Commonfund Higher Education Price Index

2022 Update

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Welcome

History making or a footnote to history? That is the question that inflation in FY2022 poses for decision-makers at colleges and universities across the country. Will FY2022 trigger an era when inflation becomes embedded not only in the real economy but also in people's psyches? (Inflation data from the late 1970s and early '80s spring to mind.) Or will FY2022 be little more than an aberration, a period when inflation was relatively quickly contained by resolve on the part of the Federal Reserve, as was the case 40 years ago? (Fed Chair Paul Volcker engineered the record high interest rates that tamed inflation and ignited the equity boom in 1982.)

Time will tell. But when it comes to inflation, time is not on one's side. The longer it continues, the more painful it becomes. Trustees and senior staff at institutions of higher education need to make decisions today, in real time. That's why hard data about how inflation is impacting their institutions becomes a vital resource for boards and committees. Year in, year out, regardless of the inflationary environment, Commonfund's annual Higher Education Price Index (HEPI) delivers that data … data that is especially valuable because it focuses solely on those costs relevant to the operating budgets found in higher ed.

As this year's report shows, costs for a market basket of items making up those operating budgets increased at an annual rate of 5.2 percent in FY2022 compared with 2.7 percent in FY2021 (and 1.9 percent in FY2020). From a long-term perspective, it was the steepest annual increase in HEPI since 6.0 percent in 2001. This is not welcome data, but it does make clear the need to discuss and weigh matters related to inflation just like other high priority agenda topics.

We are gratified by the feedback we receive every year, as it confirms that HEPI serves as the valuable tool we intend it to be. We remain committed to keeping it that way in the future regardless of whether inflation is temperate or testing.

George Suttles
Executive Director
Commonfund Institute

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About Commonfund Institute

Commonfund Institute is among the nation's most trusted sources for relevant, useful, and proprietary data, analytics, and best practices in financial management. The Institute provides a wide variety of resources, including conferences, seminars, roundtables, and online learning through Commonfund Institute Online. Insights cover topics such as endowments and governance; proprietary and third-party research such as the Commonfund Benchmark Studies®; publications including the Commonfund Higher Education Price Index® (HEPI); and events such as the annual Commonfund Forum and Investment Stewardship Academy.

Higher Education Price Index Introduction

Executive Summary

Commonfund Higher Education Price Index® (HEPI) data show that costs for colleges and universities rose 5.2 percent in FY2022, an increased rate of inflation compared with 2.7 percent in FY2021 and 1.9 percent in FY2020. (FY2022 covers the period from July 1, 2021, to June 30, 2022, and coincides with the budget year of most institutions of higher education.)

The 5.2 percent increase for FY2022 is the highest since the 6.0 percent rise for FY2001, and it slightly exceeds 5.1 percent increases in fiscal years 2003 and 2006.

From a historical perspective, the highest annual increases since the inception of HEPI in FY1961 generally occurred in the late 1970s and early 1980s. The highest annual rate, 10.7 percent, was recorded in FY1981. The lowest annual rate, an increase of 0.9 percent, occurred in FY2010. That year marked the beginning of a decade when annual increases in HEPI averaged less than 2.2 percent.

Year over year, costs in FY2022 rose in all eight components tracked by HEPI, with the most pronounced increases coming in two components: utilities plus supplies and materials. The former rose 43.1 percent year over year, while the latter rose 21.5 percent. After those, the greatest increase was 8.6 percent in service employee costs. The lowest rate of increase was 2.1 percent in the category of faculty salaries, a rate of increase that while modest by historical standards was more than twice FY2021's 1.0 percent rise. Utilities were also the category showing the highest annual rate of inflation in FY2021, an increase of 15.0 percent. Utility costs have been highly volatile, however, as costs in that category declined 15.7 percent in FY2020.

Comparing HEPI and the Consumer Price Index[1] (CPI), while the former showed costs rising 5.2 percent in FY2022 costs rose in the latter by 7.2 percent. This marked the first time since FY2013 that the CPI exceeded HEPI, and even then, the difference was just 0.1 percent. Historically, the annual rate of increase in HEPI usually exceeds that of the CPI. For instance, since FY2000, HEPI has increased at a higher annual rate than the CPI 83 percent of the time.

About HEPI

The Higher Education Price Index (HEPI) is an inflation index designed specifically for use by institutions of higher education. HEPI measures the average relative level in the price of a fixed market basket of goods and services purchased by colleges and universities each year through current fund educational and general expenditures, excluding research. A more accurate indicator of cost changes for colleges and universities than the Consumer Price Index (CPI), HEPI is used primarily to project future budget increases required to preserve purchasing power.

With compilations dating back to 1961, HEPI offers more than 60 continuous years of higher education inflation data. It is an essential tool used by schools to determine increases in funding necessary to maintain both real purchasing power and investment.

In 2005, Commonfund Institute assumed responsibility for the index and the proprietary model used to calculate HEPI's values from Research Associates of Washington, D.C. In subsequent years, in keeping with its commitment to improving and expanding the index, Commonfund Institute has expanded HEPI to include additional calculations and measures.

HEPI is compiled using data items from publicly available sources (see page 27 for more details) that are released at different points in the academic fiscal year, which runs from July 1 through the following June 30. We use this data, as it is released, to calculate HEPI forecasts that are released each April, June and September. The final report is released in December each year.

1 The Bureau of Labor Statistics (BLS) updates CPI statistics monthly. It also provides a six- and 12-month average change; January-June, July-December and January-December. The CPI values reported on Commonfund's HEPI web site are based on fiscal year (July 1 through June 30) 12-month averages rather than the monthly (or point-to-point) CPI values usually reported by the BLS.

HEPI data are provided free of charge via Commonfund's website at www.commonfund.org/HEPI, where you can sign up to receive quarterly forecasts and the full HEPI report when it is published each December.

The HEPI Tables

The chart below shows HEPI from fiscal years 1961 to 2022. Table A on page 3 summarizes HEPI and CPI for the same period. Table B on page 4 summarizes the regression formula used since FY2002 to calculate HEPI. HEPI data beginning with FY2002 have been restated to reflect methodological improvements adopted in 2009.

FIGURE 1

HIGHER EDUCATION PRICE INDEX

1961-2022

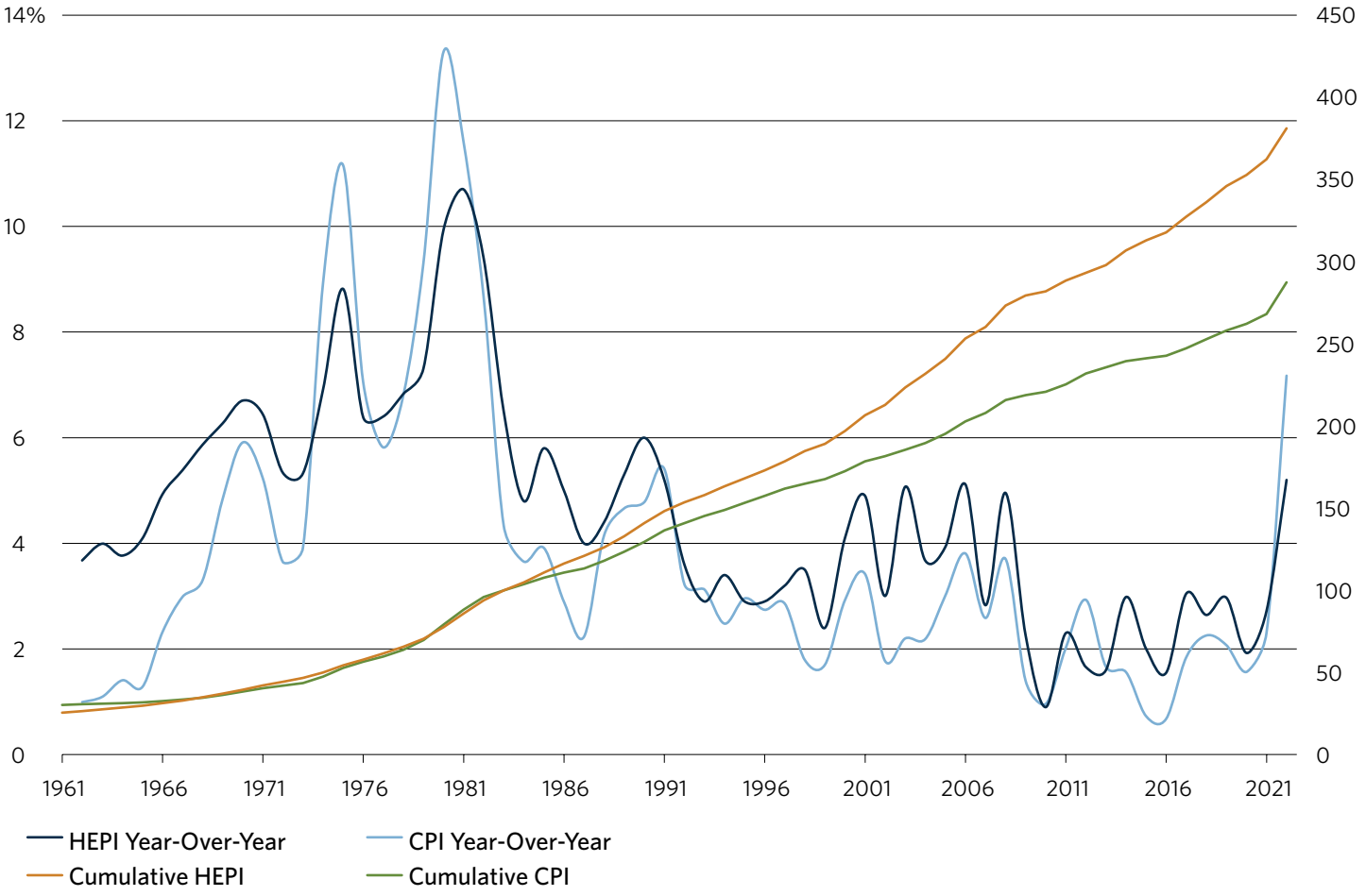


Figure 1 traces the Higher Education Price Index (HEPI) and the Consumer Price Index (CPI) from 1961 to 2022. Cumulative HEPI is represented by the steadily increasing orange line, indexed to 100 for 1983, and should be read using the right-hand scale. The jagged lines trace percentage year-over-year changes in HEPI and CPI and should be read using the left-hand scale. In this chart and in the supporting data in Table A on page 3, HEPI and CPI are presented in two ways—as an index level and as a year-over-year percent change. HEPI data beginning with FY2002 have been restated to reflect the methodological improvements adopted in 2009.

