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

Were one 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, one likely would be regaled with tales of woe. Such students no doubt will complain that the price of attendance has gone up too rapidly and that as a result, 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 their family incomes, 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. Increases in the Virginia Community College System ranged from Richard Bland 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 data come from the Chronicle of Higher Education,

1 Partners 4 Affordable Excellence @ EDU, a 501-c-3 nonprofit foundation, 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.

which maintains a large easily accessible tuition and fee database on the nation's colleges and universities.

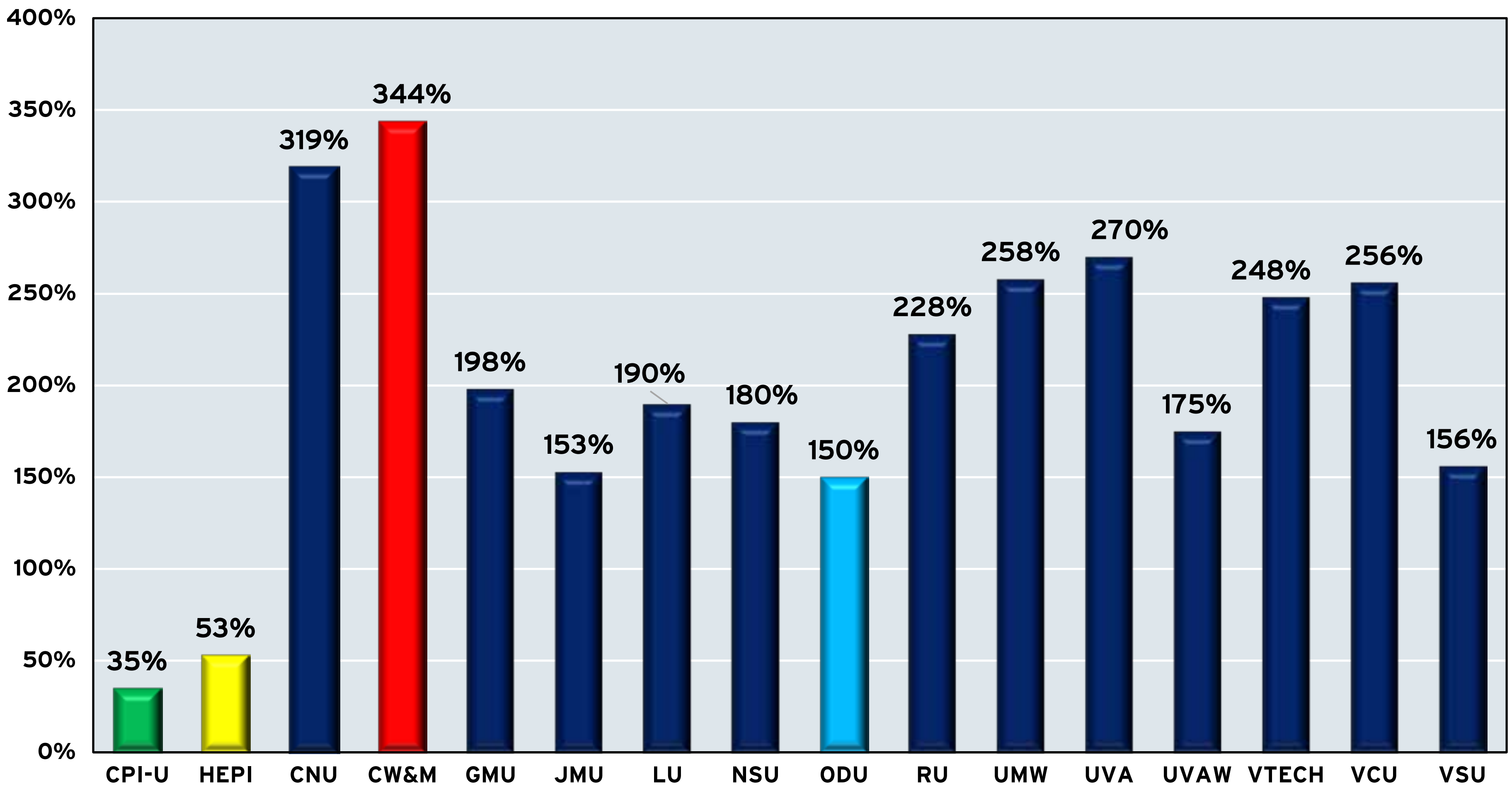
Sticker prices **are the charges approved by boards of visitors and published in catalogs. They differ from the actual prices that students end up paying because of financial grants students may receive. These actual prices are labeled *net prices.* This situation is analogous to the difference between the sticker price of a new automobile and the actual sales prices that a purchaser negotiates.**

As we shall see, there are real-world consequences associated with these cost increases. They include the inability of many Virginians to afford 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. These are among the reasons why Virginia's economy has grown more slowly than that of the United States for six consecutive years.[2] It also helps explain why enrollment in Virginia's public institutions of higher education has crept downward every year since 2011 (see Graph 3). Simply put, increasing numbers of potential students have decided that our public colleges have become too expensive compared to the benefits they generate in return.

