

Affordability And Access In Virginia Public Higher Education



AFFORDABILITY AND ACCESS IN VIRGINIA PUBLIC HIGHER EDUCATION

Mind numbing.

– Chris Jones, chairman of the Virginia House of Delegates Appropriations Committee, after learning of the College of William & Mary's substantial increase in tuition and fees, May 16, 2016

The precise causes of this increase are not yet well understood.

– The President's Council of Economic Advisors, referring to spikes in tuition and fees, July 2016

If you were to ask a random sample of the 388,000 students currently attending one of Virginia's many fine public colleges and universities questions about the cost of their education, you should be prepared to listen to tales of woe. These students, 78,000 of whom attend public institutions in Hampton Roads, likely will tell you that the price of attendance has gone up too rapidly and that as a consequence, too many of them have been forced to go deep into debt. They will tell you that the cost of attending Virginia's colleges and universities has leaped far ahead of the growth in family income, or in the consumer price index (CPI).¹

These are not unsubstantiated claims. Between 2001-02 and 2016-17, total increases in the published "sticker prices" of tuition and fees at Virginia's four-year institutions ranged from a low of 149.8 percent at Old Dominion University to a high of 344.2 percent at the College of William & Mary.² Increases in the Virginia Community College System ranged from Richard Bland Community College's 246 percent to Northern Virginia Community College's 349 percent. Graphs 1 and 2 report these data plus information for selected Virginia public institutions of higher education. These tuition and fee data come from the Chronicle of Higher Education, which maintains a large database containing this information on the nation's colleges and universities.

As we shall see, there are real-world consequences associated with these cost increases. They include the inability of many Virginians to attend a public college, or to have to do so on a part-time basis; increasing levels of student and family debt; increasing social and economic stratification of student bodies; and a drag on Virginia's economic growth because indebted current or former students don't buy homes or automobiles and don't start new businesses. This is one reason among several why Virginia's economy has grown more slowly than that of the United States for six consecutive years.³ It also is one of the reasons why enrollment in Virginia's public institutions of higher education has crept downward every year since 2011. Simply put, increasing numbers of individuals have decided that our public colleges have become too expensive compared to the benefits they generate in return.

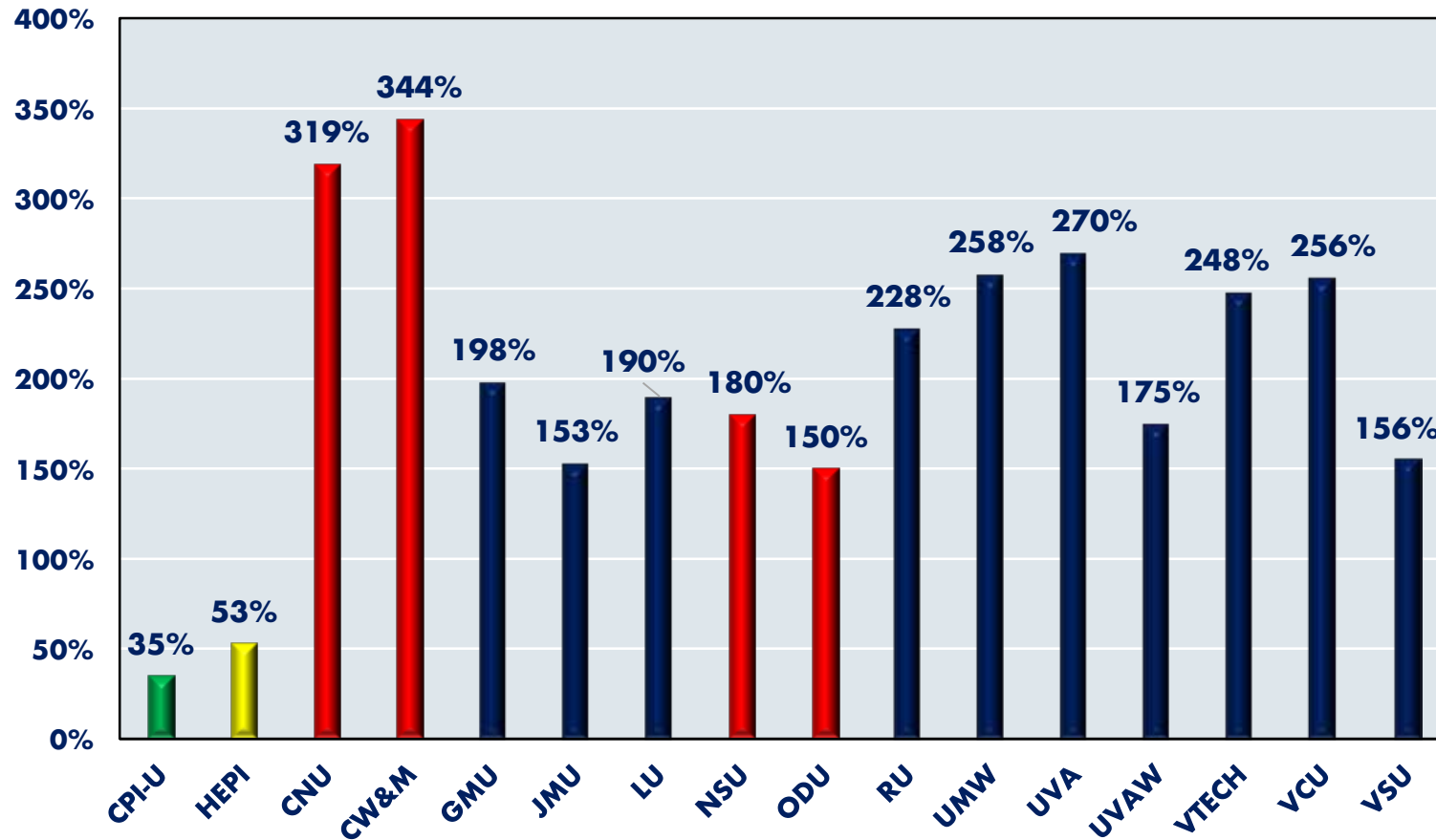
¹ Partners 4 Affordable Excellence @EDU commissioned a public opinion poll in late 2016 that was mounted by two highly reputable polling organizations of differing political leanings. Among the results: 85 percent of respondents believe that Virginia public higher education is not affordable; 90 percent do not believe their incomes are keeping up with the rising price of higher education; 77 percent believe that policymakers should find ways to lower the cost of attending a public college.

² "Sticker prices" are the prices approved by boards of visitors and published in catalogs. They differ from the actual prices that students end up paying because of financial grants they may receive. These latter prices are labeled "net prices."

³ State Council of Higher Education for Virginia, Report E02, www.schev.edu.

GRAPH 1

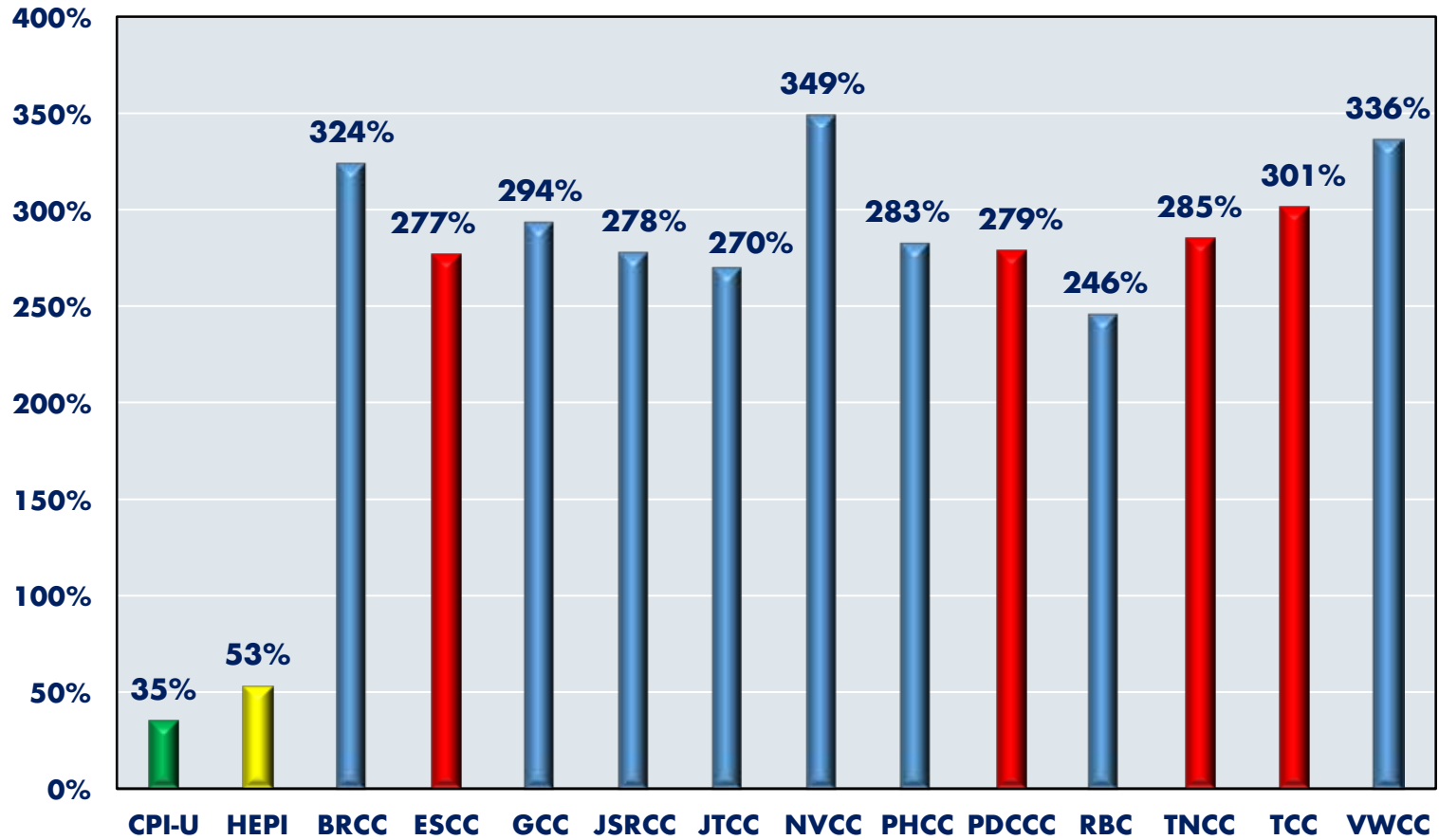
**PERCENT CHANGE IN IN-STATE TUITION AND FEES:
VIRGINIA FOUR-YEAR PUBLIC INSTITUTIONS, 2001-02 – 2016-17**



