14
On campus, other expenses	1,000	57	0	14
Off campus, room and board	5,598	295	5,660	72
Off campus, other expenses	2,646	285	2,450	69
Living with parents, other expenses	2,676	293	3,003	70
Program year reporters				
Tuition and fees	7,590	1,119	6,900	332
Books and supplies	500	1,073	490	321
On campus, room and board	0	86	0	38
On campus, other expenses	0	85	0	39
Off campus, room and board	5,198	744	5,050	210
Off campus, other expenses	2,480	734	2,051	208
Living with parents, other expenses	2,363	743	2,100	211

† Not applicable.

NOTE: This analysis was conducted using the original data files; no attempts were made to recode or impute for missing data, for either the included institutions or the eliminated institutions. Therefore, the number of institutions presented differs for the variables measured, depending how many institutions were missing data for that variable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Year 2002.

Statistical Procedures

Descriptive Statistics

The tables in this analysis report median values for groups of institutions. The composite variables described above were calculated as averages at the individual institutional level; medians were then calculated across the institutional averages. One should keep in mind that the median values reported are aggregates, and therefore do not necessarily reflect the circumstances of an individual institution. Rather, they reflect the circumstances of the “middle” institution in a particular sector or subgroup of institutions.

For the universe of institutions, trend data on prices, financial aid, and net prices were compiled for each institutional type. Changes were calculated at the institutional level. Dollar

changes over the periods 1999–2000 to 2000–01, 2000–01 to 2001–02, and 1999–2000 to 2001–02 were calculated as the difference between the values for the first and last years, in current dollar terms. Percentage changes for each of the three periods were calculated as the difference between the values divided by the value for the base year.²¹ Medians were then calculated for each group of institutions. As a result, the aggregate change in median values reported in tables may not be the same as the median dollar change over the same period.

Differences Between Medians and Other Values

To take into account nonsampling error and its potential effect on descriptions of differences within the population, it is helpful to set criteria for the “meaningful size” of such differences. All of the differences in this report have been found to be meaningful based upon the following criteria:

- For percentage distributions, 5 percentage point difference.
- For median dollar amounts, \$500 difference.
- For changes (increases or decreases) in median dollar amounts, \$100 difference.
- For median percentage changes, 0.5 percentage points.
- For index changes, 0.5 index points.

These criteria were set after examining the distribution of the data and the size of the medians calculated. The strategy in choosing the cutoffs was to find a cutoff that distinguished between real changes over time and differences that may have been introduced by reporting error or imputation. The criteria are not definitive, however, and it is possible that a change did occur but was below the cutoff set for the criterion. For example, for the sake of simplicity, the criterion for a meaningful difference between prices of attendance is same for all sectors, although the range of prices varies across sectors.

In addition, median values in the tables in this report were reported only for cells that had at least 30 cases in order to ensure that reported medians were stable.

²¹ In a few cases, institutions had a zero value for financial aid in the base year. In these cases, the percentage change in total aid or total grants was blank.

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Appendix C—Alternative Housing Methodology

As noted in appendix B, one component of the calculated price of attendance was the estimated cost of room and board (or living expenses for students who do not contract with the school for room and board) for full-time freshmen. For each institution in the universe, the average cost of room and board or living expenses was calculated by multiplying the estimated cost for each type of housing (on-campus, off-campus not with family, and off-campus with family) by the percentage of full-time freshmen housed in each option and adding the three. In the methodology used for this study, the percentage of students housed in each option was based on estimates from NPSAS:2000 of the percentage of first-time freshmen living on campus, off campus (not with family), and off campus (with family), calculated by sector. However, it is also possible to obtain the percentages of students using each housing option from IPEDS data, if certain assumptions are made.

A proposed alternative housing methodology would use data from the Institutional Characteristics and the Fall Enrollment components.²² The IC component includes variables on whether institutions offer on-campus housing and, if so, their room capacity. The EF component includes variables on the number of first-time, full-time undergraduates, the number of full-time undergraduates in general, and the age distribution of full-time undergraduates.²³ From these variables, one can derive the following for each institution: 1) the estimated percentage of first-time freshmen who lived on campus;²⁴ 2) the percentage of full-time undergraduates who were less than 22 years old; and 3) the percentages of first-time freshmen who lived off campus (with family) and off campus (not with family).²⁵ These percentages could then be applied to the reported average room, board, and other expenses for students living on campus, off campus (not with family), and off campus (with family).