TABLE A

HISTORICAL SUMMARY OF HIGHER EDUCATION PRICE INDEX AND CONSUMER PRICE INDEX

Fiscal Years 1961 to 2022

	College and university operations		Consumer prices			College and university operations		Consumer prices	
Fiscal year	HEPI Index Value 1983 = 100	Yearly % Change	CPI Index Value 1983 = 100	Yearly % Change	Fiscal year	HEPI Index Value 1983 = 100	Yearly % Change	CPI Index Value 1983 = 100	Yearly % Change
1961	25.6	–	30.3	–	1991	148.2	5.2%	136.4	5.4%
1962	26.5	3.7%	30.6	1.0%	1992	153.5	3.6%	140.8	3.2%
1963	27.6	4.0%	31.0	1.1%	1993	157.9	2.9%	145.2	3.1%
1964	28.6	3.8%	31.4	1.4%	1994	163.3	3.4%	148.8	2.5%
1965	29.8	4.1%	31.8	1.3%	1995	168.1	2.9%	153.2	3.0%
1966	31.3	4.9%	32.6	2.3%	1996	173.0	2.9%	157.4	2.7%
1967	32.9	5.4%	33.5	3.0%	1997	178.4	3.2%	161.9	2.9%
1968	34.9	5.9%	34.6	3.3%	1998	184.7	3.5%	164.8	1.8%
1969	37.1	6.3%	36.3	4.8%	1999	189.1	2.4%	167.6	1.7%
1970	39.5	6.7%	38.5	5.9%	2000	196.9	4.1%	172.5	2.9%
1971	42.1	6.4%	40.5	5.2%	2001	208.7	6.0%	178.4	3.4%
1972	44.3	5.3%	41.9	3.6%	2002	212.7	1.9%	181.6	1.8%
1973	46.7	5.3%	43.6	3.9%	2003	223.5	5.1%	185.5	2.2%
1974	49.9	6.9%	47.5	8.9%	2004	231.7	3.7%	189.6	2.2%
1975	54.3	8.8%	52.8	11.2%	2005	240.8	3.9%	195.3	3.0%
1976	57.8	6.4%	56.5	7.1%	2006	253.1	5.1%	202.7	3.8%
1977	61.5	6.4%	59.8	5.8%	2007	260.3	2.8%	208.0	2.6%
1978	65.7	6.8%	63.8	6.8%	2008	273.2	5.0%	215.7	3.7%
1979	70.5	7.3%	69.8	9.3%	2009	279.3	2.3%	218.7	1.4%
1980	77.5	9.9%	79.1	13.3%	2010	281.8	0.9%	220.8	1.0%
1981	85.8	10.7%	88.2	11.6%	2011	288.4	2.3%	225.3	2.0%
1982	93.9	9.4%	95.8	8.7%	2012	293.2	1.7%	231.9	2.9%
1983	100.0	6.5%	100.0	4.3%	2013	297.8	1.6%	235.7	1.7%
1984	104.8	4.8%	103.7	3.7%	2014	306.7	3.0%	239.4	1.6%
1985	110.8	5.8%	107.7	3.9%	2015	312.9	2.0%	241.1	0.7%
1986	116.3	5.0%	110.8	2.9%	2016	317.7	1.5%	242.8	0.7%
1987	120.9	4.0%	113.3	2.2%	2017	327.4	3.0%	247.2	1.8%
1988	126.2	4.4%	118.0	4.1%	2018	336.1	2.6%	252.8	2.3%
1989	132.8	5.3%	123.5	4.7%	2019	346.0	3.0%	258.0	2.1%
1990	140.8	6.0%	129.4	4.8%	2020	352.7	1.9%	262.2	1.6%
					2021	362.3	2.7%	268.1	2.3%
					2022	381.1	5.2%	287.3	7.2%

Sources: HEPI, Research Associates of Washington and Commonfund Institute, July 1 - June 30 data
CPI, U.S. Department of Labor, data is calculated July 1 - June 30 (annual published CPI is computed over the calendar 12-month period)

IMPORTANT NOTE: In 2015, the American Association of University Professors (AAUP) began using a new methodology to calculate salary and total compensation that was not directly comparable with the past. Further adjustments were made to the data for FY2021 and data for fiscal years 2015 through 2021 have now been restated to account for the change and to make the data compatible with past reporting.

TABLE B

HIGHER EDUCATION PRICE INDEX COMPONENTS ANALYSIS

Fiscal Years 2013 to 2022

	Fiscal	Regression HEPI	Faculty salaries	Admin-istrative salaries	Clerical	Service employees	Fringe benefits	Miscel-laneous services	Supplies and materials	Utilities
Index Value	2013	297.8	294.6	362.4	269.8	239.4	437.5	269.4	180.0	195.6
	2014	306.7	301.0	366.4	274.8	242.0	458.3	274.2	200.2	211.4
	2015	312.9	306.4	381.9	280.4	248.4	484.0	279.8	190.7	183.5
	2016	317.7	318.2	393.3	289.1	253.3	487.9	285.7	179.5	146.5
	2017	327.4	326.0	405.2	297.3	262.7	501.6	290.7	180.1	167.8
	2018	336.1	333.6	414.1	305.9	271.6	516.3	297.8	187.9	170.7
	2019	346.0	342.2	424.1	316.6	282.5	534.1	304.8	195.6	172.3
	2020	352.7	351.4	430.3	326.6	293.9	549.6	313.2	188.8	145.3
	2021	362.3	354.7	437.2	335.7	306.6	572.2	319.3	195.4	167.0
	2022	381.1	362.1	449.8	353.2	332.9	587.3	332.9	237.5	239.0
Standard Deviation	2002-2022	47.1	43.3	64.6	42.3	38.7	93.1	36.9	26.4	35.2
Yearly% change	2013	1.6%	1.7%	2.9%	1.9%	1.6%	2.9%	1.8%	-11.7%	2.1%
	2014	3.0%	2.2%	1.1%	1.9%	1.1%	4.8%	1.8%	11.2%	8.1%
	2015	2.0%	1.8%	4.2%	2.1%	2.6%	5.6%	2.1%	-4.8%	-13.2%
	2016	1.5%	3.8%	3.0%	3.1%	2.0%	0.8%	2.1%	-5.8%	-20.2%
	2017	3.0%	2.5%	3.0%	2.8%	3.7%	2.8%	1.7%	0.3%	14.5%
	2018	2.6%	2.3%	2.2%	2.9%	3.4%	2.9%	2.4%	4.3%	1.7%
	2019	3.0%	2.6%	2.4%	3.5%	4.0%	3.5%	2.4%	4.1%	0.9%
	2020	1.9%	2.7%	1.5%	3.2%	4.0%	2.9%	2.8%	-3.5%	-15.7%
	2021	2.7%	1.0%	1.6%	2.8%	4.3%	4.1%	2.0%	3.5%	15.0%
	2022	5.2%	2.1%	2.9%	5.2%	8.6%	2.6%	4.3%	21.5%	43.1%

IMPORTANT NOTE: In 2015, the American Association of University Professors (AAUP) began using a new methodology to calculate salary and total compensation that was not directly comparable with the past. Further adjustments were made to the data for FY2021 and data for fiscal years 2015 through 2021 have now been restated to account for the change and to make the data compatible with past reporting.

Summary Output

Regression Statistics

Multiple R	0.999998904
R Square	0.999997809
Adjusted R Square	0.999997261
Standard Error	0.096391663
Observations	41

Coefficients

Intercept	-0.286286907
Faculty	0.353741718
Admin	0.104289477
Clerical	0.18408585
Service	0.082314791
Fringe	0.131020859
Services	0.022899544
Supplies	0.055138426
Utilities	0.068247106

Higher Education Price Index Analysis

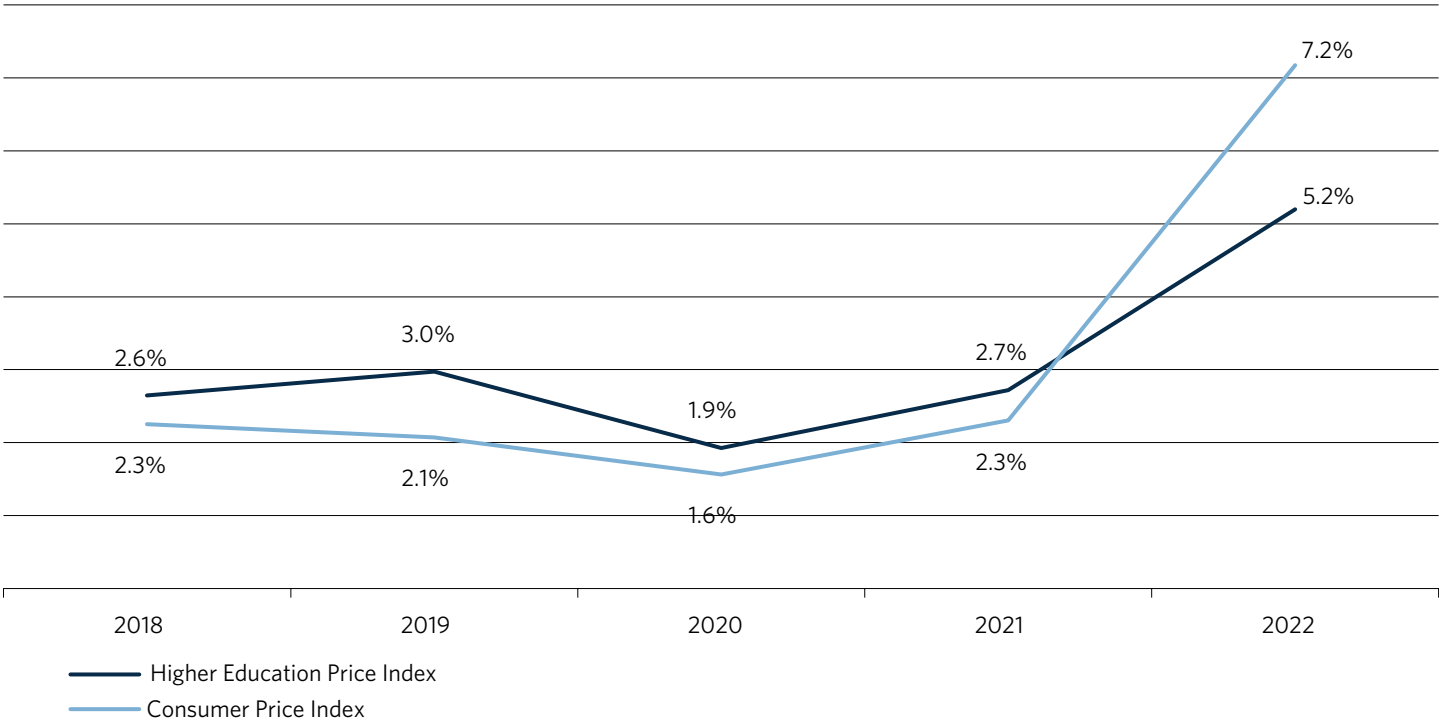
HEPI for 2022

For fiscal year 2022, the HEPI calculation shows that inflation for colleges and universities was 5.2 percent, a 93 percent increase over FY2021's 2.7 percent and well over double FY2020's 1.9 percent. The HEPI inflation figure for FY2022 was also well above the average of 2.6 percent for the preceding five years (FY2017—FY2021). Whether the FY2022 increase proves to be an aberration or the beginning of an era akin to the late 1970s/early 1980s remains to be seen. Costs across the entire domestic economy rose sharply in FY2022, as the Consumer Price Index (CPI) increased 7.2 percent. *Note: the CPI values reported by Commonfund for HEPI are based on fiscal year (July 1 through June 30) 12-month averages rather than the monthly (or point-to-point) CPI values usually reported by the Bureau of Labor Statistics.*

FIGURE 2

THE HIGHER EDUCATION PRICE INDEX VERSUS THE CONSUMER PRICE INDEX

Fiscal years 2018 - 2022



- There are eight cost factor components that contribute to the HEPI regression calculation: faculty salaries, administrative salaries, clerical costs, service employee costs, fringe benefits, miscellaneous services, supplies and materials, and utilities.
- The regression equation assigns a different weighting to each cost factor and, therefore, a change in one component may influence the final HEPI calculation more than another.
- The components that are most heavily weighted are faculty salaries, clerical costs, fringe benefits and administrative salaries.

Highlights of 2022 Study

Costs in FY2022 rose in all eight of the cost components tracked by HEPI. Faculty salaries—the most heavily weighted component in the index—increased by 2.1 percent, a rate that was more than twice the 1.0 percent increase in FY2021. The FY2022 rate, however, was the same as the average rate recorded for the past five years, 2.1 percent.