Source: Chronicle of Higher Education, www.che.edu. HEPI is the higher education price index published by the Commonfund and is designed to reflect higher education's distinctive costs.

GRAPH 2

**TOTAL PERCENT INCREASE IN IN-STATE TUITION AND FEES:
SELECTED VIRGINIA TWO-YEAR PUBLIC INSTITUTIONS, 2001-02 – 2016-17**



Source: Chronicle of Higher Education, www.che.edu. HEPI is the higher education price index published by the Commonfund and is designed to reflect higher education's distinctive costs.

Comparing Tuition And Fee Increases To Changes In Other Prices And Incomes

Published tuition and fee charges at Virginia's public institutions have far outpaced both CPI-U (the consumer price index for all urban consumers)⁴ and changes in the median household incomes of Virginians. Further, tuition and fee increases have dwarfed those that have occurred in other segments of the U.S. economy. Graph 3 reports changes in a variety of prices and incomes between 2006-07 and 2016-17. Note that the average total tuition and fee increase at a Virginia four-year public college or university during this time period was 74 percent, compared to a 40.7 percent increase in the costs of medical care services (doctors, insurance payments, pharmaceuticals, etc.).

Meanwhile, the CPI-U increased only 35.6 percent during these years. Graph 4 shows the relationship between the average tuition and fee increase at four-year public institutions in Virginia and the CPI-U. Tuition and fee increases have exceeded the growth of the CPI-U 15 years in a row, with the average increase in tuition and fees being 2.08 times the average increase in the CPI-U.

During the same time span, median household income rose by a total of 22.4 percent but in real, price-adjusted terms, actually declined by 8.6 percent. **The upshot is that tuition and fees have been spiraling upward at the very time when the ability of the typical Virginia household to pay such prices has been in decline. The average published tuition and fee charge at a Virginia four-year public institution increased 3.31 times as fast as Virginia median household income between 2001 and 2016.**

Another way to assess the ability of Virginians to pay for Virginia public higher education is to ask the following question: "How many hours of work would it take for a Virginia worker earning the Commonwealth's median (50th percentile) wage rate to pay the average tuition and fee charge at a Virginia

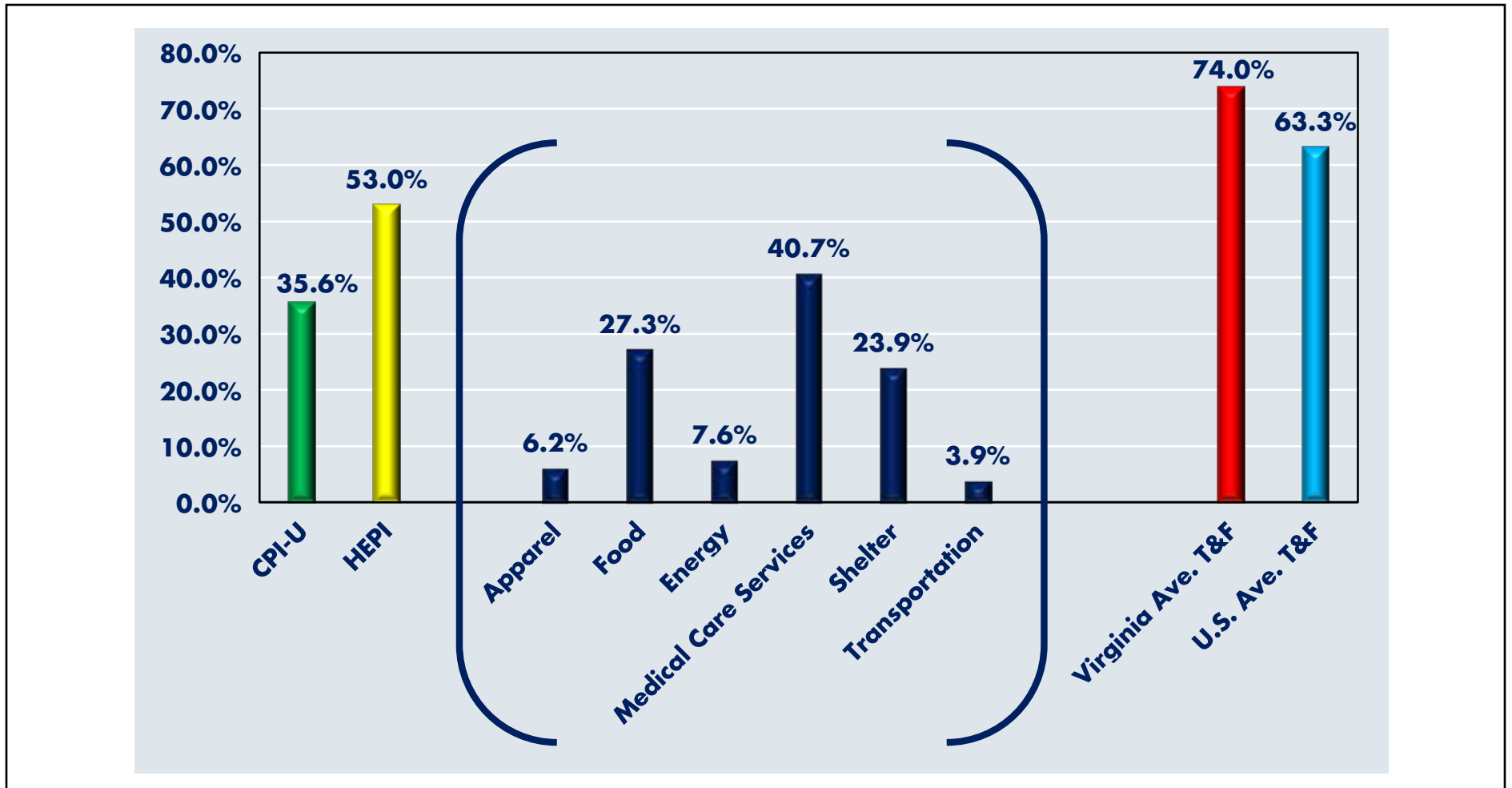
four-year or two-year public college or university?" Graph 5 provides this information, which is eye-opening. **In 2001, it took 227.7 hours of work for a Virginian earning the median hourly wage to pay for tuition and fees at the typical four-year public Virginia institution. By 2016, the number of hours of work required had grown to 438.** For the Virginia Community College System, the comparable numbers were 140.2 and 234.2.

Absent increased financial aid (which we discuss later), it is difficult to avoid concluding that the typical Virginian is being priced out of access to public higher education. The financial barriers to public higher education that confront prospective Virginia students and their families progressively have grown larger.

⁴ The CPI-U is the Consumer Price Index for all urban consumers and covers approximately 80 percent of all Americans.