²² The proposed methodology is based on a methodology advanced by a subgroup to the IPEDS Technical Review Panel on derived and calculated variables in February, 2004.

²³ The age component of the EF component is asked every other year.

²⁴ This was done by dividing the dorm capacity by the number of full-time freshmen, plus half of other full-time undergraduates. About 500 institutions had percentages that were greater than 100 percent (dorm capacity was greater than the number of full-time freshmen plus other full-time undergraduates). This likely reflects the fact that many institutions have on-campus housing for upper level undergraduates, graduate students, and professional students, which are figured into their institution's dorm capacity. In addition, colleges may "over-fill" dormitories with freshmen. For the purposes of this analysis, percentages above 100 were bounded to 100.

²⁵ After calculating the percentage who lived on campus, the remainder was distributed between off-campus (not with family) and off-campus (with family), by assuming that the freshmen who were less than 22 years old would be the ones who lived with family.

The following analysis compares the two housing methodologies for the 4,135 institutions in the study universe for 2001–02. Data for the alternative methodology were recoded as necessary; however, imputations for missing data were not performed. Institutions that did not have data available to make the calculations for the alternative methodology were excluded, leaving 3,933 institutions.²⁶ The cleaned and imputed study variables for average room and board and other expenses, tuition and fees, and books and supplies were used in the comparisons so that the focus was placed on the differences in the methods of calculating the percentages of students housed in each option.²⁷

The original and alternative housing methodologies did not lead to large differences in the results (table C-1). The original methodology shows that a median of 61 percent of full-time freshmen lived on-campus at public 4-year institutions, compared to 52 percent using the alternative methodology. On the other hand, the original methodology for private not-for-profit,

Table C-1. Comparison of medians, new and alternative housing methodologies used to calculate the price of attendance, first-time, full-time, degree/certificate-seeking undergraduates: 2001–02

	Number of institutions	Percentage living on campus	Percentage living off campus	Percentage living with family	Housing expenses (composite)	Price of attendance
Original methodology						
Institutional type						
Public 4-year	546	61.0	16.0	23.0	\$6,072	\$11,185
Private not-for-profit, 4-year	990	78.0	10.0	12.0	6,767	22,303
Public 2-year	994	0.0	40.0	60.0	4,707	7,191
Private for-profit, less-than-4-year	1,403	0.0	61.0	39.0	5,876	14,665
Alternative methodology						
Institutional type						
Public 4-year	546	52.0	14.8	31.0	5,987	10,912
Private not-for-profit, 4-year	990	100.0	0.0	0.0	6,945	22,375
Public 2-year	994	0.0	34.5	58.3	4,614	7,158
Private for-profit, less-than-4-year	1,403	0.0	62.2	36.6	6,241	14,696

NOTES: Figures are only for institutions in the study universe that had data available for the calculation of the alternative methodology (N = 3,933).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Year 2002; U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000).

²⁶ Of the 203 institutions with missing data, some were missing data on room capacity while the rest were missing data on the age distribution of enrollment.

²⁷ One potential difference from the initial proposed methodology was to replace IPEDS data on room, board, and other expenses for students living with family with the federal financial aid allowance.

4-year institutions led to a median of 78 percent of students living on-campus, with the alternative methodology shows a median of 100 percent of students. At least some proportion of these percentage differences may be attributed to the fact that the original housing methodology used nationally representative percentages based on a survey of undergraduates, whereas the proposed methodology makes calculations based on the dorm capacity and the number of first-time, full-time undergraduates reported by institutions.

Ultimately, the composite housing expenses variables calculated using the two methodologies do not exhibit meaningful differences. In the public sector, median housing expenses calculated through the original methodology were slightly higher than those calculated through the alternative methodology; the opposite was true for private institutions. However, the differences were not meaningful. In addition, the differences in calculations of median price of attendance between the two methodologies were not meaningful.