2 See chapter 1 of this report.

GRAPH 1

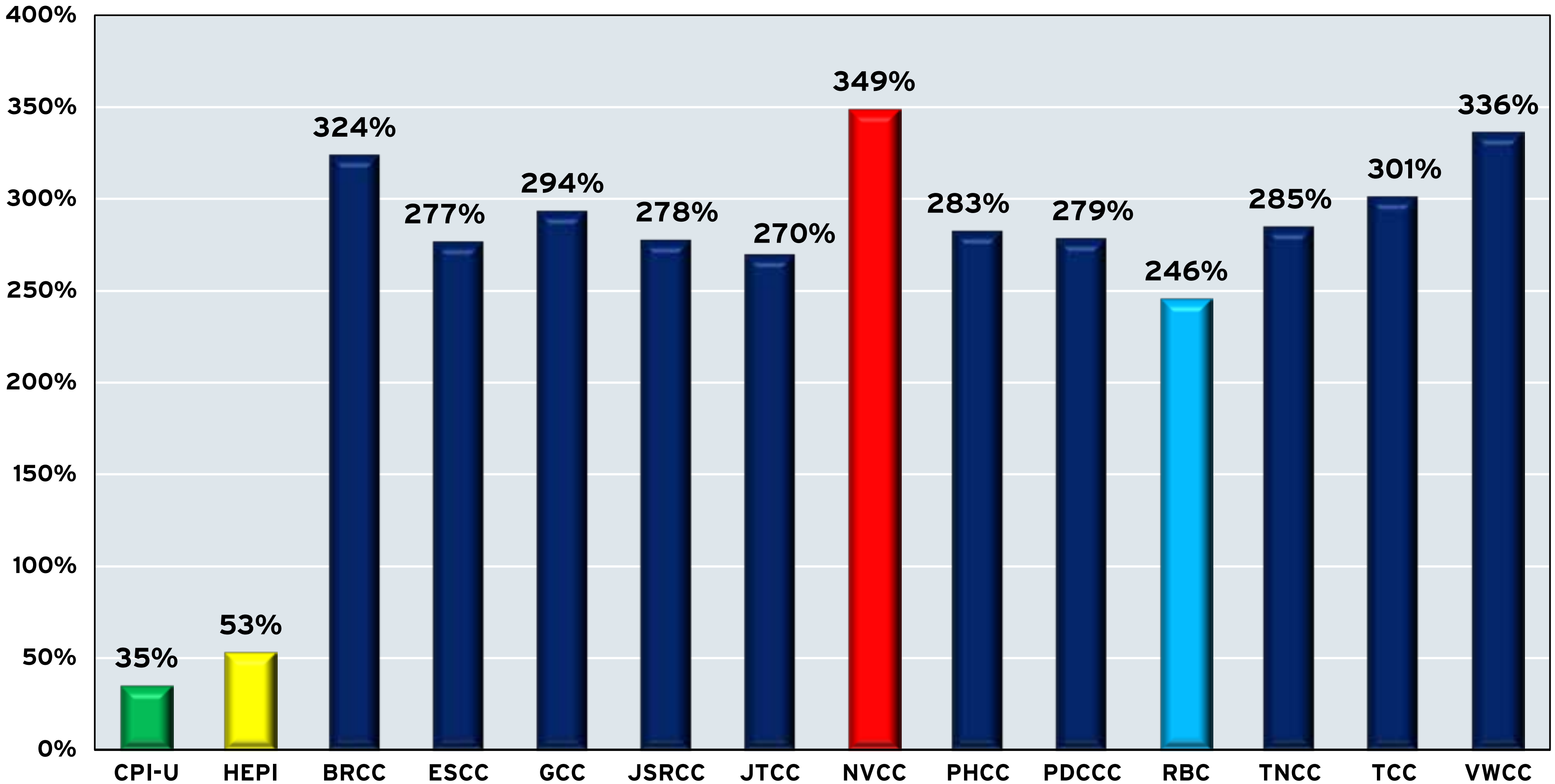
PERCENT CHANGE IN IN-STATE TUITION AND FEES, VIRGINIA FOUR-YEAR PUBLIC INSTITUTIONS, 2001-02 TO 2016-17