GRAPH 3

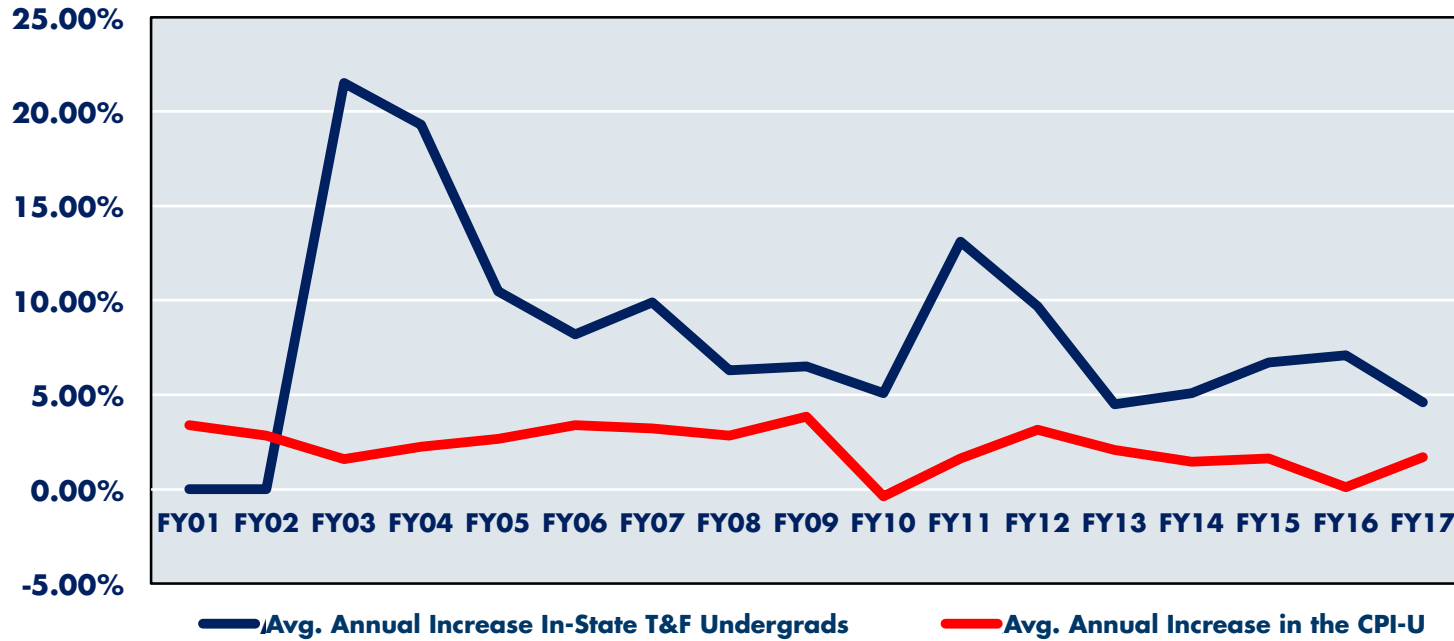
COMPARING TUITION AND FEE INCREASES AT VIRGINIA'S PUBLIC FOUR-YEAR INSTITUTIONS
TO CHANGES IN OTHER PRICES, 2006-07 – 2016-17



Sources: Chronicle of Higher Education for Virginia tuition and fees; College Board for average tuition and fees nationally; Bureau of Labor Statistics for the CPI; Federal Reserve Bank of St. Louis for median household income. Note that 2015 is the most recent household income data for Virginia.

GRAPH 4

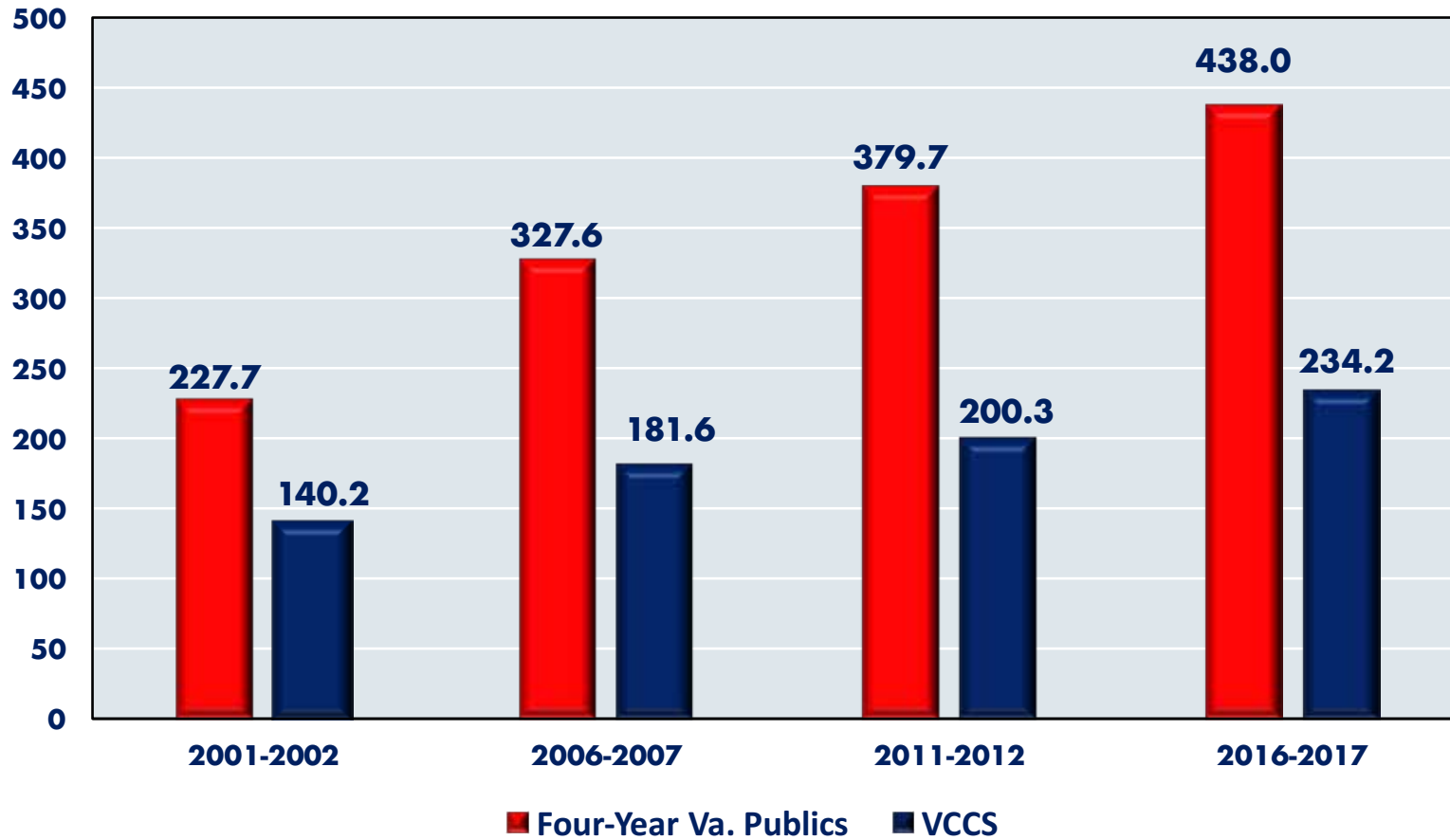
**COMPARING AVERAGE FOUR-YEAR PUBLIC TUITION AND FEE INCREASES
AT VIRGINIA PUBLIC INSTITUTIONS TO THE CONSUMER PRICE INDEX, FY 2001–FY 2016**



Sources: State Council of Higher Education for Virginia for tuition and fees; Bureau of Labor Statistics for the CPI

GRAPH 5

**NUMBER OF WORK HOURS REQUIRED ANNUALLY FOR A VIRGINIA WORKER
EARNING THE MEDIAN HOURLY WAGE TO PAY AVERAGE VIRGINIA IN-STATE TUITION AND FEES**



Sources: Bureau of Labor Statistics for wages; SCHEV for tuition and fees

However, Net Prices Are Very Important

The tuition and fee numbers presented thus far are usually referred to as “sticker prices” in higher education – the prices approved by each institution’s board of visitors and subsequently published in their catalogs. At some colleges and universities, only very small proportions of the student bodies actually pay these sticker prices and the massive remainder pay lower prices because they receive financial grants that either are need-based or merit-based, perhaps reflecting superior grades and standardized test scores, or a particular expertise such as athletic prowess, acting ability or musical talent.

The most common grant received by financially needy students is a federal Pell Grant, which currently cannot exceed \$5,815 annually. Institutions may, instead of or in addition to Pell Grants, provide students with other financial grants that do not need to be repaid. Institutional endowments commonly are thought to be the major source of such funds, but the reality is that internally redistributed tuition and fee monies are the major source of such grants. Out-of-state students are charged premium prices and these funds then are allocated throughout the institutions for a variety of purposes, including financial grants to students. Students coming from families with higher incomes effectively are charged higher prices when they do not receive financial aid grants, but other students coming from lower-income families do receive such grants.

In effect, the pricing policies of most colleges and universities today (including both public and independent institutions in Virginia, two-year and four-year alike) are a collegiate version of a steeply progressive income tax, taking from the wealthier and giving to the less wealthy by means of the net prices they ultimately charge each.⁵ “Net price” here is the effective price each student ends up paying after financial grants (but not loans that have to be repaid) are deducted from the published sticker prices.

Graph 6 presents the average net price paid by undergraduate students at Virginia’s four-year public colleges and universities in 2014-15, the latest

⁵ Critics point out that this pseudo-tax never has been approved by the Virginia General Assembly.

year for which comparable data are available. The data in Graph 6 shine a somewhat different light on tuition and fees. The lowest-cost institution in the Commonwealth is the University of Virginia’s College at Wise, followed by Norfolk State University and Radford University; the highest-cost institution is Christopher Newport University, followed by Virginia Commonwealth University and the University of Mary Washington. Despite having the highest sticker price of any public institution in the country, William & Mary, on average, charges a net price that places it well below the group average of \$16,312.