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Appendix D—Enrollment-Weighted Perspective

This report has presented aggregates of prices, financial aid, and net prices with postsecondary institutions as the unit of analysis. Therefore, the figures are not weighted by enrollment. However, other published sources explored these issues from the student perspective, by using either student-based sample surveys, or by weighting institutional data by enrollment. In order to provide an alternative perspective, this section presents tables with enrollment-weighted median values for purposes of comparison. Variables were weighted using the number of first-time, full-time, degree/certificate-seeking undergraduates in 2001–02 (table D-1). When using weighted figures, the prices and aid amounts for institutions with larger enrollments are weighted more heavily than those with smaller enrollments. Enrollment-weighted prices can be viewed as reflecting the median prices that students face, while unweighted figures reflect the median prices institutions charge.

Table D-1. Distribution of enrollment of first-time, full-time, degree/certificate-seeking undergraduates, by sector: 2001–02

Sector	Percentiles			Range	
	25	50	75	Minimum	Maximum
All institutions in study universe	116	278	600	25	7208
Public 4-year	516	1026	1977	52	7208
Private not-for-profit, 4-year	161	299	506	50	5077
Public 2-year	224	401	714	50	5103
Private for-profit, less-than-4-year	59	113	269	25	4163

NOTE: Figures reflect distribution after data cleaning and recoding process. Enrollment refers to the cohorts of students required for the Student Financial Aid survey.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Student Financial Aid, Collection Year 2002.

Generally, the enrollment-weighted figures show similar patterns in prices, financial aid, and net prices as do the unweighted figures. However, there were some differences.

- For public 4-year institutions, the values for net price (all aid) weighted by enrollment demonstrated a meaningful increase between 1999–2000 and 2001–02 (table D-2). The enrollment-weighted values for median price of attendance, median net price (all aid), and median net price (grants) in 2001–02 were greater than the unweighted values. In

addition, the enrollment-weighted medians for dollar change and percentage change in both types of net price over the three years were greater than the unweighted medians.

- For private not-for-profit, 4-year institutions, the enrollment-weighted values for median price of attendance, median net price (all aid), and median net price (grants) in 2001–02 were greater than the unweighted values (table D-3). In addition, the enrollment-weight medians for dollar change and percentage change in both types of net price over the three-years were greater than the unweighted medians.
- For public 2-year institutions, the enrollment-weighted values for median price of attendance no longer demonstrated a meaningful increase between 1999–2000 and 2001–02 (table D-4). In addition the percentage increase in net price (all aid) over the three years was lower than the unweighted value.
- Enrollment-weighted values for median price of attendance and net price (all aid) at private for-profit, less-than-4-year institutions in 2001–02 were lower than the unweighted values (table D-5). In addition, the enrollment-weighted medians for dollar change and percentage change in both types of net price over the 3 years were greater than the unweighted medians. However, the enrollment-weighted percentage increase in total aid over the three years was lower than the unweighted value.
- Across all sectors but public 2-year, enrollment-weighted values for price change indices for net price were higher than the unweighted index values (table D-6).

Table D-2. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates, unweighted and weighted by enrollment: Public 4-year institutions, academic years 1999–2000 to 2001–02

	Price of attendance		Total aid		Total grants		Net price (all aid)		Net price (grants)	
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
Median values in current dollars										
Academic Year										
1999–2000	\$10,230	\$10,833	\$2,946	\$3,000	\$1,759	\$1,765	\$7,216	\$7,810	\$8,463	\$9,013
2000–2001	10,634	11,171	3,321	3,349	2,006	2,028	7,435	8,214	8,731	9,409
2001–2002	11,187	11,829	3,554	3,644	2,224	2,240	7,712	8,468	9,056	9,803
Median dollar change										
Time period										
1999–2000 to 2000–2001	\$458	\$488	\$174	\$159	\$149	\$155	\$242	\$316	\$274	\$331
2000–2001 to 2001–2002	567	607	244	235	192	194	354	395	420	468
1999–2000 to 2001–2002	1,039	1,146	459	439	359	372	612	759	713	837
Median percentage change										
Time period										
1999–2000 to 2000–2001	4.1	4.1	5.5	5.0	8.3	8.5	3.2	3.9	3.1	3.5
2000–2001 to 2001–2002	5.4	5.6	8.0	8.1	9.7	10.0	4.6	5.3	4.5	5.2
1999–2000 to 2001–2002	9.8	10.1	14.4	13.5	19.6	21.3	8.6	10.1	8.1	8.8