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

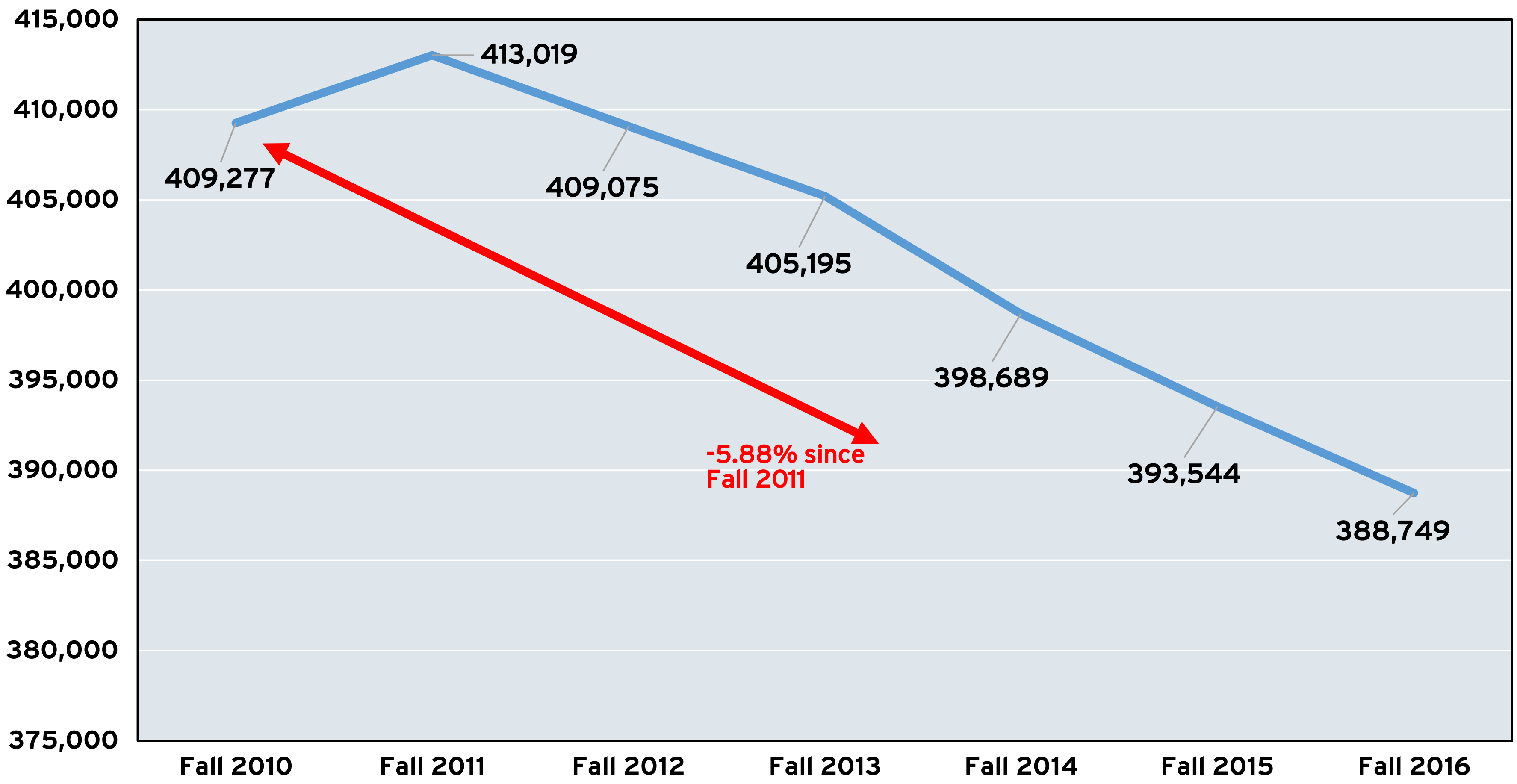
TOTAL PERCENT INCREASE IN IN-STATE TUITION AND FEES, SELECTED VIRGINIA TWO-YEAR PUBLIC INSTITUTIONS, 2001-02 TO 2016-17



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 3

DECLINING FALL SEMESTER HEADCOUNTS AT VIRGINIA'S PUBLIC INSTITUTIONS OF HIGHER EDUCATION



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

Comparing Tuition And Fee Increases To Changes In Prices And Incomes

Published tuition and fee charges at Virginia's public institutions have far outpaced both the CPI-U (the consumer price index for all urban consumers)[3] 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 4 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 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 18.7 percent during these years – only about one-quarter as much as the increase in published tuition and fees. Graph 5 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.