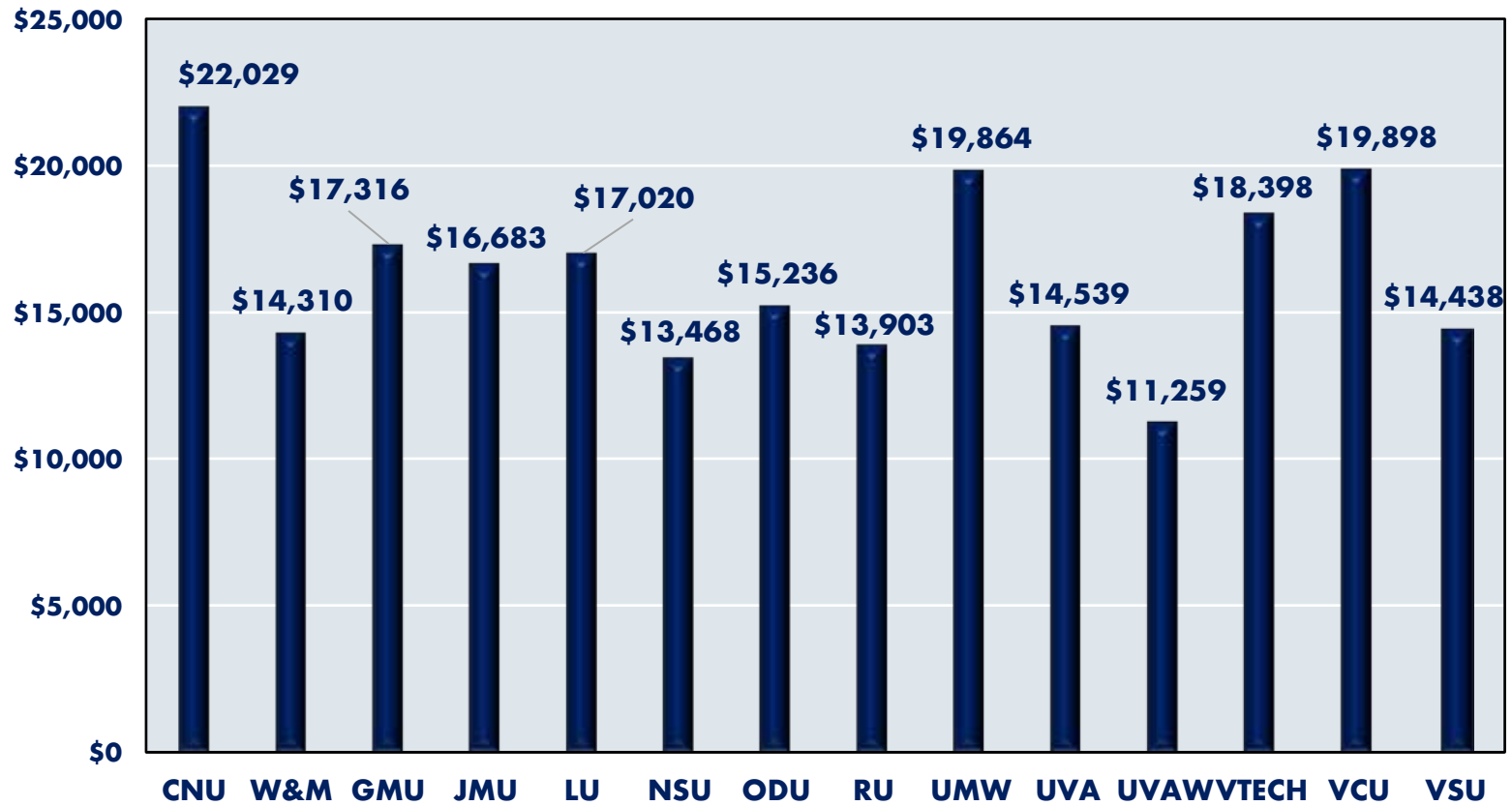
The net price data provided in Graph 6 make it clear that every institution is providing significant need-based grants to its students. Has this aid been sufficient to compensate students and their families for the tuition and fee increases that have been imposed? The simple answer is no, and this is not a disputed judgment, either in Virginia or nationally. **The Virginia House of Delegates Appropriations Committee found that the state-funded financial aid grant per student increased by 75 percent at the Commonwealth’s four-year public institutions between 2003 and 2015, while tuition and fees increased an average of 170 percent.**

Nationally, the College Board, a nonprofit organization representing more than 6,000 colleges and universities, reported that even after accounting for all financial grants received by students at public colleges and universities, the real, price-adjusted costs paid by these students rose by a total of 65.4 percent between 2000-01 and 2016-17. This translates to a compound growth rate of 3.2 percent annually.

Nevertheless, as we note in a section that follows, there is considerable variation among institutions in this regard. Institutions with larger endowments typically provide larger financial grants that do not need to be repaid, though the impact of this is reduced because their tuition and fee charges are higher as well. Also, some institutions are much more aggressive price discriminators – they charge their students very different net prices, usually based upon their residence (in-state versus out-of-state) and their family incomes (upper-income students pay much higher net prices than lower-income students).

GRAPH 6

AVERAGE NET PRICE OF ATTENDANCE AT VIRGINIA'S FOUR-YEAR PUBLIC INSTITUTIONS, 2014-15



Source: National Center for Education Statistics, College Navigator

The Economic And Social Stratification Of Student Bodies

An institution cannot charge premium prices to out-of-state students or to wealthier in-state students unless it has the brand magnetism that enables it to do so. Ultimately, the student body begins to reflect its institution’s pricing strategies and especially the ability of each student body to pay.

In January 2017, The New York Times published revealing data disclosing the percentage of the student bodies at more than 2,000 institutions that came from the upper 1 percent and the lower 60 percent of the income distribution of the United States. Table 1 reports these data for a selection of colleges and universities in Virginia. The stratification of Virginia institutions on the basis of family incomes (and presumably wealth as well) is immediately apparent. Almost one in every five undergraduate students at Washington and Lee University came from a family in the upper 1 percent of the national income distribution, whereas at Old Dominion University and Thomas Nelson Community College (to name only two), less than 1 percent of the undergraduate student body emanated from such families.

Only one in 12 undergraduate students at W&L came from the bottom 60 percent of the income distribution, but approximately two-thirds did so at Norfolk State. If the denizens of the bottom 60 percent of the income distribution can be fashioned as “common people,” then one might say that at least four Virginia public institutions (University of Virginia, William & Mary, Virginia Tech and Christopher Newport) have relatively few such individuals among their undergraduate student bodies.

One measure of the accessibility of a college or university to students coming from lower-income families is the percentage of Pell Grant students that institution enrolls. One can see in Table 2 that Virginia institutions in general enroll smaller percentages of undergraduates who receive Pell Grants (26 percent) than the national average (approximately 39 percent). This reflects

two major factors: (1) Virginia incomes are higher than the national average⁶ and hence fewer Virginians qualify for Pell Grants, and (2) tuition and fees at Virginia institutions are higher than the national average and the \$5,810 annual cap on Pell Grants means that the student bodies composed of those students who can afford to attend are weighted a bit more heavily toward upper-income students and families.

Institution	Pct. Students From Families Upper 1%	Pct. Students From Families Bottom 60%
Washington and Lee	19.1%	8.4%
U. Richmond	15.1%	20.6%
U. of Virginia	8.5%	15.0%
C. of William & Mary	6.5%	12.1%
Va. Tech	2.8%	15.0%
Christopher Newport U.	1.7%	18.1%
George Mason U.	1.5%	26.2%
Va. Commonwealth U.	< 1%	31.0%
Old Dominion U.	< 1%	33.2%
Thomas Nelson CC	< 1%	52.4%
Tidewater CC	< 1%	53.3%
Norfolk State U.	< 1%	66.0%
Paul D. Camp CC	< 1%	66.0%
Eastern Shore CC	< 1%	77.8%

Source: The Upshot, The New York Times (Jan. 18, 2017)

⁶ The Federal Reserve Bank of St. Louis reports that the 2015 national median household income was \$56,516, while the comparable Virginia number was \$61,086.

TABLE 2

PERCENTAGE OF UNDERGRADUATES RECEIVING PELL GRANTS AT SELECTED VIRGINIA INSTITUTIONS, 2014-15

C. of William & Mary	12.0%
U. of Virginia	12.4%
James Madison U.	14.8%
Virginia Tech	16.1%
Christopher Newport U.	16.2%
U. of Mary Washington	18.5%
Longwood U.	24.7%
Virginia Average	26.0%
Virginia Commonwealth U.	28.2%
George Mason U.	29.8%
Radford U.	32.5%
National Average	39.0%
Old Dominion U.	39.6%
Paul D. Camp CC	39.8%
U. of Virginia Wise	40.9%
Eastern Shore CC	49.9%
Tidewater CC	50.3%
Thomas Nelson CC	50.9%
Norfolk State U.	67.3%
Virginia State U.	69.7%

Source: SCHEV, Report FA09T

William & Mary’s 12 percent Pell Grant percentage for its undergraduate student body is the lowest of any public college or university in the United States, and the University of Virginia’s 12.4 percent is not far behind. *Prima facie*, neither institution is very accessible to student applicants from lower-income families. One could add James Madison, Christopher Newport,

Virginia Tech and Mary Washington to this list. Query if this is consistent with their status as public institutions serving the entire citizenry.