The two categories accounting for most of the increased rate of inflation were the same as last year: utilities and supplies and materials. Utilities costs rose 43.1 percent after a 15.0 percent increase in FY2021 (but a sharp decline of 15.7 percent in FY2020, underscoring the volatility this category historically has shown). Costs for supplies and materials showed a similar pattern, albeit at a lower level. These costs rose 21.5 percent in FY2022 after a 3.5 percent increase in FY2021 but a 3.5 percent decline in FY2020.

Supporting Data

Clerical costs, the second most heavily weighted category, rose 5.2 percent in FY2022, well above FY2021's rate of 2.8 percent. Fringe benefits, the third most heavily weighted component, rose in FY2022, but at a more moderate rate compared with FY2021: 2.6 percent versus the previous year's 4.1 percent. The fourth most heavily weighted component, administrative salaries, rose by 2.6 percent in FY2022 compared with FY2021's pace of 1.6 percent. Service employee costs rose at twice the rate recorded for FY2021, higher by 8.6 percent against the year-earlier 4.3 percent. Costs for miscellaneous services increased at a 4.3 percent rate compared with last year's 2.0 percent.

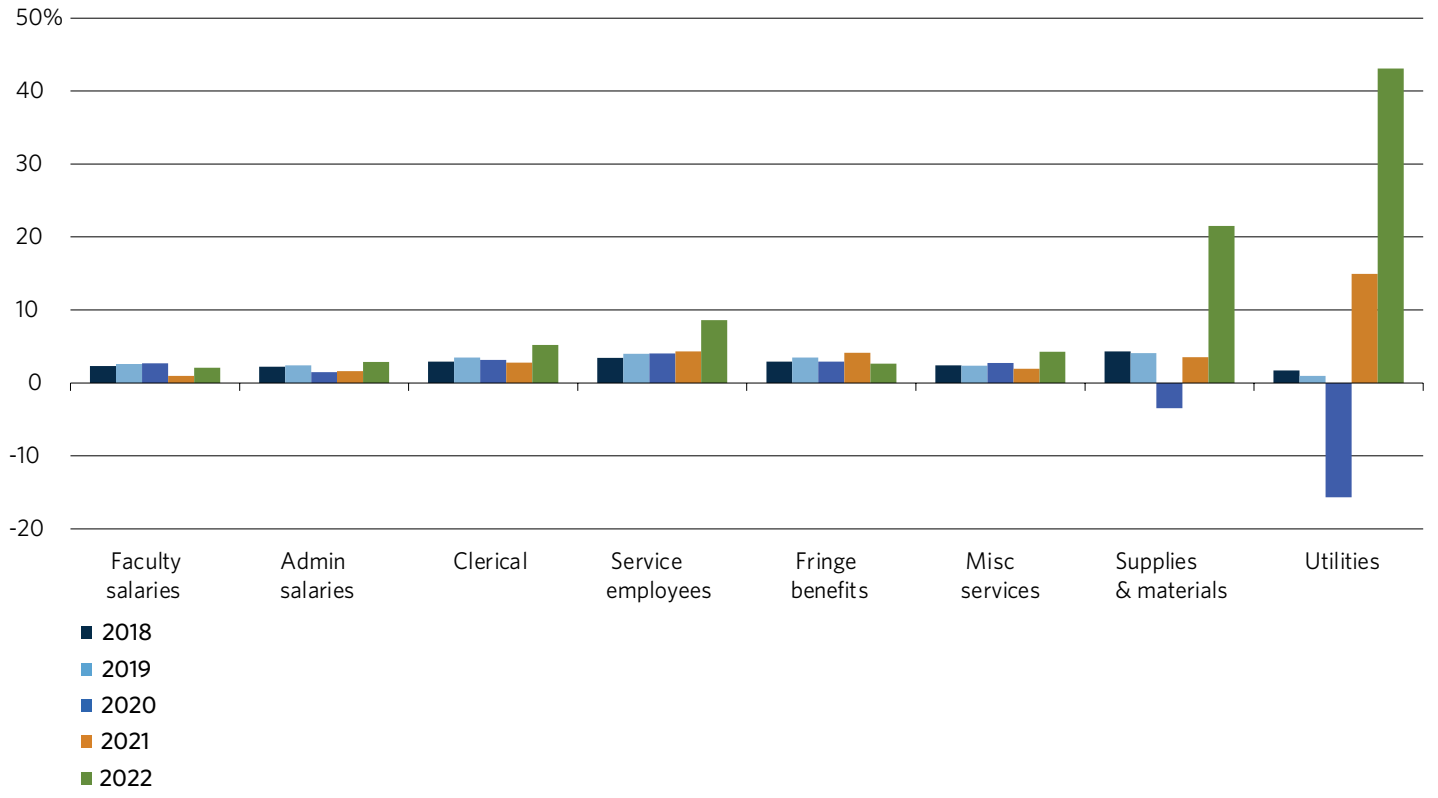
5-Year Changes in Cost Factors: Figure 3 Analysis

Figure 3 is a graphical representation of the changes in the eight cost factors from FY2018 to FY2022. Six cost factors were reasonably stable over the period, rising consistently but not dramatically until, that is, FY2022 when service employee and clerical costs rose significantly. The two remaining cost factors reflect considerable volatility. As mentioned, the most dramatic year-over-year changes occurred in utilities, which deflated 15.7 percent in FY2020 before inflating 15.0 percent in FY2021, then soaring 43.1 percent in FY2022—by far the single greatest price increase for any component over the five-year period. Yet, this category was close to flat in FY2019 and FY2018 (increases of 0.9 percent and 1.7 percent, respectively). In summary, since the beginning of the five-year period in FY2018 prices for this component rose or fell at double-digit rates in three of the five years. Turning to supplies and materials, prices fell once in the past five years and, until FY2022, annual price increases during that period were in the lower single-digit range. For this category, as well as for utilities, the FY2022 increases were the highest since FY2001—the earliest date for which records of these two market basket items are available.

FIGURE 3

ANNUAL PERCENTAGE CHANGES IN THE 8 HEPI COST FACTORS

Fiscal Years 2018 – 2022



HEPI for FY2022 versus a 5-Year Average: Figure 4 Analysis

Figure 4 shows a longer-term analysis of HEPI's components, comparing the reported rates for FY2022 against their historical five-year averages. Of the eight cost factors, six were above their five-year average in FY2022, one was level and one was lower.

- Of the four most heavily weighted HEPI components, cost increases in FY2022 were above their five-year average in two, level in one and lower in one. Costs were level for faculty salaries (a 2.1 percent increase for both time periods) and lower for fringe benefits (a 2.6 percent increase in FY2022 versus a five-year average of 3.2 percent). Administrative salaries were higher in FY2022 (2.9 percent versus 2.1 percent) as were clerical costs (5.2 percent versus 3.5 percent).

- As was true for the previous two years, in FY2022 the greatest deviation from the five-year average was in the utilities component, which rose 43.1 percent compared with its five-year average of 9.0 percent. The other significant deviation was found in supplies and materials, which rose by 21.5 percent in FY2022 versus its 6.0 percent five-year average.

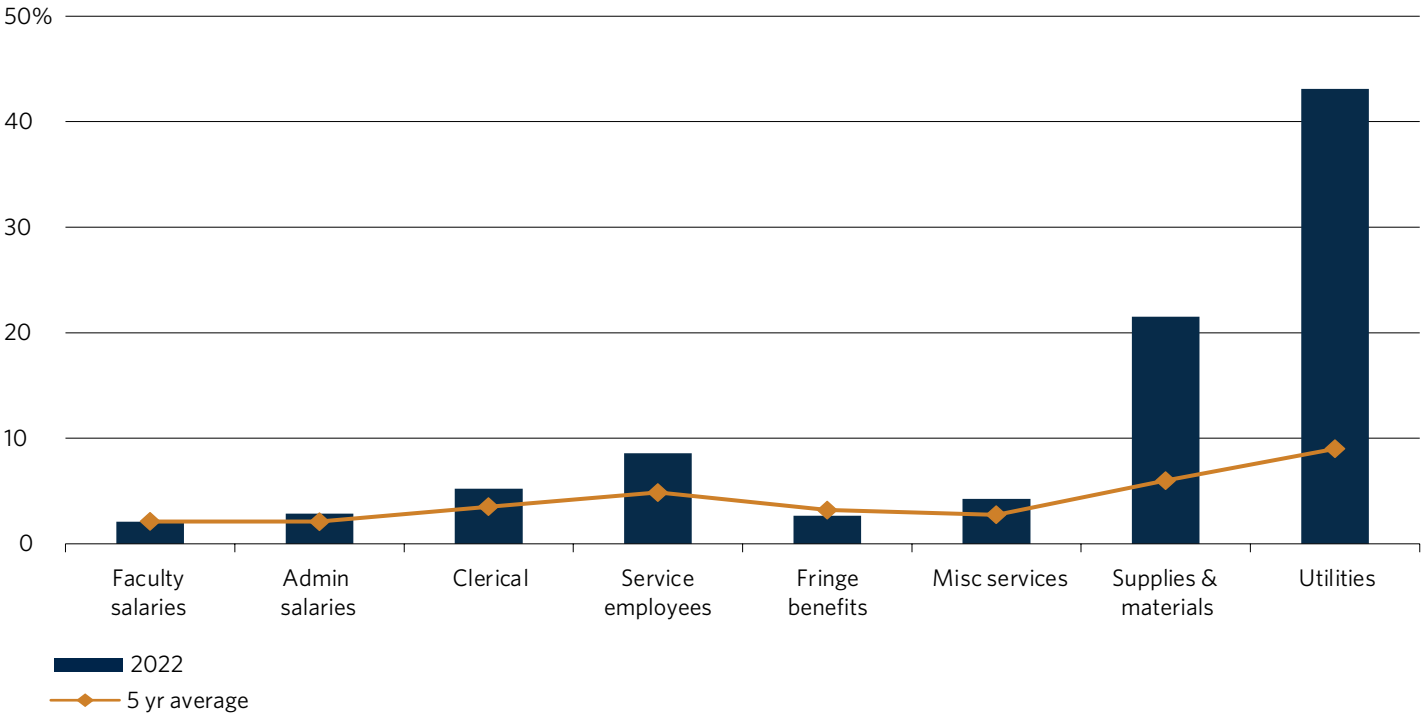
- Service employee costs also showed a sharp increase in FY2022, rising to an annual rate of 8.6 percent versus a five-year average of 4.9 percent. The yearly increase was the highest in more than 20 years.

- Miscellaneous services increased by 4.3 percent versus a five-year average of 2.7 percent. Last year this category showed the lowest rate of increase, rising 2.0 percent in FY2021 versus a five-year average of 2.2 percent.

- Last year's 1.0 percent increase in faculty salaries was the lowest since FY2002, while the 1.6 percent increase in administrative salaries has only shown smaller increases twice in the period since then.

FIGURE 4

ANNUAL PERCENTAGE CHANGES IN THE 8 HEPI COST FACTORS VS. 5-YEAR AVERAGE



Looking at five-year trends and ranking cost categories beginning with the highest rate of average annual increases, utilities, supplies and materials, and service employee costs clearly ranked numbers one, two and three. Two categories, clerical costs and miscellaneous services, ranked in the mid-range at numbers four and five. The final three categories were bunched in a range of five-year average annual cost increases between 2.0 and 3.0 percent. These were administrative salaries, fringe benefits and faculty salaries. As noted, the only cost component that increased a lower rate in FY2022 compared to its five-year average was fringe benefits. Faculty salaries in FY2022 rose at the same rate as their five-year average. Prices in the other six components increased at a faster rate in FY2022 than their five-year average.