NOTE: Enrollment weighted figures are using the number of first-time, full-time, degree/certificate-seeking undergraduates. Aid amounts are composite variables derived from the percentage receiving aid multiplied by the average amount received. Thus, they are medians across all students at each institution. Dollar changes were calculated at an institutional level, and then medians were calculated across all institutions. As a result, the aggregate change in median values may not be the same as the median dollar change over the same period. Percentage changes also were calculated at an institutional level, and then medians were calculated. In a few cases, institutions had a zero value for financial aid in the base year. In these cases, the percentage change in total aid or total grants was system missing.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Years 2000 to 2002.

Table D-3. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates, unweighted and weighted by enrollment: Private not-for profit, 4-year institutions, academic years 1999–2000 to 2001–02

	Price of attendance		Total aid		Total grants		Net price (all aid)		Net price (grants)	
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
Median values in current dollars										
Academic Year										
1999–2000	\$20,157	\$22,842	\$8,425	\$8,688	\$5,862	\$6,287	\$11,400	\$13,264	\$13,762	\$15,872
2000–2001	21,071	23,847	8,537	8,684	6,299	6,468	11,910	13,986	14,271	16,728
2001–2002	22,259	25,280	9,280	9,505	6,747	6,837	12,514	14,800	14,954	17,732
Median dollar change										
Time period										
1999–2000 to 2000–2001	\$956	\$1,080	\$256	\$171	\$288	\$225	\$698	\$885	\$645	\$858
2000–2001 to 2001–2002	1,112	1,252	508	468	348	314	613	863	754	876
1999–2000 to 2001–2002	2,098	2,367	798	713	689	645	1,264	1,664	1,406	1,742
Median percentage change										
Time period										
1999–2000 to 2000–2001	4.4	4.5	3.2	2.3	5.0	3.6	5.4	5.8	4.4	4.8
2000–2001 to 2001–2002	5.0	4.9	5.9	5.6	5.7	5.0	4.7	5.2	4.8	5.0
1999–2000 to 2001–2002	10.0	9.8	9.6	8.5	11.4	10.0	10.2	11.1	9.8	10.4

NOTE: Enrollment weighted figures are using the number of first-time, full-time, degree/certificate-seeking undergraduates. Aid amounts are composite variables derived from the percentage receiving aid multiplied by the average amount received. Thus, they are medians across all students at each institution. Dollar changes were calculated at an institutional level, and then medians were calculated across all institutions. As a result, the aggregate change in median values may not be the same as the median dollar change over the same period. Percentage changes also were calculated at an institutional level, and then medians were calculated. In a few cases, institutions had a zero value for financial aid in the base year. In these cases, the percentage change in total aid or total grants was system missing.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Years 2000 to 2002.

Table D-4. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates, unweighted and weighted by enrollment: Public 2-year institutions, academic years 1999–2000 to 2001–02

	Price of attendance		Total aid		Total grants		Net price (all aid)		Net price (grants)	
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
Median values in current dollars										
Academic Year										
1999–2000	\$6,667	\$6,763	\$1,264	\$1,197	\$1,013	\$927	\$5,260	\$5,457	\$5,623	\$5,785
2000–2001	6,860	6,956	1,419	1,372	1,170	1,099	5,249	5,505	5,646	5,824
2001–2002	7,184	7,235	1,616	1,557	1,330	1,241	5,439	5,639	5,831	5,959
Median dollar change										
Time period										
1999–2000 to 2000–2001	\$170	\$163	\$97	\$102	\$107	\$108	\$89	\$79	\$87	\$84
2000–2001 to 2001–2002	284	273	178	177	157	153	133	121	152	144
1999–2000 to 2001–2002	509	484	285	275	271	257	223	208	236	247
Median percentage change										
Time period										
1999–2000 to 2000–2001	2.6	2.4	7.7	8.5	10.1	11.3	1.6	1.5	1.5	1.4
2000–2001 to 2001–2002	4.1	4.0	12.5	12.2	13.6	13.7	2.5	2.2	2.7	2.5
1999–2000 to 2001–2002	7.6	7.2	21.8	21.8	25.3	25.8	4.3	3.8	4.1	4.2