In defense of several of these institutions, however (and especially William & Mary), they do provide generous need-based financial grants to students who come to them from lower-income families. Table 3 provides the average net price paid by students who came to these institutions from households with incomes that were \$30,000 or below. These students nearly always qualified for a Pell Grant, but typically required substantial additional financial aid to be able to attend. Consider Old Dominion as an example. In 2015-16, the estimated total expense for an in-state student living on the ODU campus was \$24,099. A \$5,815 Pell Grant would still leave an \$18,000 gap that a lower-income student would have to fill in some manner, including going into debt.

TABLE 3

NET PRICES PAID BY STUDENTS COMING TO CAMPUSES FROM FAMILIES WITH INCOMES \$30,000 OR BELOW, 2014-15

C. of William & Mary	\$4,049
U. of Virginia Wise	\$8,264
U. of Virginia	\$10,119
Old Dominion U.	\$11,678
Radford U.	\$11,815
Norfolk State U.	\$11,974
Virginia State U.	\$11,986
U. of Mary Washington	\$12,263
James Madison U.	\$12,926
Virginia Tech	\$12,735
Longwood U.	\$13,953
George Mason U.	\$14,769
Virginia Commonwealth U.	\$14,890
Christopher Newport U.	\$15,970

Source: National Center for Educational Statistics, College Navigator

William & Mary's generously low \$4,049 net price for students who came to it from households with incomes of \$30,000 or less stands out. Clearly, W&M has made the provision of grant-based financial aid to its lowest-income students a very high priority. We know of only one other institution, the University of Michigan, which offers its lowest-income students a lower price (\$3,414).

The problem is that very few lower-income students end up being able to take advantage of William & Mary's generosity. This is true for a variety of reasons, including of course W&M's impressively high admission standards. Much the same story might be recited for the University of Virginia, though it is not as liberal in providing grant-based financial aid to its lowest-income students.

These episodes inspire intriguing public policy questions. Should Virginia subsidize public colleges and universities that, in terms of their pricing of undergraduate education, behave very much like private institutions? Is it appropriate for the citizenry to subsidize institutions that increase social and economic inequality rather than provide ladders of opportunity that diminish differences? These are knotty questions because, *inter alia*, the Top 25 rankings of W&M and UVA depend in part on their ability to structure their operations and prices in the fashion just outlined. Programs designed to increase the presence of lower-income students at these institutions might endanger their coveted rankings if they ended up reducing SAT and ACT scores and other metrics, such as graduation rates.⁷

There are undeniable financial considerations attached to institutional admission strategies. Pell Grant students can be expensive because they require more institutionally based financial aid and often augmented campus services. Enrolling additional Pell Grant students might reduce the number of slots available for full-price out-of-state students, who pay more than \$40,000 in annual tuition at W&M and UVA. Who wants to be the president or the board that presides over a noticeable decline in their institution's rankings, however laudable the intent might be?

**Are there other reputable models available for consideration?
Yes. The University of California at Berkeley, for example,**

⁷ With respect to graduation rates, see Sarah Butrymowicz, "Billions in Pell Dollars Go to Students Who Never Graduate," *Hechinger Report* (Aug. 17, 2015).

enrolled 31 percent undergraduate Pell Grant recipients in 2014-15, while UCLA enrolled 35 percent. Indeed, five University of California campuses are ranked among U.S. News & World Report's Top 25 public institutions and each enrolls more Pell Grant students than virtually every one of Virginia's four-year public institutions. Further, these institutions offer rather low net prices to their lowest-income students – \$7,338 at Berkeley and \$7,602 at UCLA in 2014-15.⁸

Ultimately, even though institutions often argue otherwise, they are not prisoners of history and circumstance. As time passes, colleges and universities retain the ability to reshape their financial models and student profiles. The contrast between the UC campuses and those in Virginia is instructive in this regard. This did not occur overnight in California, but it did happen.

We will not weigh in on the provocative and complex discussions concerning the \$2.3 billion discretionary fund that UVA accumulated except to observe that some of these dollars might have been used either to reduce tuition and fees for in-state undergraduates, or to provide more generous financial aid offers to lower-income students. Ultimately, whether such decisions are made reflects the values held by the senior officers of institutions and their board members.

Our analysis should not overlook other institutions, such as James Madison, Christopher Newport, Virginia Tech and Mary Washington, each of which appears to have made strategic decisions that ultimately restrict the access of lower-income Virginians. How many such campuses should taxpayers and citizens support? We do not have the answer to this question, but easily can observe that what is good for an individual institution's national rankings may not be synonymous with what is good for Virginians.

⁸ These and all other net price data come from the National Center for Education Statistics, College Navigator.

Student Debt

When students and their families cannot afford to attend a Virginia public college or university, one of three things happens. They may choose not to attend college at all; they may switch from full-time to part-time attendance; or they may go into debt by borrowing money to pay their educational costs.

The State Council of Higher Education for Virginia (SCHEV) collects data concerning student debt in the Commonwealth. **In 2016, SCHEV looked at the debt status of 49,065 students who had earned bachelor's degrees five years earlier (see Table 4). Sixty-one percent of these graduates borrowed money, an average of \$26,407, to pay for their education.** The 61 percent debtor number for 2011-12 graduates was up from 56 percent for 2006-07 graduates. SCHEV labels these debts "known" and cautions that its report may not capture all debt these graduates incurred.

Student debt changes lives and alters behavior. Table 5 summarizes a variety of unhappy aftereffects attached to student debt. **It will suffice for us to observe that rising levels of student debt do not constitute a recipe for bringing Virginia out of its economic growth doldrums.**

Student debt owed to the U.S. government (more than 80 percent of all student debt) is nondischargeable in a personal bankruptcy proceeding. This means that federal student debt follows former students for the remainder of their lives and cannot be avoided unless they qualify for a limited number of federal debt forgiveness programs. In 2016, no payments were being made on almost half of all federal student debt accounts and 11 percent were in serious default (Forbes, April 10, 2016).

The bottom line is that it is in the best interests of Virginia to graduate students who are debt-free, or whose debt obligations are small. Rapidly rising higher education prices (both "sticker" and "net") push the Commonwealth in the opposite direction.

TABLE 4

THE GROWTH OF KNOWN STUDENT DEBT INCURRED BY 2011-12 BACCALAUREATE DEGREE GRADUATES OF VIRGINIA FOUR-YEAR PUBLIC INSTITUTIONS

Year	Percent of Known Debtors	Average Level of Debt
2007-08	56%	\$20,039
2008-09	57%	\$21,510
2009-10	57%	\$23,601
2010-11	59%	\$25,242
2011-12	61%	\$26,407

Source: State Council of Higher Education for Virginia, "Who Borrows and How Much Do They Borrow?" <http://research.schev.edu/apps/info/Articles.Student-Debt-A-First-Look-at-Graduate-Debt.ashx>

TABLE 5

THE ECONOMIC CONSEQUENCES OF COLLEGE STUDENT DEBT

Those who have significant student debt are:

- **Less likely to buy a home (New York Fed, 2013)**
- **Less likely to start a new business (Philadelphia Fed, 2015)**
- **More likely to live with their parents (Fed's Board of Governors, 2015)**
- **Less likely to save for their retirements (Brookings, 2014)**
- **More likely to have negative household wealth (Armantier, 2016)**
- **More likely to have an inferior credit rating score (New York Fed, 2013)**

Sources: Noted above

Why Have Tuition And Fees Increased So Rapidly?

Virginia's higher education institutions argue that their tuition and fee increases have been necessary because of reductions in state general fund tax support. This assertion is true – but only to a certain point. Between 1996 and 2015, Virginia cut its real, enrollment-adjusted appropriations to its institutions of higher education by about 26 percent.⁹ Hence, it is understandable that the colleges and universities moved to replace this revenue with tuition and fee dollars.

However, a fall 2016 analysis by the staff of the House of Delegates Appropriations Committee concluded that institutions raised tuition \$2 for every \$1 they lost in state appropriations between 1996 and 2015 (see Graph 7, which addresses the statistical background).¹⁰ Thus, Virginia's public colleges and universities have been increasing tuition for other reasons as well. This conclusion is consistent with recent national studies.¹¹

What are those other reasons? They include:

- The aforementioned institutional concern with national rankings is epitomized by U.S. News & World Report rankings. This fixation can lead to a variety of decisions divorced from the needs of taxpayers, students and families.
- Inter-institutional amenities competition stimulates institutions to offer such things as recreational spas and climbing walls as well as upscale (and expensive) food services.
- Institutions often construct new, spacious buildings even though it is costly to maintain this space, and their use of existing space is surprisingly low. A 2014 study by the State Council of Higher Education for Virginia disclosed that no residential four-year campus in the Commonwealth utilized its

⁹ "Higher Education Affordability," House Appropriations Committee Retreat Nov. 15-16, 2016, <http://hac.virginia.gov/committee/files/2016/11-15-16/III%20-%20Higher%20Education%20Affordability.pdf>.