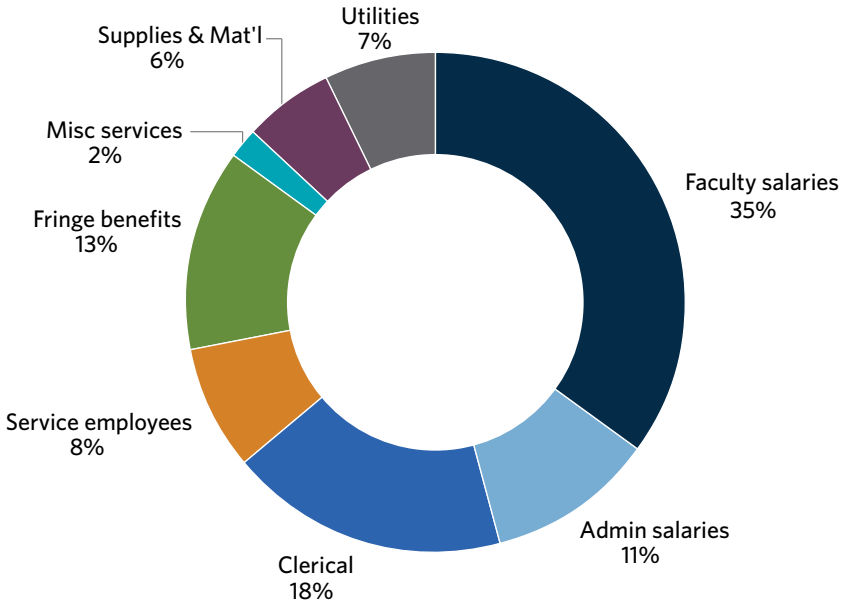
Sensitivity Analysis of the 8 HEPI Regression Components: Figure 5 Analysis

Figure 5 shows how the HEPI regression equation assigns a different weighting to each cost factor.

- Owing to the large variance in these weightings (a difference of 33 percentage points between the high and low), an increase in one component may influence the final HEPI calculation more than an identical increase in another.
- Those components that are most heavily weighted are faculty salaries, clerical costs and fringe benefits.
- Utilities represent the third lowest weighting and supplies and materials the second lowest. The low weightings of these two components have served to mitigate the effect of the high volatility that has characterized these cost factors in recent years.

FIGURE 5

HEPI COST FACTOR WEIGHTINGS



Sensitivity of HEPI to a 5 Percent Increase in Faculty Salaries or Miscellaneous Services: Figure 6 Analysis

The sensitivity analysis in Figure 6 shows that a 5 percent increase in faculty salaries, the largest component of HEPI, from an index value of 362.1 to 380.2, has the effect of increasing HEPI by 180 basis points, keeping all other components constant. However, a similar 5 percent increase in the index for miscellaneous services, the smallest component, has the effect of adding only 10 basis points to HEPI.

FIGURE 6

SENSITIVITY OF HEPI TO A 5 PERCENT INCREASE IN FACULTY SALARIES OR MISCELLANEOUS SERVICES

	Total	Faculty salaries	Admin salaries	Clerical	Service employees	Fringe benefits	Misc. services	Supplies & mat'l	Utilities
Current									
Index Value	381.1	362.1	449.8	353.2	332.9	587.3	332.9	237.5	239.0
Yearly % Change	5.2%	2.1%	2.9%	5.2%	8.6%	2.6%	4.3%	21.5%	43.1%
Scenario: Faculty Salaries up 5%									
Index Value	387.5	380.2	449.8	353.2	332.9	587.3	332.9	237.5	239.0
Yearly % Change	7.0%	7.2%	2.9%	5.2%	8.6%	2.6%	4.3%	21.5%	43.1%
△	**180 b.p.**	**510 b.p.**							
Scenario: Misc. Services up 5%									
Index Value	381.5	362.1	449.8	353.2	332.9	587.3	349.6	237.5	239.0
Yearly % Change	5.3%	2.1%	2.9%	5.2%	8.6%	2.6%	9.5%	21.5%	43.1%
△	**10 b.p.**						**520 b.p.**		

Higher Education Price Index for Different Types of Educational Institutions

Beginning in FY2007 Commonfund expanded the calculations of HEPI for eight types of educational institutions:

- Public institutions as a whole
- Public doctoral degree-granting institutions
- Public master's degree-granting institutions
- Public two-year colleges
- Private institutions as a whole
- Private doctoral degree-granting institutions
- Private masters' degree-granting institutions
- Private baccalaureate institutions

These indices were calculated using the appropriate faculty salary and fringe benefit information for each type of institution, while holding the other six HEPI cost factors constant. Table C on page 13 shows HEPI for FY2013 – 2022 for these institution types.

For FY2022, HEPI data showed that costs for public and private institutions rose at relatively similar rates: an increase of 5.1 percent for public institutions and 5.4 percent for private institutions. In contrast, last year's HEPI data showed a sharp divergence between cost increases for public and private institutions. For public institutions, costs rose 3.4 percent while for private institutions costs decreased by 0.7 percent.

For private institutions the 5.4 percent increase in costs for FY2022 was the second highest of the past decade, exceeded only by 8.0 percent in FY2018. Outside of these two years, there were three years when costs inflated between 3.0 and 4.0 percent and three other years that were in the 2.0 – 3.0 percent range. In the remaining two years, costs declined: -2.3 percent in FY2016 and -0.7 percent in FY2021.

TABLE C

HIGHER EDUCATION PRICE INDEX BY MAJOR CATEGORIES OF PUBLIC AND PRIVATE EDUCATIONAL INSTITUTIONS

Fiscal Years 2013 - 2022

		NATIONAL	PUBLIC INSTITUTIONS				PRIVATE INSTITUTIONS			
	Fiscal year	Total	Total	Doctoral	Master's	2 Year College	Total	Doctoral	Master's	Baccalau-reate
Index Value	2013	297.8	293.2	325.5	294.2	286.3	312.1	354.6	312.6	313.1
	2014	306.7	302.5	334.3	301.1	295.9	322.1	366.3	319.9	323.7
	2015	312.9	308.3	340.1	306.2	300.9	328.7	374.6	321.8	328.4
	2016	317.7	311.7	347.8	313.8	312.3	321.3	375.7	321.3	318.3
	2017	327.4	322.9	360.4	325.0	319.5	332.8	389.1	337.1	330.4
	2018	336.1	332.0	371.3	334.3	334.1	359.3	405.1	353.2	368.2
	2019	346.0	341.0	381.9	342.5	341.4	367.6	417.9	351.4	374.2
	2020	352.7	346.1	387.6	344.3	340.9	380.0	427.4	360.8	376.8
	2021	362.3	357.7	400.4	359.8	345.5	377.4	431.4	360.1	373.4
	2022	381.1	375.9	419.0	378.1	362.2	397.9	454.2	380.4	394.7
Yearly % Change	2013	1.6%	1.0%	2.4%	0.7%	-1.6%	2.4%	2.1%	2.3%	2.2%
	2014	3.0%	3.2%	2.7%	2.3%	3.4%	3.2%	3.3%	2.3%	3.4%
	2015	2.0%	1.9%	1.7%	1.7%	1.7%	2.1%	2.3%	0.6%	1.4%
	2016	1.5%	1.1%	2.3%	2.5%	3.8%	-2.3%	0.3%	-0.2%	-3.1%
	2017	3.0%	3.6%	3.6%	3.6%	2.3%	3.6%	3.6%	4.9%	3.8%
	2018	2.6%	2.8%	3.0%	2.8%	4.6%	8.0%	4.1%	4.8%	11.4%
	2019	3.0%	2.7%	2.9%	2.5%	2.2%	2.3%	3.2%	-0.5%	1.6%
	2020	1.9%	1.5%	1.5%	0.6%	-0.1%	3.4%	2.3%	2.7%	0.7%
	2021	2.7%	3.4%	3.3%	4.5%	1.3%	-0.7%	0.9%	-0.2%	-0.9%
	2022	5.2%	5.1%	4.7%	5.1%	4.8%	5.4%	5.3%	5.6%	5.7%

Faculty Salary Differences by Institution Type

As shown in Figures 7 and 8 on the following page, faculty salaries—the most heavily weighted component of HEPI—saw an increase of 1.8 percent at public institutions and 2.2 percent at private institutions. By comparison, in FY2021 faculty salaries saw an increase of 1.0 percent at public institutions but no change (0.0 percent) at private institutions.

Breaking down the data, among public institutions faculty salaries rose 1.9 percent at doctoral institutions and 1.7 percent at master's degree-granting institutions. Salaries rose just 0.1 percent public two-year colleges. Faculty salaries at private doctoral institutions increased 3.8 percent, well ahead of 0.5 percent at master's degree-granting institutions and 0.7 percent at baccalaureate institutions.

FIGURE 7

FY2022 FACULTY SALARIES
PUBLIC INSTITUTIONS

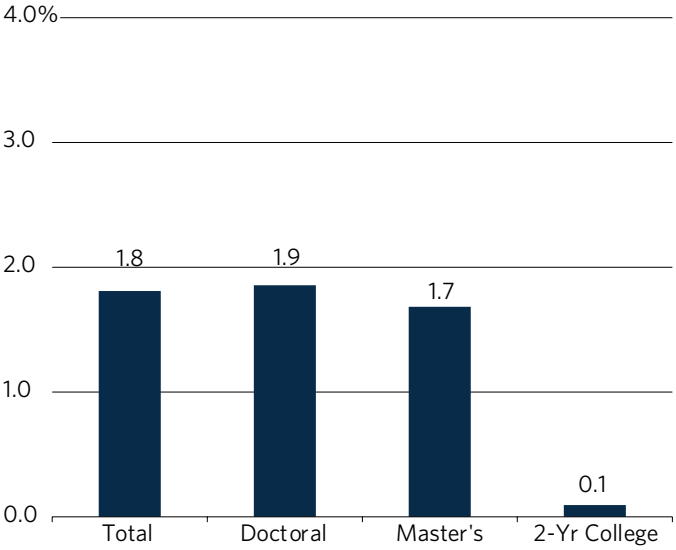
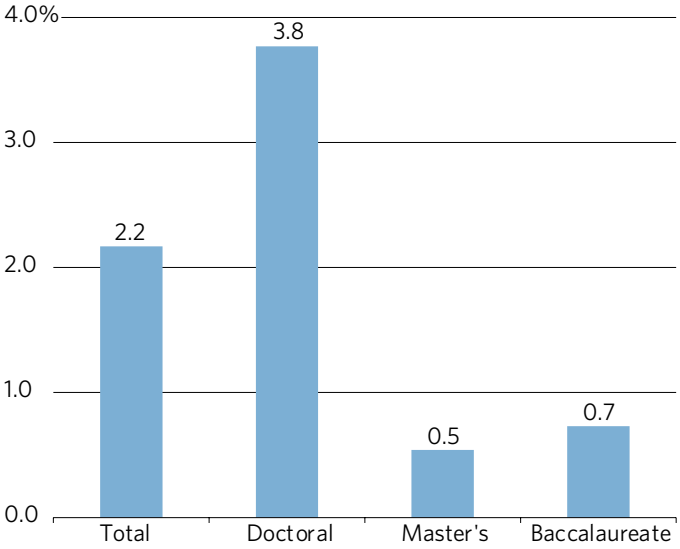


FIGURE 8

FY2022 FACULTY SALARIES
PRIVATE INSTITUTIONS



On average, fringe benefit costs rose 2.3 percent at public institutions and 4.1 percent at private institutions in FY2022. Comparing year-over-year changes, fringe benefit costs rose 7.3 percent for public institutions in FY2021 and but declined for private institutions of all three types.