NOTE: Enrollment weighted figures are using the number of first-time, full-time, degree/certificate-seeking undergraduates. Aid amounts are composite variables derived from the percentage receiving aid multiplied by the average amount received. Thus, they are medians across all students at each institution. Dollar changes were calculated at an institutional level, and then medians were calculated across all institutions. As a result, the aggregate change in median values may not be the same as the median dollar change over the same period. Percentage changes also were calculated at an institutional level, and then medians were calculated. In a few cases, institutions had a zero value for financial aid in the base year. In these cases, the percentage change in total aid or total grants was system missing.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Years 2000 to 2002.

Table D-5. Median price of attendance, total aid, total grants, net price (all aid), and net price (grants) for first-time, full-time, degree/certificate-seeking undergraduates, unweighted and weighted by enrollment: Private for-profit, less-than-4-year institutions, 1999–2000 to 2001–02

	Price of attendance		Total aid		Total grants		Net price (all aid)		Net price (grants)	
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
Median values in current dollars										
Year ¹										
1999–2000	\$13,020	\$14,419	\$3,369	\$3,923	\$1,434	\$1,386	\$9,776	\$10,702	\$11,521	\$12,798
2000–2001	13,653	15,026	3,630	3,944	1,557	1,483	9,982	11,001	11,961	13,259
2001–2002	14,514	15,589	4,007	4,230	1,783	1,640	10,487	11,332	12,581	13,711
Median dollar change										
Time period										
1999–2000 to 2000–2001	\$496	\$607	\$217	\$152	\$105	\$89	\$244	\$370	\$412	\$586
2000–2001 to 2001–2002	725	762	301	317	218	189	465	481	529	557
1999–2000 to 2001–2002	1,307	1,460	574	479	355	286	764	999	1,020	1,248
Median percentage change										
Time period										
1999–2000 to 2000–2001	3.7	4.4	6.8	5.0	6.9	6.6	2.4	3.6	3.5	4.3
2000–2001 to 2001–2002	5.2	5.0	7.9	8.6	13.2	13.6	4.5	3.9	4.1	4.1
1999–2000 to 2001–2002	9.9	10.1	18.4	14.4	22.7	22.4	8.0	9.5	8.6	9.5

¹ Academic Year for institutions that were academic year reporters, Program Year for program year reporters. See methodology for details.

NOTE: Enrollment weighted figures are using the number of first-time, full-time, degree/certificate-seeking undergraduates. Aid amounts are composite variables derived from the percentage receiving aid multiplied by the average amount received. Thus, they are medians across all students at each institution. Dollar changes were calculated at an institutional level, and then medians were calculated across all institutions. As a result, the aggregate change in median values may not be the same as the median dollar change over the same period. Percentage changes also were calculated at an institutional level, and then medians were calculated. In a few cases, institutions had a zero value for financial aid in the base year. In these cases, the percentage change in total aid or total grants was system missing.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Years 2000 to 2002.

**Table D-6. Median values for indices of tuition and fees, price of attendance, and net price, by sector, unweighted and weighted by enrollment:
1999–2000 to 2001–02**

Sector	Index of tuition and fees		Index of price of attendance		Index of net price (all aid)		Index of net price (grants)	
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
Public 4-year	6.8	7.4	4.5	4.7	3.3	4.7	2.8	3.4
Private not-for-profit, 4-year	5.2	4.9	4.6	4.4	4.8	5.7	4.4	5.0
Public 2-year	4.4	4.6	2.2	1.8	-1.1	-1.6	-1.3	-1.2
Private for-profit, less-than-4-year	7.0	7.1	4.5	4.7	2.6	4.2	3.2	4.1

NOTE: Each index was calculated as the rate of change in price between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in the Consumer Price Index during this period. Therefore, an institution that raises its price over this period at the rate of inflation would have an index value of 0. Enrollment weighted figures are using the number of first-time, full-time, degree/certificate-seeking undergraduates. Price data are for academic year for institutions that were academic year reporters (including all public 4-year, private not-for-profit, 4-year, and public 2-year institutions), and program year for program year reporters. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Years 2000 to 2002.