¹⁰ "Higher Education Affordability," House Appropriations Committee Retreat, Nov. 15-16, 2016, <http://hac.virginia.gov/committee/files/2016/11-15-16/III%20-%20Higher%20Education%20Affordability.pdf>.

¹¹ One example is Neal McCluskey, "Not Just Treading Water," *Policy Analysis* (Cato Institute, Feb. 15, 2017).

classrooms more than 76 percent of reasonably available hours, and three campuses ranged below 60 percent usage. Parenthetically, it is not clear that adding significant new space is an intelligent public policy when internet-based instruction is expanding. Modernization and rehabilitation of existing space may make more sense and be less expensive.

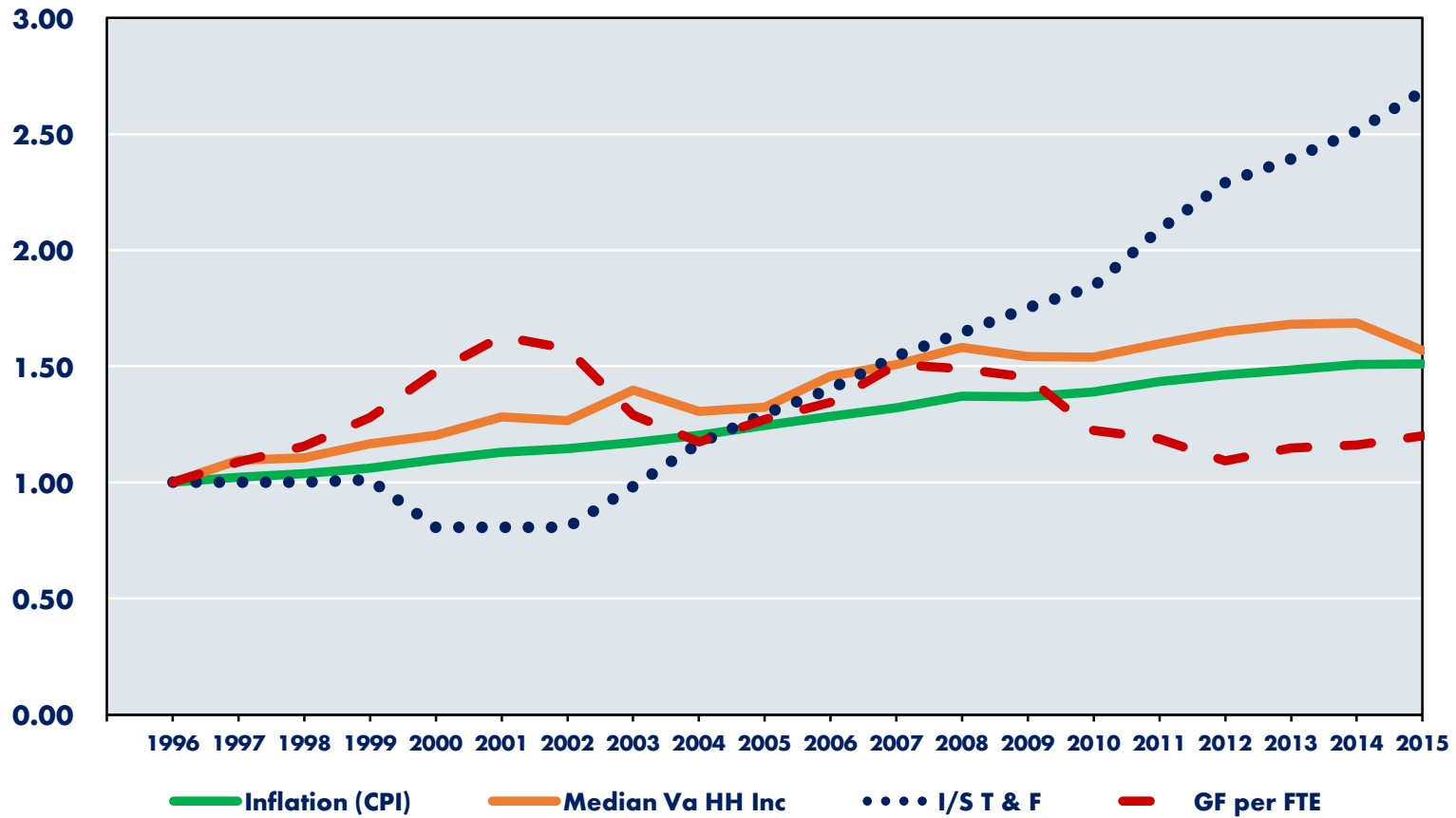
- Related to the above, institutions increasingly have assessed mandatory fees to support items ranging from student centers to athletic teams. In 2016-17, eight Virginia four-year public institutions assessed their full-time undergraduate students athletic fees that exceeded \$1,538. Consider Christopher Newport's \$1,886 annual fee. This corresponds to a charge of \$188.60 per three-hour course. Doubtless CNU's Captains are well regarded, but they also are expensive and students bear a substantial portion of that cost.
- The growth of institutional room and board charges at most Virginia institutions easily has exceeded the growth of the consumer price index (see Graph 8). First-rate residence halls and excellent food are pleasing, but costly.
- Administrative proliferation (as measured by the number of administrators per faculty member or student) exists on most campuses. Further, these administrators tend to be paid well.
- Institutions have reduced the proportion of their budgets they spend on instruction (see Graph 9).
- Disproportionate growth in spending on employee fringe benefits (which sometimes has substituted for pay raises during difficult years) has pushed tuition and fees upward.
- Federal government financial aid policies are based upon institutional costs. Hence, when institutional costs increase, the "feds" supply more money. A July 2015 study by the Federal Reserve Bank of New York found that up to 60 percent of additional federal financial aid is siphoned off by institutions for other purposes.

- Institutions are reluctant to take advantage of new teaching and learning technologies, flipped classrooms and other innovations that have the potential to scale higher education.
- Institutions are disinclined to share resources and programs with other institutions, even in low-enrollment areas such as foreign languages and literatures.
- Institutions are averse to pricing the resources they use internally, thus leading to suboptimal behavior and hoarding. Space provides an obvious example.
- Institutional mission creep has propelled many institutions into offering new, low-enrollment programs, often at the graduate level.
- Faculty productivity, as measured by their contact hours with students and on many campuses by their credit hours generated, has declined.
- Subsidies from undergraduate students often are required to support faculty research activity, even in cases where the research is supported by outside grants.

This is an extensive list and one should understand that the application of these factors often varies substantially from one campus to another. Nowhere is this truer than Virginia, where institutional independence is relatively high compared to many other states, not the least because each institution has its own board of visitors. Even so, these are among the primary reasons why tuition and fee increases at Virginia's public colleges and universities not only have vastly exceeded the growth in the consumer price index and median household income, but also why they have been substantially higher than the national average.