Segmenting the data, among public institutions, fringe benefit costs rose the most, 3.6 percent, at two-year colleges followed by 2.5 percent at master's degree-granting institutions and 1.8 percent at doctoral institutions. Fringe benefit costs increased the most for private institutions: a 7.2 percent increase at baccalaureate institutions and 6.9 percent at master's degree-granting institutions. The increase was 2.5 percent at doctoral institutions.

FIGURE 9

FY2022 FRINGE BENEFIT COSTS
PUBLIC INSTITUTIONS

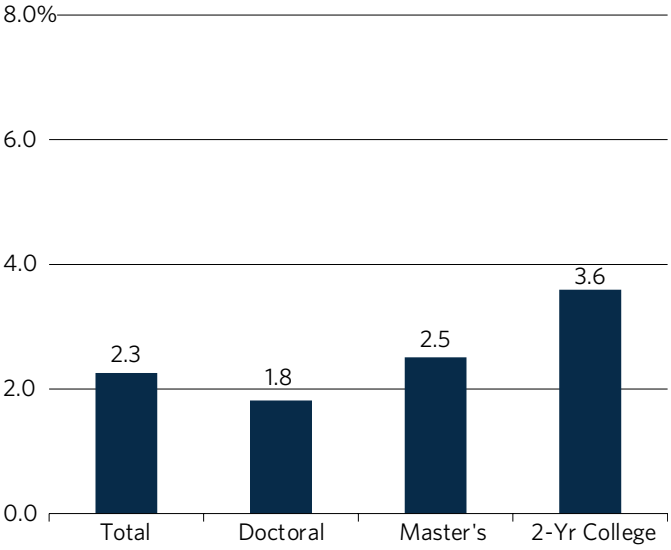
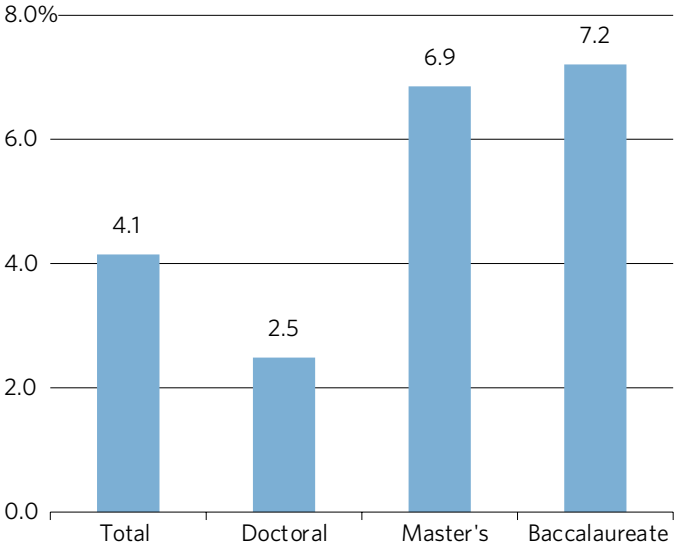


FIGURE 10

FY2022 FRINGE BENEFIT COSTS
PRIVATE INSTITUTIONS

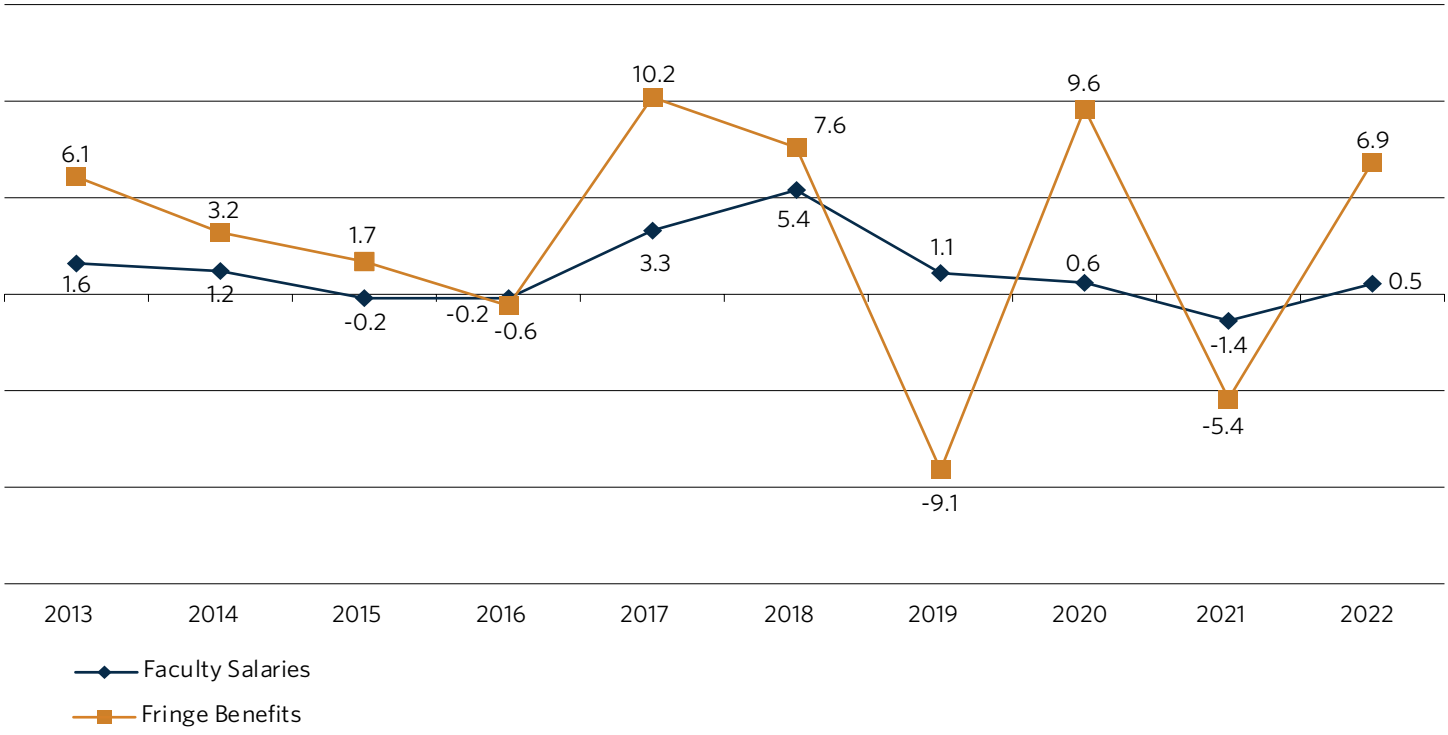


As shown in Figure 11, faculty salaries at private master's degree-granting institutions increased 0.5 percent in FY2022 following a decrease of 1.4 percent in FY2021 and a 0.6 percent increase in FY2020. Fringe benefit costs, however, rose by 6.9 percent in FY2022 after a 5.4 percent decrease in FY2021. As Figure 11 also shows, fringe benefit costs have been highly volatile in recent years as FY2021's 5.4 percent decrease was preceded by a 9.6 percent increase in FY2020 and a 9.1 percent decrease in FY2019. This volatility has been evident throughout the past decade, as the figure illustrates.

FIGURE 11

FY2022 FACULTY SALARIES AND FRINGE BENEFIT COSTS
PRIVATE MASTER'S DEGREE-GRANTING INSTITUTIONS

Numbers in percent



Higher Education Price Indices for Different Regions of the Country

Since FY2009, Commonfund has been providing calculations of HEPI for the nine standard divisions of the United States:

- New England — Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
- Middle Atlantic — New Jersey, New York, Pennsylvania
- East North Central — Illinois, Indiana, Michigan, Ohio, Wisconsin
- West North Central — Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota
- South Atlantic — Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, Puerto Rico, South Carolina, Virginia, West Virginia
- East South Central — Alabama, Kentucky, Mississippi, Tennessee
- West South Central — Arkansas, Louisiana, Oklahoma, Texas
- Mountain — Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming
- Pacific — Alaska, California, Guam, Hawaii, Oregon, Washington

These indices were calculated using the appropriate faculty salary and fringe benefit information for each region, while holding the other six HEPI cost factors constant. Table D on page 17, shows HEPI for FY2013 – 2022 for the nine regions.

TABLE D

HIGHER EDUCATION PRICE INDEX SUMMARIZED BY REGION

Fiscal years 2013-2022

	Fiscal Year	HEPI National	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Index Value	2013	297.8	307.4	306.0	294.9	299.2	285.7	295.5	301.0	298.4	316.3
	2014	306.7	314.2	307.2	302.1	308.5	300.1	307.4	314.0	307.2	323.7
	2015	312.9	320.6	310.1	308.1	314.3	304.9	312.5	319.6	316.2	331.8
	2016	317.7	326.5	316.5	314.1	319.4	312.6	313.9	327.9	322.9	329.5
	2017	327.4	334.6	324.1	320.4	325.3	323.6	322.1	333.5	327.9	350.3
	2018	336.1	343.5	333.6	323.6	335.3	333.2	331.6	345.6	335.7	363.7
	2019	346.0	350.2	342.7	338.3	341.4	341.3	343.5	351.6	342.9	373.7
	2020	352.7	360.2	344.7	343.1	353.9	350.3	352.7	359.8	350.5	383.4
	2021	362.3	366.1	354.5	348.2	358.5	357.7	357.6	366.2	354.6	403.8
	2022	381.1	388.0	373.9	361.1	378.9	378.4	375.7	384.8	372.1	422.7
Yearly % Change	2013	1.6%	3.0%	4.5%	2.0%	1.9%	0.2%	0.5%	0.3%	0.8%	1.9%
	2014	3.0%	2.2%	0.4%	2.4%	3.1%	5.1%	4.0%	4.3%	2.9%	2.3%
	2015	2.0%	2.0%	0.9%	2.0%	1.9%	1.6%	1.7%	1.8%	2.9%	2.5%
	2016	1.5%	1.9%	2.0%	1.9%	1.6%	2.5%	0.5%	2.6%	2.1%	-0.7%
	2017	3.0%	2.5%	2.4%	2.0%	1.8%	3.5%	2.6%	1.7%	1.6%	6.3%
	2018	2.6%	2.6%	2.9%	1.0%	3.1%	3.0%	2.9%	3.6%	2.4%	3.8%
	2019	3.0%	2.0%	2.7%	4.5%	1.8%	2.4%	3.6%	1.7%	2.1%	2.8%
	2020	1.9%	2.9%	0.6%	1.4%	3.6%	2.6%	2.7%	2.3%	2.2%	2.6%
	2021	2.7%	1.6%	2.8%	1.5%	1.3%	2.1%	1.4%	1.8%	1.2%	5.3%
	2022	5.2%	6.0%	5.5%	3.7%	5.7%	5.8%	5.1%	5.1%	4.9%	4.7%

Faculty Salary Differences by Region

Data in Figure 12 show that by region faculty salary increases in FY2022 ranged from a high of 3.2 percent in the New England region to low of 0.1 percent in the East South Central region. There were no decreases (unlike last year when there was a 2.5 percent decrease in the Mountain region).