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Appendix E—Institutional Selectivity

One of the variables expected to be associated with prices and aid at 4-year institutions was institutional selectivity. Thus, it was important to have a measure of selectivity for each 4-year institution in the study universe. In order to create a measure that could be calculated at an institutional level and be simple and replicable over time, a new selectivity variable was derived from IPEDS data.

The selectivity variable presented in several tables in this report as an institutional characteristic was calculated from 2002 Institutional Characteristics data for the 4-year institutions in the study universe. The IC component includes several relevant variables: a flag for whether or not institutions were open admission; the number of applicants; the number of students admitted; the 25th and 75th percentiles of ACT and/or SAT scores; and a flag for whether or not test scores were required.²⁸

Open admission 4-year institutions were formed into a separate category. For non-open admission institutions, an index was created from two variables: 1) the centile distribution of the percentage of students who were admitted (of those who applied); and 2) the centile distribution of the midpoint between the 25th and 75th percentile SAT/ACT combined scores reported by each institution (ACT scores were converted into SAT equivalents). The two variables were given equal weight for those non-open admission institutions that had data for both, and the combined centile variable was divided into selectivity categories—very selective, moderately selective, and minimally selective—based on breaks in the distribution. Institutions that did not have test score data (about 10 percent of non-open admission institutions) were assigned to the selectivity categories using a combination of percent admitted and whether they required test scores; institutions that did not require test scores were assigned to the “minimally selective” category, while the remainder were assigned according to the range of centiles of “percent admitted” in which they fell.

Multiple tests were performed to check the validity of the selectivity variable, including crosstabulations and correlations with highest degree offered, Carnegie Classification, and other

²⁸ Institutions were required to report test scores only if test scores were required for admission and if 60 percent or more of the entering cohort of students submitted scores for a given test.

types of selectivity measures such as Peterson’s Selectivity Ranking.²⁹ The selectivity variable appeared to assign institutions to categories in ways that would be expected (table E-1).

Table E-1. Selected 4-year institutions in the study universe, by institutional selectivity

	Very Selective	Moderately selective	Minimally selective	Open admission
Public institutions	Cornell University	Ball State University	Black Hills State University	Northern Kentucky University
	SUNY-Binghamton	Ohio State University	Northern Alabama University	Texas Southern University
	University of Virginia	University of Oregon	Winston-Salem State University	University of Toledo
	Duke University	DePaul University	Cabrini College	University of Rio Grande
Private not-for-profit institutions	Princeton University	Mary Baldwin College	Wayland Baptist University	Pikeville College
	Williams College	University of San Francisco	Albertus Magnus College	Rochester College

NOTE: Selected institutions are in no particular order.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics, Collection Year 2002.

²⁹ From the 2001 *Peterson’s Guide to Four-Year Colleges* (Thomson Peterson’s 2001). The Peterson’s Ranking was available for 1,093 of the 1,569 4-year institutions in the study universe. All of the tests had significant Chi Squares and Pearson’s r values.

Appendix F—Inflation Measures

This report used the Consumer Price Index for Urban Consumers (CPI-U) to measure inflation over the period under review. In order to measure changes in consumer prices for the CPI, the Bureau of Labor Statistics (BLS) uses a defined “market basket” of various types of goods and services that consumers purchase for their day-to-day living. BLS measures the average monthly prices of specific expenditure items in eight major groups: food and beverages, housing, apparel; transportation; medical care, recreation; education and communication; and other goods and services.³⁰ However, the CPI has some limitations in its use as a tool to assess the price changes faced by colleges and universities.