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 3.3 times as fast as Virginia median household income between 2001 and 2016.**

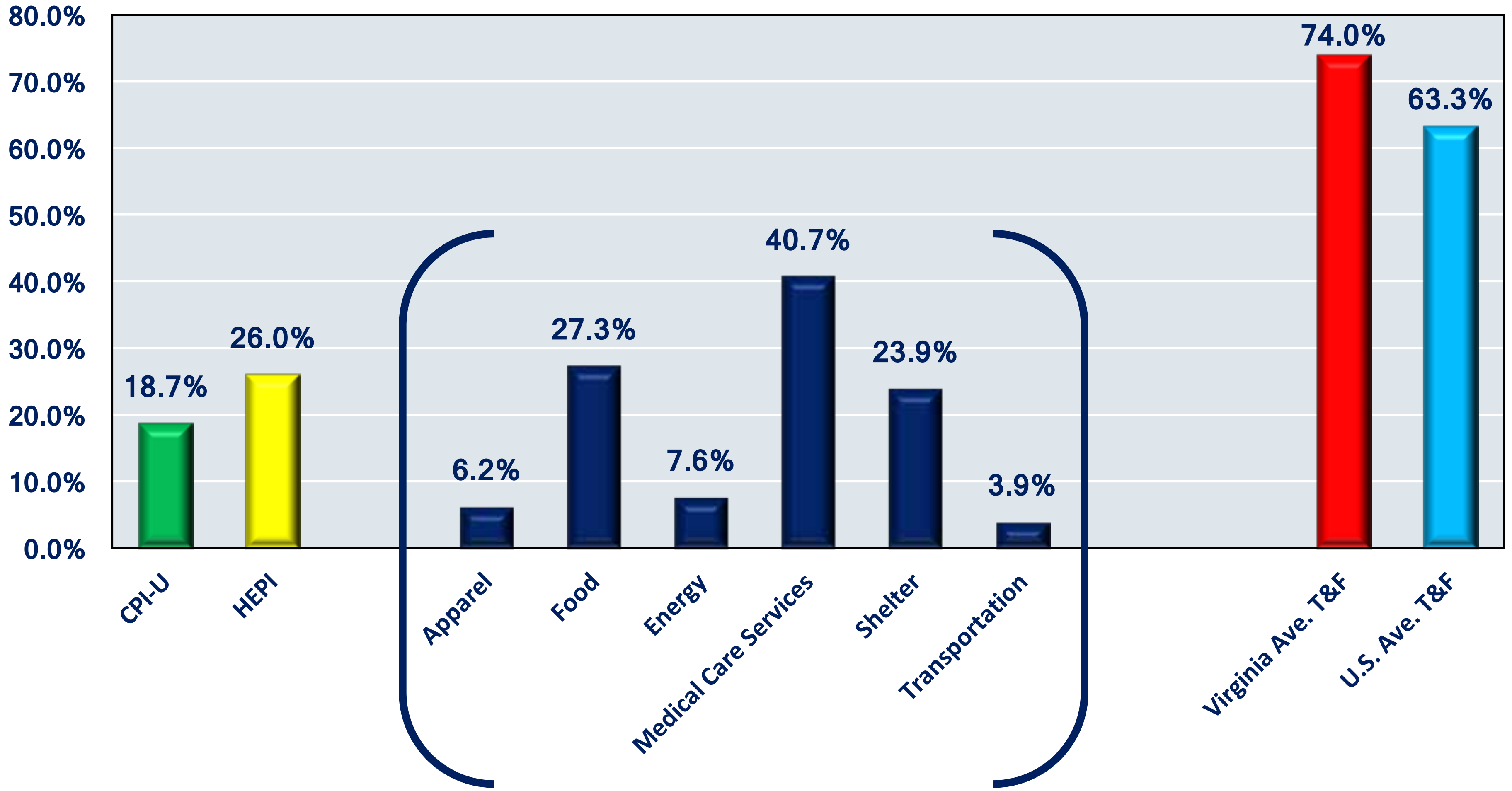
An interesting and relevant way to assess the ability of Virginians to pay for Virginia public higher education is to ask the following question: How many hours of work would it take for a Virginia worker earning the Commonwealth's median (50th percentile) wage rate to pay the average tuition and fee charge at a Virginia four-year or two-year public college or university? Graph 6 provides this information, which is eye-opening. **In 2001, 227.7 hours of work were required for a Virginian earning the median hourly wage to pay for tuition and fees at the typical four-year public Virginia institution. (And this was before taxes.) 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.