FIGURE 12

FY2022 FACULTY SALARIES BY REGION

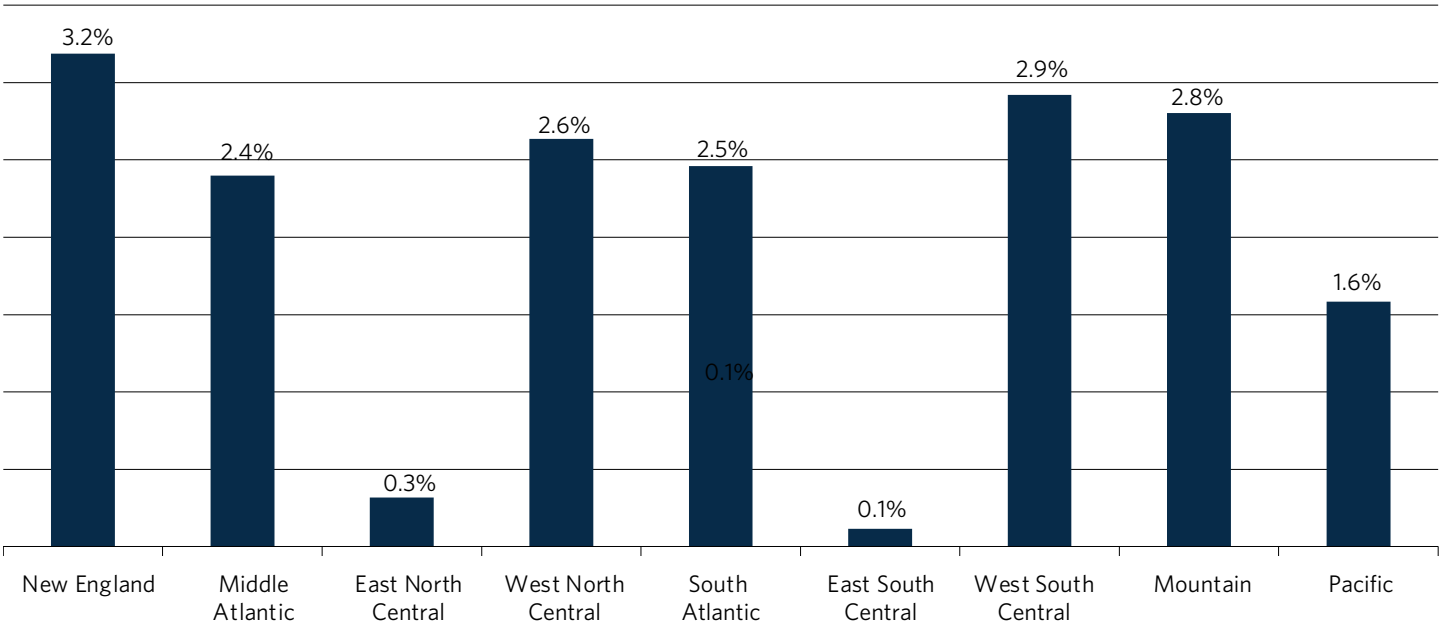
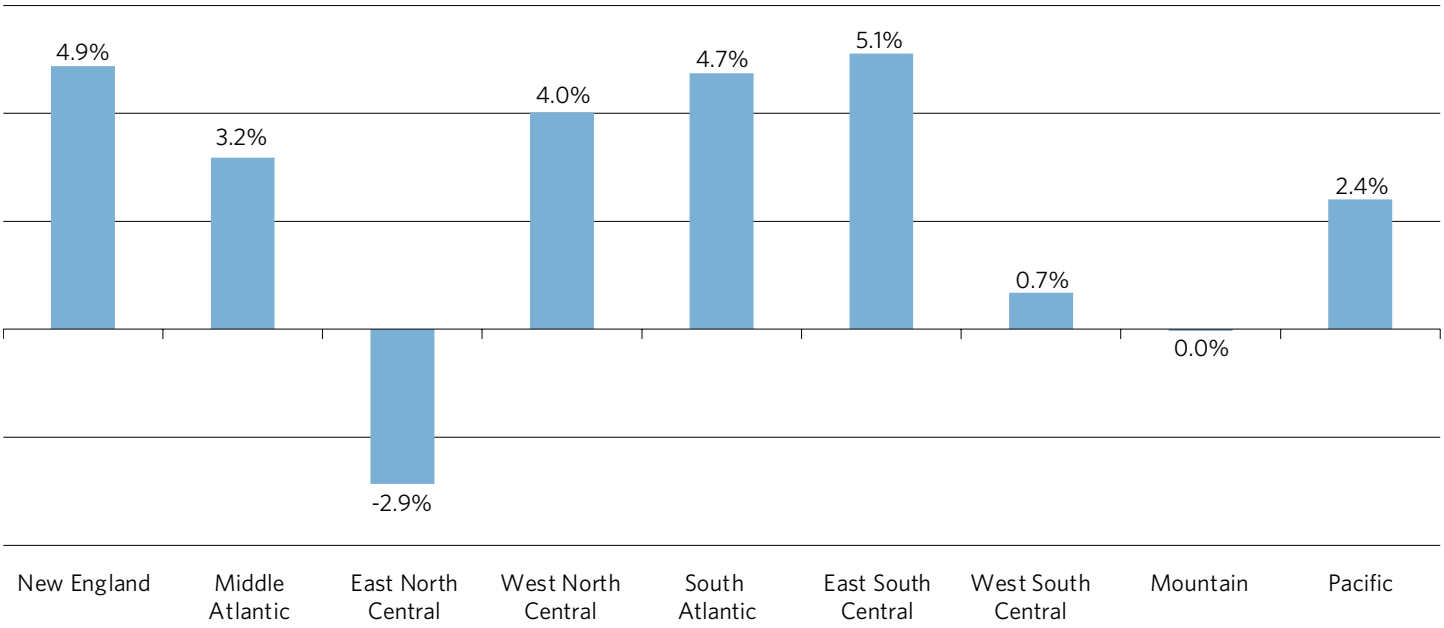


FIGURE 13

FY2022 FRINGE BENEFITS BY REGION



Fringe benefit costs varied widely by region in FY2022, rising the most, 5.1 percent, in the East South Central region but deflating -2.9 percent in the East North Central region. Costs in two other regions were unchanged in one and higher by just 0.7 percent in the other. In contrast, three regions showed increases in the 4.0 percent-plus range.

Limitations and Opportunities of HEPI by Institutional Type and Region

In providing HEPI figures and analysis by type of institution and geographical region, it is appropriate to bear in mind the limitations of the methodology employed while also recognizing the potential opportunities for users of these indices to improve their fit with their own institution.

As noted, the institutional and regional HEPI indices are derived by substituting appropriate data for faculty salaries and fringe benefits into the standard HEPI regression equation, while leaving the other six cost factors unchanged. These two components, which together account for nearly half of the factor weighting in the HEPI equation, are the only ones for which information by institutional type and region is available. Since the other six factors, representing over half the weighting, are not changed, the institutional and regional HEPI indices are of necessity approximations and should be used accordingly.

In deriving the institutional and regional indices, the standard HEPI equation's factor weightings are also left unchanged. This is of relatively little importance in the institutional HEPI, where each component includes schools throughout the nation; in the regional HEPI, however, the weightings are kept the same because there is no standard source of information to serve as a guide to how they might be appropriately adjusted for each region.

For example, in a region where weather patterns are comparatively moderate the weighting assigned to utilities may be too high, while in a region of severe weather it might be appropriate to increase it. Users of the regional HEPI who are confident of the proportional composition of their institution's budgets, as expressed in the eight cost factors, may want to adjust the relative weightings of the factors in order to produce a HEPI that is more appropriate for their own institution.

Purchasing Power and Salaries of Full-Time Professors

As part of the calculation of HEPI, Commonfund Institute also gathers information about the salaries of full-time professors at public and private institutions. As illustrated in Tables E and F, these salaries have been restated in constant dollar terms so that they reflect the impact of inflation as measured by CPI.

Table E, on page 21, shows that salaries of professors at public doctoral-level institutions have increased in constant terms over the last 55 years by $17,503, evidencing an increase in real purchasing power. This is, however, a measurable decline from the $23,560 increase in real purchasing power reported last year. For public comprehensive institutions, salaries in FY2022 contracted in constant terms by $5,522 after having been all but unchanged the previous year—an increase of just $95. For public two- year colleges FY2022 salaries increased in constant terms by $6,194 but this too was well below the $11,802 reported for FY2021.

Table F shows that at private colleges, salaries are ahead of those at public institutions and increased in absolute terms but have not kept pace with inflation this fiscal year. Salaries at doctoral-level institutions led the way in FY2022 with a real increase of $69,475. This is down, however, from $71,260 in constant 2021 dollars reported in last year's HEPI. Faculty salaries at comprehensive schools have increased by $16,608 in constant dollars, but that is well off last year's $22,702 in constant 2021 dollars. Salaries at general baccalaureate institutions have increased by $26,441 over the shorter 45-year period that they have been tracked. This compares with $32,210 in constant 2021 dollars reported a year ago.

Comparing public and private institutions, it is apparent that salaries for professors at public doctoral-level and comprehensive institutions have lagged those for professors at comparable private institutions. Measured in 1967 dollars when calculations began, full professors at private doctoral-level institutions earned $1,152 more than their counterparts at public doctoral-level institutions ($9,874 more in FY2022 dollars). While salary levels were many times higher by FY2022, the difference in absolute and 2022 dollars had expanded to $61,846. The history is somewhat different among comprehensive institutions: In this case, in 1967 dollars, full professors at public institutions earned $1,076 more ($9,223 more in FY2022 dollars). Now, however, salary levels have reversed and full professors at private comprehensive institutions earn more: $117,082 versus $104,175, or a gap of $12,907.