GRAPH 7

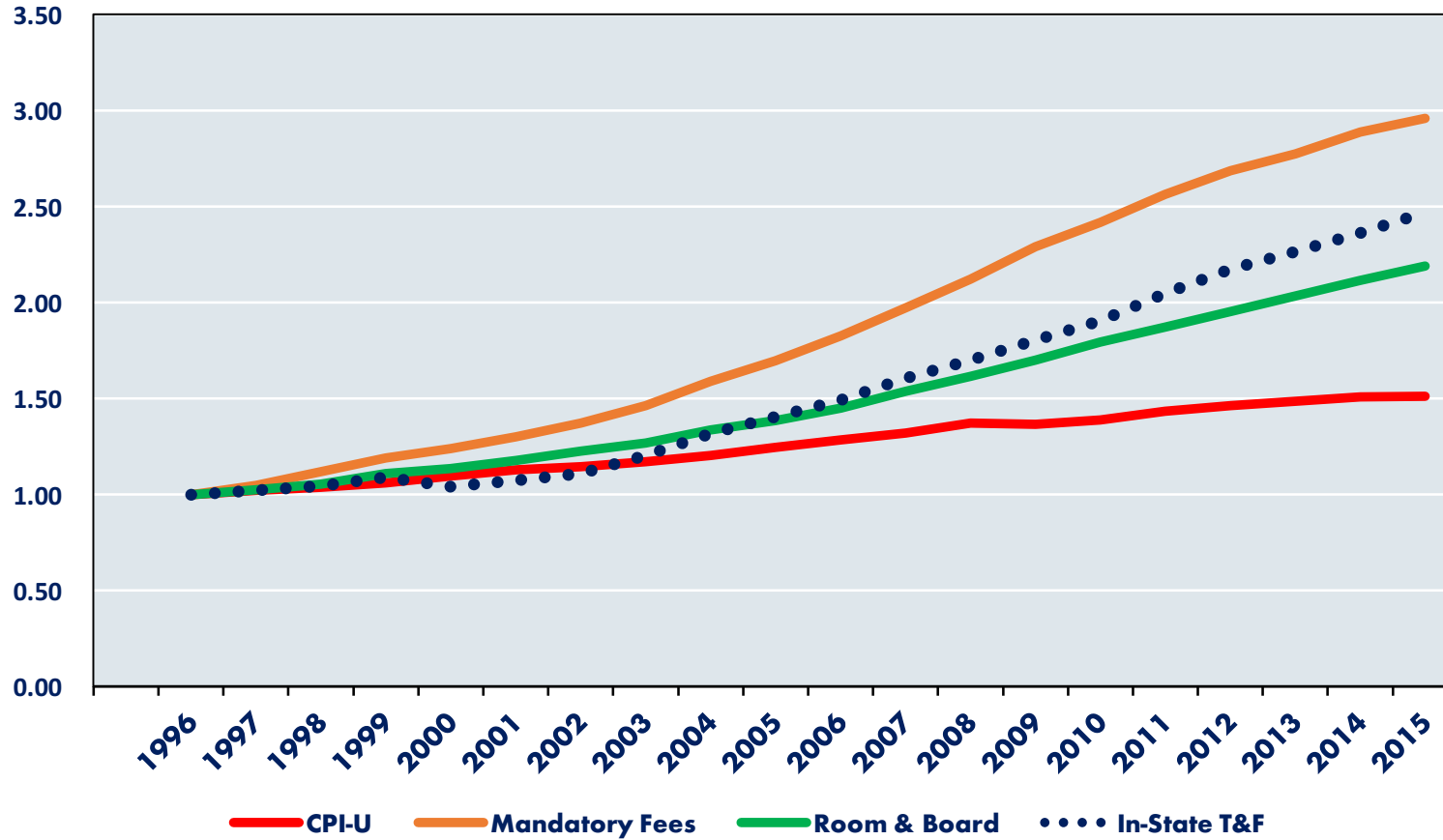
STATE GENERAL FUND APPROPRIATIONS TO PUBLIC HIGHER EDUCATION IN VIRGINIA PER IN-STATE FULL-TIME EQUIVALENT STUDENT COMPARED TO TUITION AND FEES AND THE CONSUMER PRICE INDEX, 1996-2015



Source: "Higher Education Affordability," House Appropriations Committee Retreat, Nov. 15-16, 2016, <http://hac.virginia.gov/committee/files/2016/11-15-16/III%20-%20Higher%20Education%20Affordability.pdf>

GRAPH 8

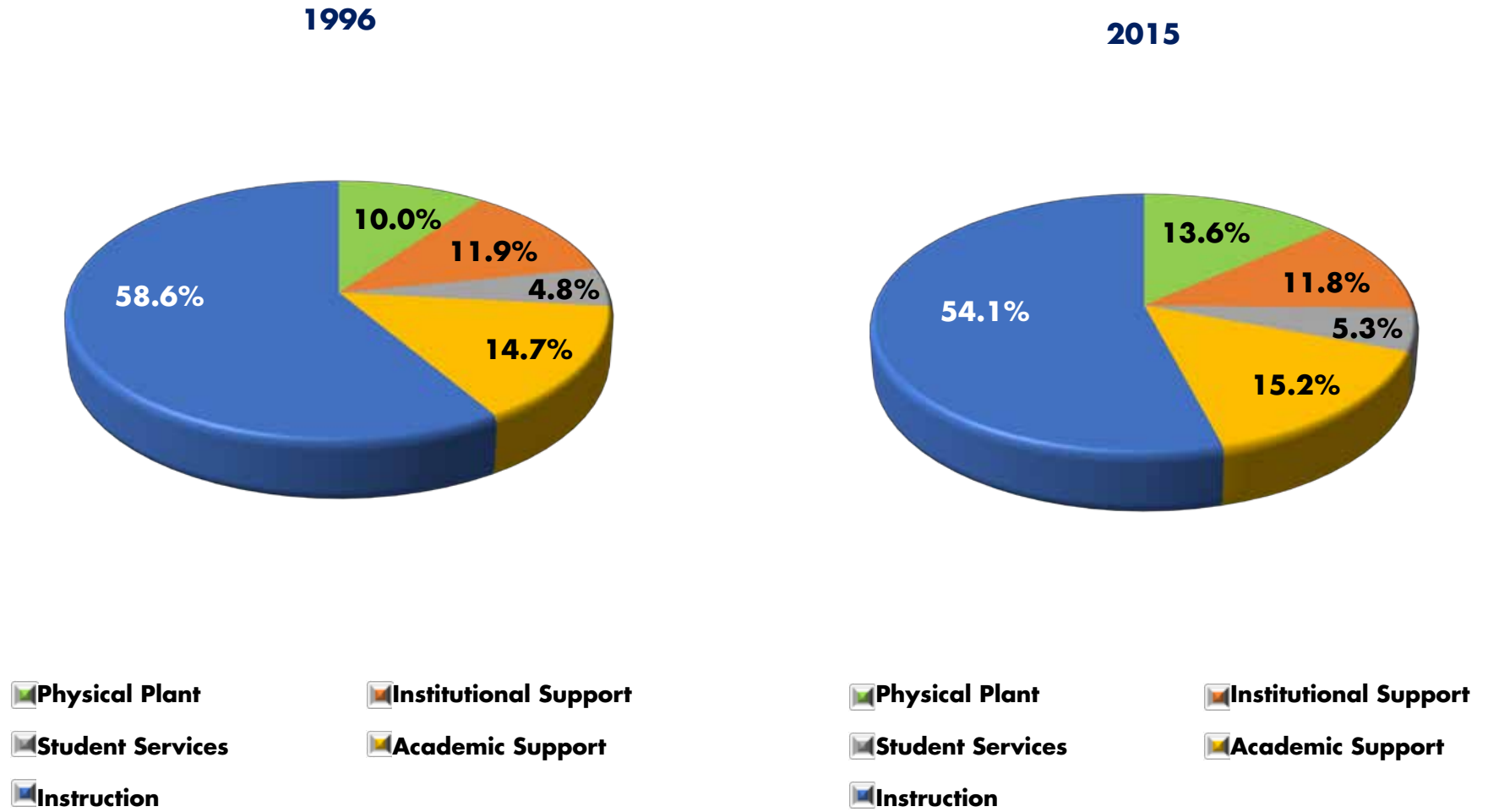
COMPARING CHANGES IN THE MAJOR ELEMENTS OF THE COST OF ATTENDANCE AT VIRGINIA PUBLIC INSTITUTIONS TO CHANGES IN THE CONSUMER PRICE INDEX, 1996-2015



Source: "Higher Education Affordability," House Appropriations Committee Retreat, Nov. 15-16, 2016, <http://hac.virginia.gov/committee/files/2016/11-15-16/III%20-%20Higher%20Education%20Affordability.pdf>

GRAPH 9

COMPARING MAJOR EXPENSE CATEGORY SPENDING AT VIRGINIA PUBLIC INSTITUTIONS, 1996 AND 2015



Source: "Higher Education Affordability," House Appropriations Committee Retreat, Nov. 15-16, 2016, <http://hac.virginia.gov/committee/files/2016/11-15-16/III%20-%20Higher%20Education%20Affordability.pdf>

Would Legislative Rules Constraining Tuition And Fee Increases Make A Difference?

If tuition and fee increases have been too large, then would rules imposed either by the Virginia General Assembly and administered by the State Council of Higher Education for Virginia that constrain increases improve the situation? Perhaps.

Let's utilize an example to clarify the situation. Graph 10 compares the University of Virginia's (UVA's) annual tuition and fee increases to three-year rolling averages of changes in the consumer price index (CPI) and median Virginia household income. After recording zero or even negative tuition and fee increases in the first years of this century, in 14 of 15 years thereafter, UVA's tuition and fee increases exceeded the three-year rolling average rates of growth in both the CPI and Virginia median household income.

If UVA had been restricted to tuition and fee increases that were equal to the rolling three-year average growth of the CPI, then this would have cut approximately 61 percent from its per-student in-state tuition and fee charge in 2016-17. Specifically, UVA's published tuition and fee price in that year was \$15,714. If instead, between 2001-02 and 2016-17, UVA had increased its tuition and fees only at the rolling three-year average rate of growth in the CPI¹², then in 2016-17 its tuition and fee charge would have been only \$6,047 – 38.5 percent of the actual cost.

We can approximate the total cost of this higher tuition strategy to Virginia undergraduates. SCHEV reports that UVA enrolled 16,631 undergraduate students in fall 2016, of which approximately 66 percent, or 10,976, were Virginians. If these 10,976 Virginians had paid \$6,047 in tuition and fees rather than the actual \$15,714 in 2016-17, then collectively in that year alone the students would have saved \$106.11 million – a rather tidy sum. In effect,

¹² July to July of each year.

by assessing tuition and fee increases in excess of the growth in the CPI, UVA reallocated an estimated \$106.11 million from Virginia students and their families to whatever alternative purposes the university valued more highly.¹³

Cumulatively, over the 15-year period 2001-02 through 2016-17, the tuition and fees UVA charged its in-state undergraduates totaled \$721.38 million more than what those charges would have been had their increases been limited to the previous year's growth in the CPI.