Prices for specific goods and services may change more rapidly (or more slowly) than the rate of increase captured by the CPI. Unlike the goods and services purchased by the typical urban consumer, colleges and universities spend money primarily on compensation for faculty and staff, with substantially lower percentages of their budgets spent on items such as books and computing. This presents a problem for measurement of price change because on average, educated, white-collar workers have earned increasingly higher compensation through the U.S. economy, and colleges and universities are no exception.³¹

To address this issue, Kent Halstead of Research Associates developed a Higher Education Price Index (HEPI) that measured the average changes in the prices of goods and services purchased by colleges and universities through educational and general expenditures. Building upon this concept, State Higher Education Executive Officers (SHEEO) recently developed an alternative scale to estimate inflation in the costs paid by colleges and universities (for details, see SHEEO 2004). The Higher Education Cost Adjustment (HECA) is constructed from two federal prices indices: 1) the Employment Cost Index (ECI), which includes salaries and benefits for private sector white-collar workers (excluding sales); and 2) the Gross Domestic Product Implicit Price Deflator (GDP IPD), which reflects general price inflation in the US economy.³² The HECA is based on a market basket with two components:

³⁰ For more information, see the Bureau of Labor Statistics’ website, at <http://stats.bls.gov/cpi/>.

³¹ These concerns are noted in SHEEO (2004).

³² Gross Domestic Product is the monetary value of *all* goods and services produced by an economy over a specified period. The Implicit Price Deflator converts the GDP into constant dollars, i.e., current dollar GDP divided by constant dollar GDP. The deflator therefore measures price change over the whole economy, rather than using a fixed basket of goods and services.

- Personnel costs (75 percent of the index), based on the growth of the ECI
- Non-personnel costs (the remaining 25 percent), based on the growth of the GDP

Between fiscal years 1990 and 2002, consumer prices as measured by the CPI-U increased by 40 percent; provider prices for higher education as estimated by the HECA grew 49 percent; and per capita income grew 58 percent (SHEEO 2004).³³ For the purposes of this report, between 1999–2000 and 2001–02, the CPI-U increased by about 5.4 percent. In comparison, the HECA increased by 7.6 percent.

The median index values for tuition and fees, price of attendance, net price (aid) and net price (grants) can be calculated separately using the CPI and using the HECA (table F-1). As

Table F-1. Median values for indices of tuition and fees, price of attendance, and net price, calculated using the CPI-U and the HECA, by sector: 1999–2000 to 2001–02

Sector	Index of tuition and fees	Index of price of attendance	Index of net price (all aid)	Index of net price (grants)
Public 4-year				
CPI-U	6.8	4.5	3.3	2.8
HECA	4.6	2.2	1.1	0.5
Private not-for-profit, 4-year				
CPI-U	5.2	4.6	4.8	4.4
HECA	3.0	2.4	2.6	2.2
Public 2-year				
CPI-U	4.4	2.2	-1.1	-1.3
HECA	2.2	0.0	-3.3	-3.5
Private for-profit, less-than-4-year				
CPI-U	7.0	4.6	2.6	3.2
HECA	4.7	2.3	0.4	1.0

NOTE: Each index was calculated as the rate of change in price between 1999–2000 (year 1) and 2001–02 (year 3), minus the rate of change in prices overall during this period. For each sector, the first set of index values were calculated using the Consumer Price Index (CPI-U); the second set of index values were calculated using the Higher Education Cost Adjustment (HECA). The CPI-U is for academic year (July 1 to June 30). HECA data are Quarter 2 of the calendar year, coinciding with the final quarter of the comparable academic year. Price data are for academic year for institutions that were academic year reporters (including all public 4-year, private not-for-profit, 4-year, and public 2-year institutions), and program year for program year reporters. See methodology for details.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Institutional Characteristics and Student Financial Aid, Collection Years 2000 to 2002; State Higher Education Executive Officers. (2004). *State Higher Education Finance FY 2003*. Washington, DC: Author.

³³ HECA data are Quarter 2 of the calendar year, coinciding with the final quarter of the comparable fiscal year. CPI-U data are fiscal year (July 1 to June 30), and per capita income data are calendar year (SHEEO 2004).

would be expected, the median index values calculated using the HECA are lower than those calculated using the CPI. In particular, when using the HECA, the median index value for net price (grants) at public 4-year institutions is close to zero. In addition, the median index value for net price (all aid) at private for-profit, less-than-4-year institutions is close to zero. These groups of institutions raised their net prices at about the same rate as inflation in the costs paid by colleges in universities over the period under review.