TABLE E

HIGHER EDUCATION FACULTY SALARIES IN CURRENT AND CONSTANT FY2022 DOLLARS

Illustrative data—Fiscal Years 1967 to 2022

Public Faculty Salaries

Full professor average 9 - 10 month salaries by type of institution

	Category I (Doctoral-Level)			Cat IIA (Comprehensive)			Cat III (Two-Year Colleges)		
Fiscal year	**Amount**	**Yearly %**	**Constant FY22 dollars**	**Amount**	**Yearly %**	**Constant FY22 dollars**	**Amount**	**Yearly %**	**Constant FY22 dollars**
1967	$15,273	----	$130,911	$12,798	----	$109,697	$9,927	----	$85,088
1968	$16,160	5.8%	$134,089	$13,747	7.4%	$114,067	$10,659	7.4%	$88,444
1969	$16,900	4.6%	$133,755	$14,550	5.8%	$115,156	$11,800	10.7%	$93,391
1970	$17,750	5.0%	$132,643	$15,400	5.8%	$115,082	$12,950	9.7%	$96,774
1971	$18,600	4.8%	$132,086	$16,350	6.2%	$116,108	$14,150	9.3%	$100,485
1972	$19,678	5.8%	$134,826	$17,313	5.9%	$118,622	$15,217	7.5%	$104,261
1973	$20,545	4.4%	$135,461	$18,446	6.5%	$121,621	$17,080	12.2%	$112,615
1974	$21,400	4.2%	$129,539	$19,600	6.3%	$118,643	$18,100	6.0%	$109,564
1975	$22,648	5.8%	$123,332	$20,840	6.3%	$113,486	$19,312	6.7%	$105,166
1976	$24,277	7.2%	$123,494	$22,067	5.9%	$112,252	$20,254	4.9%	$103,030
1977	$25,210	3.8%	$121,192	$23,190	5.1%	$111,481	$21,860	7.9%	$105,087
1978	$26,420	4.8%	$118,999	$24,290	4.7%	$109,406	$23,240	6.3%	$104,676
1979	$28,000	6.0%	$115,329	$25,030	3.0%	$103,096	$23,420	0.8%	$96,464
1980	$30,120	7.6%	$109,440	$27,200	8.7%	$98,831	$25,190	7.6%	$91,527
1981	$32,850	9.1%	$107,020	$29,580	8.8%	$96,367	$26,200	4.0%	$85,355
1982	$35,680	8.6%	$106,970	$31,700	7.2%	$95,038	$27,720	5.8%	$83,106
1983	$38,180	7.0%	$109,707	$33,490	5.6%	$96,231	$30,480	10.0%	$87,582
1984	$39,770	4.2%	$110,247	$34,560	3.2%	$95,804	$31,510	3.4%	$87,349
1985	$42,560	7.0%	$113,538	$37,090	7.3%	$98,946	$33,230	5.5%	$88,648
1986	$45,560	7.0%	$118,122	$39,720	7.1%	$102,981	$34,870	4.9%	$90,407
1987	$48,740	7.0%	$123,610	$42,290	6.5%	$107,252	$37,460	7.4%	$95,003
1988	$51,080	4.8%	$124,385	$46,060	8.9%	$112,160	$38,230	2.1%	$93,094
1989	$54,240	6.2%	$126,197	$46,920	1.9%	$109,166	$41,200	7.8%	$95,858
1990	$57,520	6.0%	$127,727	$49,610	5.7%	$110,162	$43,000	4.4%	$95,484
1991	$60,450	5.1%	$127,344	$52,190	5.2%	$109,944	$45,050	4.8%	$94,903
1992	$61,950	2.5%	$126,426	$53,750	3.0%	$109,692	$47,700	5.9%	$97,345
1993	$63,250	2.1%	$125,168	$54,240	0.9%	$107,337	$47,820	0.3%	$94,633
1994	$64,860	2.5%	$125,248	$55,690	2.7%	$107,540	$49,120	2.7%	$94,853
1995	$67,560	4.2%	$126,715	$57,090	2.5%	$107,078	$51,490	4.8%	$96,574
1996	$69,750	3.2%	$127,332	$58,520	2.5%	$106,831	$51,560	0.1%	$94,125
1997	$72,220	3.5%	$128,176	$60,481	3.4%	$107,342	$52,752	2.3%	$93,625
1998	$75,154	4.1%	$131,037	$61,839	2.2%	$107,821	$53,024	0.5%	$92,451
1999	$79,284	5.5%	$135,928	$63,817	3.2%	$109,411	$55,326	4.3%	$94,853
2000	$82,535	4.1%	$137,482	$66,657	4.5%	$111,034	$57,089	3.2%	$95,096
2001	$84,007	1.8%	$135,306	$68,828	3.3%	$110,858	$57,932	1.5%	$93,309
2002	$89,631	6.7%	$141,860	$72,770	5.7%	$115,174	$60,997	5.3%	$96,540
2003	$92,387	3.1%	$143,077	$74,545	2.4%	$115,445	$65,730	7.8%	$101,794
2004	$94,606	2.4%	$143,377	$74,872	0.4%	$113,470	$64,439	-2.0%	$97,658
2005	$97,948	3.5%	$144,105	$76,665	2.4%	$112,793	$66,405	3.1%	$97,698
2006	$101,620	3.7%	$144,023	$78,884	2.9%	$111,800	$66,011	-0.6%	$93,556
2007	$106,495	4.8%	$147,127	$81,855	3.8%	$113,086	$68,424	3.7%	$94,531
2008	$111,807	5.0%	$148,947	$85,642	4.6%	$114,091	$71,936	5.1%	$95,832
2009	$115,509	3.3%	$151,760	$88,357	3.2%	$116,087	$74,933	4.2%	$98,450
2010	$116,750	1.1%	$151,934	$89,648	1.5%	$116,665	$74,103	-1.1%	$96,435
2011	$118,054	1.1%	$150,593	$89,808	0.2%	$114,562	$74,092	0.0%	$94,514
2012	$120,955	2.5%	$149,902	$88,940	-1.0%	$110,225	$73,534	-0.8%	$91,132
2013	$123,393	2.0%	$150,420	$88,988	0.1%	$108,479	$74,845	1.8%	$91,238
2014	$126,981	2.9%	$152,413	$90,517	1.7%	$108,646	$77,671	3.8%	$93,227
2015	$130,039	2.4%	$154,955	$91,389	1.0%	$108,900	$79,234	2.0%	$94,416
2016	$133,552	2.7%	$158,075	$95,433	4.4%	$112,956	$84,848	7.1%	$100,428
2017	$134,562	0.8%	$156,394	$97,406	2.1%	$113,209	$84,871	0.0%	$98,641
2018	$138,377	2.8%	$157,282	$99,307	2.0%	$112,874	$88,168	3.9%	$100,214
2019	$141,327	2.1%	$157,374	$100,775	1.5%	$112,217	$91,418	3.7%	$101,798
2020	$145,768	3.1%	$159,819	$102,218	1.4%	$112,071	$91,949	0.6%	$100,812
2021	$145,710	0.0%	$156,161	$102,450	0.2%	$109,798	$91,196	-0.8%	$97,737
2022	$148,414	1.9%	$148,414	$104,175	1.7%	$104,175	$91,282	0.1%	$91,282

**Constant dollars based on inflation measured by the Consumer Price Index.*
Sources: FY1967 - FY1976, NCES; FY1977 - present, AAUP

TABLE F

HIGHER EDUCATION FACULTY SALARIES IN CURRENT AND CONSTANT FY2022 DOLLARS

Illustrative data—Fiscal Years 1967 to 2022

Private Faculty Salaries
Full professor average 9 - 10 month salaries by type of institution

	Category I (Doctoral-Level)			Cat IIA (Comprehensive)			Cat III (Two-Year Colleges)†		
Fiscal year	Amount	Yearly %	Constant FY22 dollars	Amount	Yearly %	Constant FY22 dollars	Amount	Yearly %	Constant FY22 dollars
1967	$16,425	----	$140,785	$11,722	----	$100,474			
1968	$17,057	3.8%	$141,532	$12,572	7.3%	$104,317			
1969	$18,050	5.8%	$142,856	$13,250	5.4%	$104,867			
1970	$18,950	5.0%	$141,611	$14,100	6.4%	$105,367			
1971	$19,800	4.5%	$140,608	$14,950	6.0%	$106,166			
1972	$20,775	4.9%	$142,343	$15,899	6.3%	$108,934			
1973	$21,507	3.5%	$141,804	$16,501	3.8%	$108,797			
1974	$22,600	5.1%	$136,803	$17,200	4.2%	$104,116			
1975	$23,832	5.5%	$129,780	$18,047	4.9%	$98,277			
1976	$25,368	6.4%	$129,044	$19,153	6.1%	$97,429			
1977	$27,810	9.6%	$133,691	$22,020	15.0%	$105,856	$20,780		$99,895
1978	$28,880	3.8%	$130,080	$23,380	6.2%	$105,307	$21,790	4.9%	$98,145
1979	$31,090	7.7%	$128,056	$24,830	6.2%	$102,272	$23,230	6.6%	$95,682
1980	$33,400	7.4%	$121,358	$26,160	5.4%	$95,052	$24,740	6.5%	$89,892
1981	$36,000	7.8%	$117,282	$28,710	9.7%	$93,533	$27,030	9.3%	$88,059
1982	$40,220	11.7%	$120,581	$31,530	9.8%	$94,528	$29,720	10.0%	$89,102
1983	$43,950	9.3%	$126,286	$33,750	7.0%	$96,978	$32,410	9.1%	$93,127
1984	$47,070	7.1%	$130,484	$36,000	6.7%	$99,796	$34,140	5.3%	$94,640
1985	$49,880	6.0%	$133,066	$37,980	5.5%	$101,320	$36,500	6.9%	$97,372
1986	$53,190	6.6%	$137,904	$40,170	5.8%	$104,148	$38,200	4.7%	$99,040
1987	$56,900	7.0%	$144,305	$42,680	6.2%	$108,241	$40,460	5.9%	$102,611
1988	$59,850	5.2%	$145,740	$44,010	3.1%	$107,168	$42,540	5.1%	$103,589
1989	$64,290	7.4%	$149,580	$47,010	6.8%	$109,376	$44,770	5.2%	$104,164
1990	$68,360	6.3%	$151,798	$51,000	8.5%	$113,249	$46,830	4.6%	$103,989
1991	$72,950	6.7%	$153,677	$52,820	3.6%	$111,271	$49,610	5.9%	$104,509
1992	$76,890	5.4%	$156,915	$54,980	4.1%	$112,202	$52,230	5.3%	$106,590
1993	$80,280	4.4%	$158,869	$57,060	3.8%	$112,918	$54,620	4.6%	$108,089
1994	$82,520	2.8%	$159,351	$59,610	4.5%	$115,110	$56,780	4.0%	$109,645
1995	$84,790	2.8%	$159,032	$60,830	2.0%	$114,092	$58,040	2.2%	$108,859
1996	$88,050	3.8%	$160,739	$63,430	4.3%	$115,794	$59,830	3.1%	$109,222
1997	$92,112	4.6%	$163,481	$64,468	1.6%	$114,418	$62,047	3.7%	$110,121
1998	$95,023	3.2%	$165,680	$67,282	4.4%	$117,311	$64,784	4.4%	$112,956
1999	$98,606	3.8%	$169,055	$69,509	3.3%	$119,169	$67,180	3.7%	$115,176
2000	$103,761	5.2%	$172,839	$71,547	2.9%	$119,179	$70,528	5.0%	$117,482
2001	$107,633	3.7%	$173,360	$75,143	5.0%	$121,030	$74,031	5.0%	$119,238
2002	$112,534	4.6%	$178,108	$77,310	2.9%	$122,359	$76,692	3.6%	$121,381
2003	$118,269	5.1%	$183,159	$80,011	3.5%	$123,910	$79,928	4.2%	$123,782
2004	$122,158	3.3%	$185,133	$81,570	1.9%	$123,621	$82,344	3.0%	$124,794
2005	$127,214	4.1%	$187,163	$83,986	3.0%	$123,564	$85,575	3.9%	$125,902
2006	$131,292	3.2%	$186,076	$88,800	5.7%	$125,854	$87,779	2.6%	$124,407
2007	$136,689	4.1%	$188,842	$91,197	2.7%	$125,993	$90,353	2.9%	$124,827
2008	$144,428	5.7%	$192,404	$95,114	4.3%	$126,709	$94,139	4.2%	$125,410
2009	$151,403	4.8%	$198,919	$99,555	4.7%	$130,799	$98,808	5.0%	$129,818
2010	$153,332	1.3%	$199,541	$99,963	0.4%	$130,088	$98,098	-0.7%	$127,661
2011	$157,282	2.6%	$200,634	$101,290	1.3%	$129,208	$99,976	1.9%	$127,532
2012	$162,561	3.4%	$201,465	$103,094	1.8%	$127,766	$101,568	1.6%	$125,875
2013	$167,118	2.8%	$203,722	$104,186	1.1%	$127,006	$104,335	2.7%	$127,187
2014	$173,890	4.1%	$208,717	$107,082	2.8%	$128,529	$106,641	2.2%	$127,999
2015	$177,600	2.1%	$211,629	§	§	$127,334	$108,741	2.0%	$129,576
2016	$177,513	0.0%	$210,108	§	§	§	§	§	§
2017	$181,416	2.2%	$210,849	§	§	§	§	§	§
2018	$189,889	4.7%	$215,832	§	§	§	§	§	§
2019	$195,995	3.2%	$218,249	$117,355	1.1%	$130,680	$125,025	1.8%	$139,221
2020	$203,221	3.7%	$222,810	$118,076	0.6%	$129,458	$127,137	1.7%	$139,392
2021	$202,623	-0.3%	$217,156	$116,452	-1.4%	$124,805	$125,420	-1.4%	$134,416
2022	$210,260	3.8%	$210,260	$117,082	0.5%	$117,082	$126,336	0.7%	$126,336

**Constant dollars based on inflation measured by the Consumer Price Index.*
†Data collection by AAUP did not begin until FY1977 for this category.
§Due to a change in the methodology used by AAUP there was a discontinuity and these data cannot be cited reliably.
Sources: FY1967 – FY1976, NCES; FY1977 – present, AAUP

The Design of HEPI

The Higher Education Price Index (HEPI) measures price levels from a designated reference year in which budget weights are assigned. This base year is FY1983 and is assigned a price value of 100.0 for index compilation.[1] Comparing one year's index value with that of another year reflects relative change. An index value of 115.0, for example, represents a 15 percent price increase over 1983 values. This change can also be expressed in monetary terms so that the price of $100 worth of goods and services purchased in 1983 in this example would have risen to $115. Movements of the index from one year to another are usually expressed as percent changes by dividing a later year's value by that of any earlier year and subtracting 1.00. Thus, an increase in index values from 125.6 in 1987 to 134.4 in 1988 would be a yearly increase of 134.4/125.6 = 1.07 minus 1.00, or 7 percent. The HEPI in this study represents fiscal year (July 1 to June 30) average values. Values are compiled by computer and reported to the nearest tenth, which properly suggests the degree of accuracy involved.