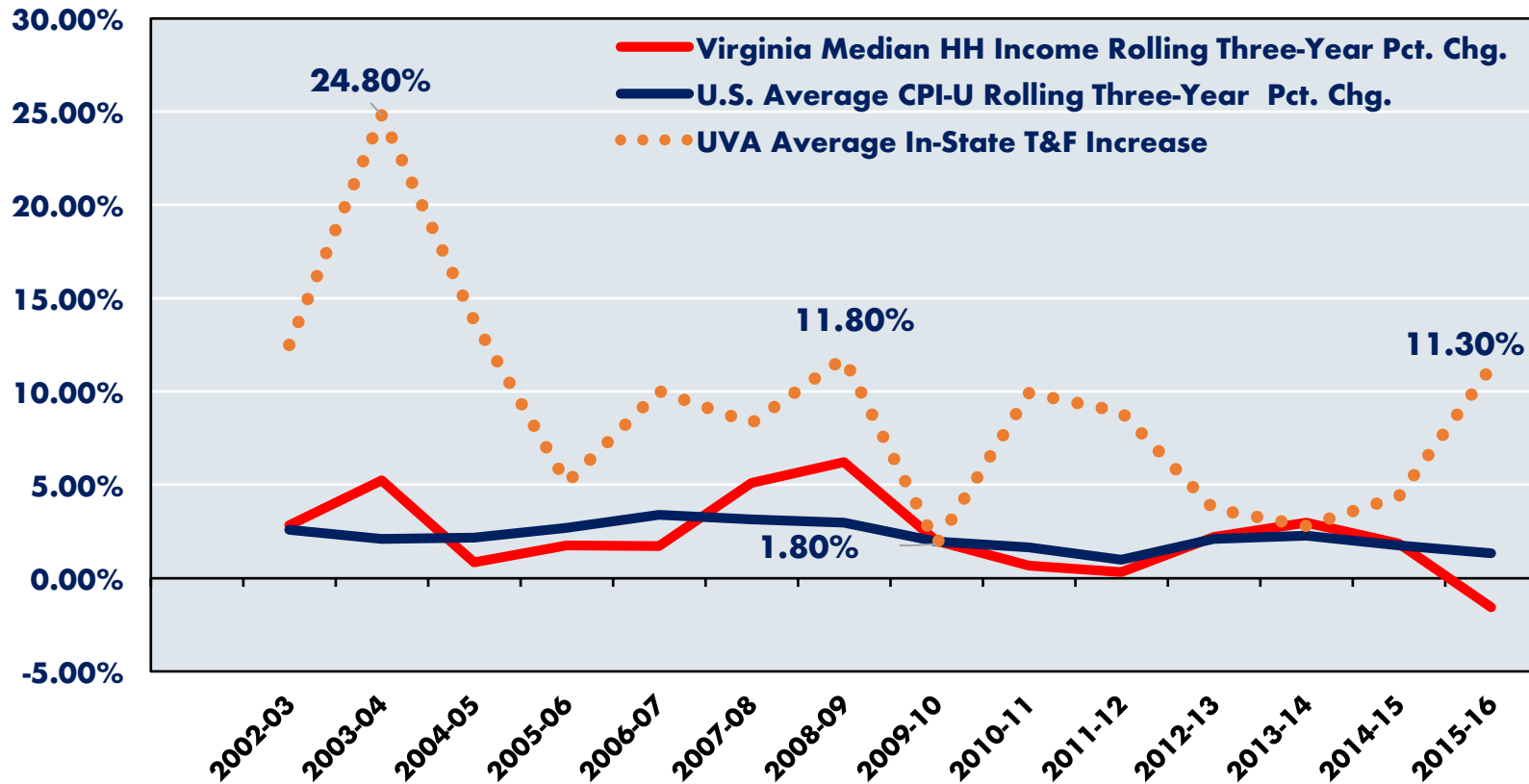
Many readers are aware that even while these tuition increases were being imposed, UVA was accumulating a \$2.3 billion discretionary fund. The university did so legally. Choice-making, however, is an intrinsic, unavoidable part of the exercise of leadership. This particular set of choices invites questions. Might not UVA have used some of the \$2.3 billion it accumulated to lower the tuition and fees assessed Virginia students at the university? Could not more modest tuition and fee increases have been imposed on in-state undergraduates that would have reduced the \$721.38 million estimate above?



¹³ We assume that 66 percent of the undergraduate students in each year would qualify for in-state tuition and fees. Note that one use of the \$106.11 million by UVA was to provide additional financial aid to its undergraduates. Hence, some students received back some of the proceeds of the putative excise tax that all paid.

GRAPH 10

ANNUAL TUITION AND FEE INCREASES AT THE UNIVERSITY OF VIRGINIA VERSUS THREE-YEAR ROLLING AVERAGES OF CHANGES IN THE CONSUMER PRICE INDEX AND MEDIAN VIRGINIA HOUSEHOLD INCOME, 1996-2015



Sources: Federal Reserve Bank of St. Louis for Virginia median household income; Bureau of Labor Statistics for the Consumer Price Index; Chronicle of Higher Education for UVA tuition and fees

The point here is not that UVA misused the \$721.38 million but instead, as economists point out, that there were real opportunity costs – foregone alternatives – associated with this approach to tuition and fees. Other, perhaps more Spartan, ways to operate the institution existed instead of UVA choosing to impose the equivalent of a 61 percent excise tax on Virginia students and families.

Would an alternative, low-tuition policy have done damage to UVA's rankings and its ability to accomplish its stated institutional goals? Perhaps. This is an important reason why our discussion here will not lead to a definitive conclusion. Our goal in this chapter is to highlight affordability and access issues and the costs associated with current tuition and fee regimens, not to prescribe an operating plan for any Virginia public institution, including UVA.

Lest anyone view tuition and fee rules such as the one we have just illustrated for the CPI as a panacea, we will point out that skillful administrators likely could find a variety of ways around any restrictive rule legislators might devise. For example, they might choose instead to impose discipline-specific surcharges (for example, charging engineering students higher tuition). Or, they might impose user fees on many campus services previously free or low-priced. They might also raise room and board charges and then assess a larger administrative fee to the residence halls (or any other auxiliary enterprise) for central services provided.

We could go on, but the implication is clear: Regulatory authorities nearly always must struggle to impose their wills on those they regulate. Human imagination seemingly is infinite and those regulated are adept at finding new ways to circumvent seemingly ironclad behavioral rules. The law of unintended consequences has not yet been revoked.

The Crucial Role Of Governors, Boards Of Visitors And The General Assembly

University administrators cannot increase published tuition and fee charges on their own. Their recommendations in this arena must be approved by their boards of visitors, whose members are appointed by the governor. We will cut to the chase and observe that many, perhaps most, members of the boards of Virginia colleges and universities believe their primary responsibility is to their institution (and by extension, perhaps its president) rather than to taxpayers, citizens and students.

Gradually, significant numbers of board members end up being co-opted by their university's president and senior administrators, who treat them well, shower them with attention and present them with almost uniformly good news about their institution. If basic institutional "dashboard" variables (enrollment, fundraising, rankings) appear to be in order, then most board members tend to defer to their president and senior administrators when they receive proposals from them (including tuition and fee increases). Discussions concerning accessibility and affordability do arise at some meetings, but they are matters that nearly always receive less attention than items relating to new buildings and academic programs.

Lunches and dinners during board meetings are filled with the likes of Fulbright Scholar faculty members, those who have garnered large research grants, string quartets and jazz groups, students who have been admitted to prestigious graduate schools, and members of the campus community who are local incarnations of Mother Teresa. When combined with tickets to an enticing football or basketball game, these amenities form a seductive mixture that subtly discourages probing questions that might disrupt the flow. Indeed, board members who delve too deeply, or who venture into uncomfortable affordability and access territory, may find themselves being counseled by

senior board members and advised to stick to the agenda and to avoid being contentious.

Given this environment, what if future Virginia governors were to appoint to boards of visitors only those individuals who view citizens, taxpayers and students as their primary constituency and concern? What if future Virginia public college and university presidents were evaluated on the basis of the access and affordability of their institutions in addition to the usual dashboard metrics? What if future administrative salary increments were to reflect this reorientation?

The answers are that we would soon observe different behavior by administrators and see more modest tuition and fee increases. The current system is fixable, but it will take definitive action by future governors of the Commonwealth and the board members they appoint for this to occur.

The General Assembly has a significant role to play in terms of the incentives it implants in the budgets it passes. Why should institutions that have been circumspect in their tuition and fee increases receive the same budgetary treatment as those that have implemented large increases? Legislators can and should ask significant questions of prospective board of visitor nominees concerning their approach to their duties. Future board members, as a condition of their service, should be required to undertake significant orientation activities that address many of the issues covered in this chapter as a condition of their appointments.

The accumulated evidence suggests that it is time to move in different directions in public higher education in Virginia. If we opt to do so, the rewards will be higher economic growth and (some might argue) a more equitable society that places emphasis on increasing economic opportunity rather than closing doors.