Since FY2002 the Higher Education Price Index (HEPI) has been based on a regression formula. The eight regression components employed represent 79.6 percent of the HEPI weighted whole in 1990. The regression-based index values are essentially equal to those resulting from complete data. The R-square value of the regression is .999997809 based on 41 observations. Regression-calculated HEPI values are not likely to vary from fully compiled values by more than 0.1 parts out of 200.0 or ±0.05 percent. The regression analysis is shown below the table.

Price Index Theory and Design

A price index measures the effects of price change and price change only, as reflected by differences in the overall price level of a fixed group of items. The procedure in calculating the index is to measure the price level of purchased items each year, comparing the aggregate amount paid to that of the base period. The amount and quality of the selected commodities that make up the market basket being indexed must remain constant so that only the effects of price changes are reflected. The quantities represent not only annual consumption of the specific sample items actually priced by the index, but also consumption of related items for which prices are not obtained, so that the total cost of the market basket represents total spending for goods and services. Under these restrictive conditions, the change in price index values from year to year may be interpreted as the change in dollars required to offset the effects of inflation in buying the same kinds and amounts of goods and services previously purchased.

What makes a price index so valuable is that by reporting only price increases, without quality or quantity changes, the series documents the additional revenues required for continuation of "business as usual." Few financial supporters can deny that funding should at least maintain the status quo, if not improve it. Thus, price indices reliably report increased funding requirements that can be defended as essential if the same services are to be maintained. If quality changes were to be included, then the force of the argument would be lost, since justification of the added costs to improve operations is seldom obvious.

To achieve its intended purpose of reporting only price changes, a price index attempts to hold constant all other factors. A persistent and nearly irresolvable problem in this regard is eliminating the effect on prices of quality changes in purchased goods and services. When possible, a process of "linking" is used whereby the price of a new item is tied to the price of an old item by factoring out the price difference due to the change in quality involved. For personnel services, quality is fixed by specific job descriptions. Improvements in training and growth in individual talents brought to professional positions are considered constant in the sense that the present mix of new practitioners and senior personnel consistently represents the current average "state-of-the-art" in training and tenure.

A price index holds constant the mix

[1]Once compiled, index values can be converted to any year equal to 100 simply by dividing all indices in the series by the subject year's value. Thus, a price series with the base year 1983=100.0 and 2001=195.0 can be converted to a 2001=100 base year with 1983 then equal to 100.0/195.0=51.3. Converting index values to the current (2001) base year places all adjusted figures in the most recent (2001) dollars, which is a useful, recognized point of reference.

of purchases and, implicitly, the mix of their general use by a single type of consumer. This consistency is accomplished by designing and fix-weighting the index components according to the buyer's budget composition. The price series for each component must be set equal to 100 in the base year for which the budget weights are established. (FY1983 is the base year for the HEPI in this report.) Each year the price changes or price relatives (ratio of following to previous year price) for the various items being priced are weighted according to this base year expenditure pattern. The budget percentages (weights) represent the actual physical count mix of items involved. The index must not be re-weighted unless there is a substantial change in the consumer's buying pattern, which results in a different mix in the actual physical count of goods and services purchased.

To the extent that college faculty, university researchers and school teachers use different pedagogy, analyses, instruments, equipment and materials from year to year—or that institutions employ different mixes of personnel and capital to accomplish their objectives—the use of a fixed-weight index fails to price current actual practices. Also, a price index does not account for changes in the mix of students; for example, in the higher education community an increase over time in the proportion of handicapped or graduate students and the associated higher overall per-student costs would not be reflected in a price index series. Re-weighting the index is required when such changes result in large differences in the physical count proportions involved.

HEPI Uses

The most frequent use colleges and schools make of the HEPI is in projecting future budget increases required to preserve purchasing power. If next year's inflation affecting current operations is expected to be 6 percent, the budget must be increased by this amount if the same level and quality of goods and services are to be purchased.

The basic nature of price indices in reflecting yearly percent changes, however, cannot be projected in the traditional manner. Incremental changes seldom exhibit trends on which an extrapolation can be based. A two- or three-year average increase in annual percentage changes is not predictive that this phenomenon will continue into the future.

HEPI can also serve the following additional uses:

- Index values may be projected into the future to estimate the degree of change in expenditures that will be necessitated by anticipated price changes. If price increases are expected, the projected index value are used to inflate expected real resource needs to equal future funding requirements in actual dollars. Usually, these real resource needs are expressed in user unit terms, e.g., constant (inflation-adjusted) dollars per full-time-equivalent student. Budget requests based on a projected HEPI account only for inflation, i.e., provision of additional funding sufficient to purchase the same resources as acquired in the previous year. Additional funding for greater student load, program expansion, and improvements in quality would need to be separately requested and justified.

- Past expenditures may be compared with movements in a price index to ascertain whether spending has kept pace with price level changes. Adjusting expenditures by an appropriate price index to convert actual or current dollars to constant dollars permits comparison over time of the real purchasing power of funding levels.

- Similarly, dollar incomes may be deflated by a price index to identify trends in the level of real purchasing power of funding by various sources.

- Price indices may be used to provide automatic inflation adjustment of various administrative and contractual transactions. The price charged for a particular service, for example, may be tied to input prices or the cost of labor as measured by an appropriate price index.

What is the Higher Education Price Index (HEPI)

The Higher Education Price Index (HEPI) is an inflation index, released each July, that is designed specifically for higher education and is a more accurate indicator for colleges and universities than the Consumer Price Index (CPI).

From its inception in 1961, HEPI was produced by Research Associates of Washington, D.C. In 2005, Commonfund Institute assumed management of the Index. The Institute manages the database, publishes the Index, and makes available analytical and descriptive materials using HEPI data.

The HEPI report is published using the July HEPI figure, which may be subject to a further small adjustment when the last of the underlying data items are finalized in November.

Why is HEPI a better price inflation measure than CPI for colleges and universitities?

Compiled from data reported by governmental and industry sources, HEPI measures the average relative level in the prices of a fixed basket of goods and services purchased by colleges and universities each year through current fund educational and general expenditures, excluding research. HEPI includes eight categories that cover most of the current operational costs of colleges and universities and is an essential tool enabling schools to determine increases in funding necessary to maintain purchasing power and investment. The CPI, on the other hand, measures goods and services that consumers buy for day-to-day living.

What are the HEPI categories?

HEPI categories are based on price data for 45 budget components that all schools can report, organized in eight component sub-indexes: faculty salaries; administrative salaries; clerical salaries; service employee salaries; fringe benefits; miscellaneous services; supplies and materials; and utilities.

How do HEPI and the CPI differ?

The bulk of educational costs are related to personnel, mainly college faculty, whose salary increases are usually different from those measured in the CPI, which includes salaries of city wage earners and salaried clerical workers. As a case in point, from 1980 to 2000 the price of goods and services purchased by colleges and universities increased by 154 percent, while inflation measured by the CPI increased by 118 percent. Using HEPI, colleges and universities would have received 16.5 percent more support per student.

While HEPI is composed of the eight categories previously mentioned, the CPI includes: food and beverage; housing; apparel; transportation; medical care; recreation; education and communication; and other goods and services. All taxes directly associated with the purchase and use of the items are included in the index.

Another difference between the two indices is the treatment of changes in quality. HEPI is a straightforward measure of costs, whereas the CPI is a measure of "quality-adjusted prices." For example, assume that it costs $2,000 to replace an older computer that originally cost $1,500. The new computer, however, is twice as fast as the old one. HEPI would report that as a $500 price increase, while the CPI would report the new computer as a $500 price decrease due to the "quality adjustment."

15 Old Danbury Road
Wilton, CT 06897

Tel 888-TCF-MAIN
Tel 203-563-5000
www.commonfund.org

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Why is the CPI provided in the HEPI report different from the one(s) published by the bureau of labor statistics (BLS)?

The BLS updates CPI statistics monthly. They also provide a six- and 12-month average change; January-June, July-December and January-December. The CPI values reported on Commonfund's website for HEPI are based on fiscal year (July 1 through June 30) 12-month averages rather than the monthly (or point-to-point) CPI values usually reported by the BLS.

What is included in the annual HEPI update?

The HEPI Update contains a comprehensive analysis of the HEPI and its components for a given year, together with a sensitivity analysis and an overview of the effects of inflation on institutional funding and faculty salaries.

Does HEPI apply to all operational expenses?

No, but it covers a substantial portion of standard budget expenses.

How is HEPI used?

HEPI is used primarily to project future budget increases required to preserve purchasing power. It is a measure of inflation for current operations, for budget hearings to justify the minimum funding requirements to maintain purchasing power, and a guideline for trends in other expense areas such as faculty salaries. Additional indicators include:

- Index values, which may be projected into the future to estimate the degree of change in expenditures that will be necessitated by anticipated price changes;
- Past expenditures, which may be compared with movements in a price index to ascertain whether spending has kept pace with price level changes;
- Dollar incomes, which may be deflated by a price index to identify trends in the level of real purchasing power of funding by various sources; and
- Price indexes, which may be used to provide automatic "inflation adjustment" of various administrative and contractual transactions.

Why is HEPI valuable?

HEPI has been widely recognized as the only benchmark to effectively monitor changes in the purchasing power of higher educational institutions. Further, as many institutions have found HEPI to be a practical tool in the successful establishment of important policies, Commonfund wishes to ensure that it continues to be produced accurately and widely disseminated within the higher education community.

By reporting only price increases, without quality or quantity changes, the series documents the additional revenues required for continuation of "business as usual." To achieve this purpose, the price index attempts to hold constant all other factors, keeping constant the mix of purchases, and implicitly, the mix of their general use by a single type of consumer.

Sources

Data for the eight HEPI components is gathered from the following sources:

- Faculty Salaries: American Association of University Professors Survey Report
- Administrative Salaries: CUPA-HR 2022 Higher Ed Workforce Surveys
- Clerical: U.S. Bureau of Labor Statistics Employment Cost Index
- Service Employees: U.S. Bureau of Labor Statistics Employment Cost Index
- Fringe Benefits: American Association of University Professors Survey Report
- Miscellaneous Services: U.S. Bureau of Labor Statistics Employment Cost Index
- Supplies and Materials: U.S. Bureau of Labor Statistics Producer Price Index (18 selected categories)
- Utilities: U.S. Bureau of Labor Statistics Producer Price Index (4 selected categories)

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New York, NY 10017	Tel (646) 348-9201
San Francisco, CA 94111	Tel (415) 433-8800
London, United Kingdom	Tel +44 020 8126 1628
Beijing, China	Tel +86 10 5759 3208
15 Old Danbury Road Wilton, CT 06897	Tel 888-TCF-Main Tel (203) 563-5000 www.commonfund.org