Even though need-based financial aid has increased (which we document later), it is difficult to avoid concluding that the typical Virginian gradually 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.

3 The CPI-U covers approximately 80 percent of all Americans.

GRAPH 4

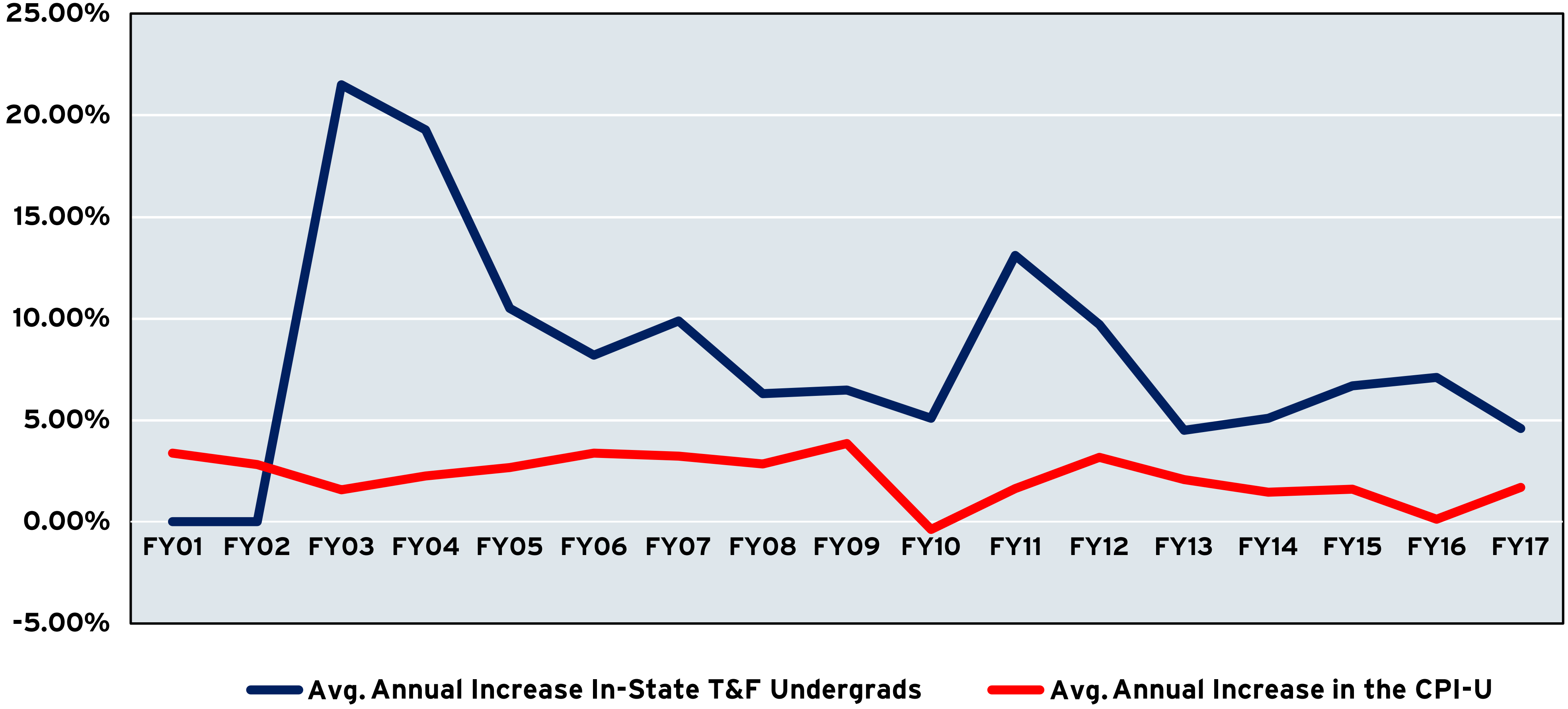
COMPARING TUITION AND FEE INCREASES AT VIRGINIA'S PUBLIC FOUR-YEAR INSTITUTIONS TO CHANGES IN OTHER PRICES, 2006-07 TO 2016-17



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-U; Commonfund for the HEPI

GRAPH 5

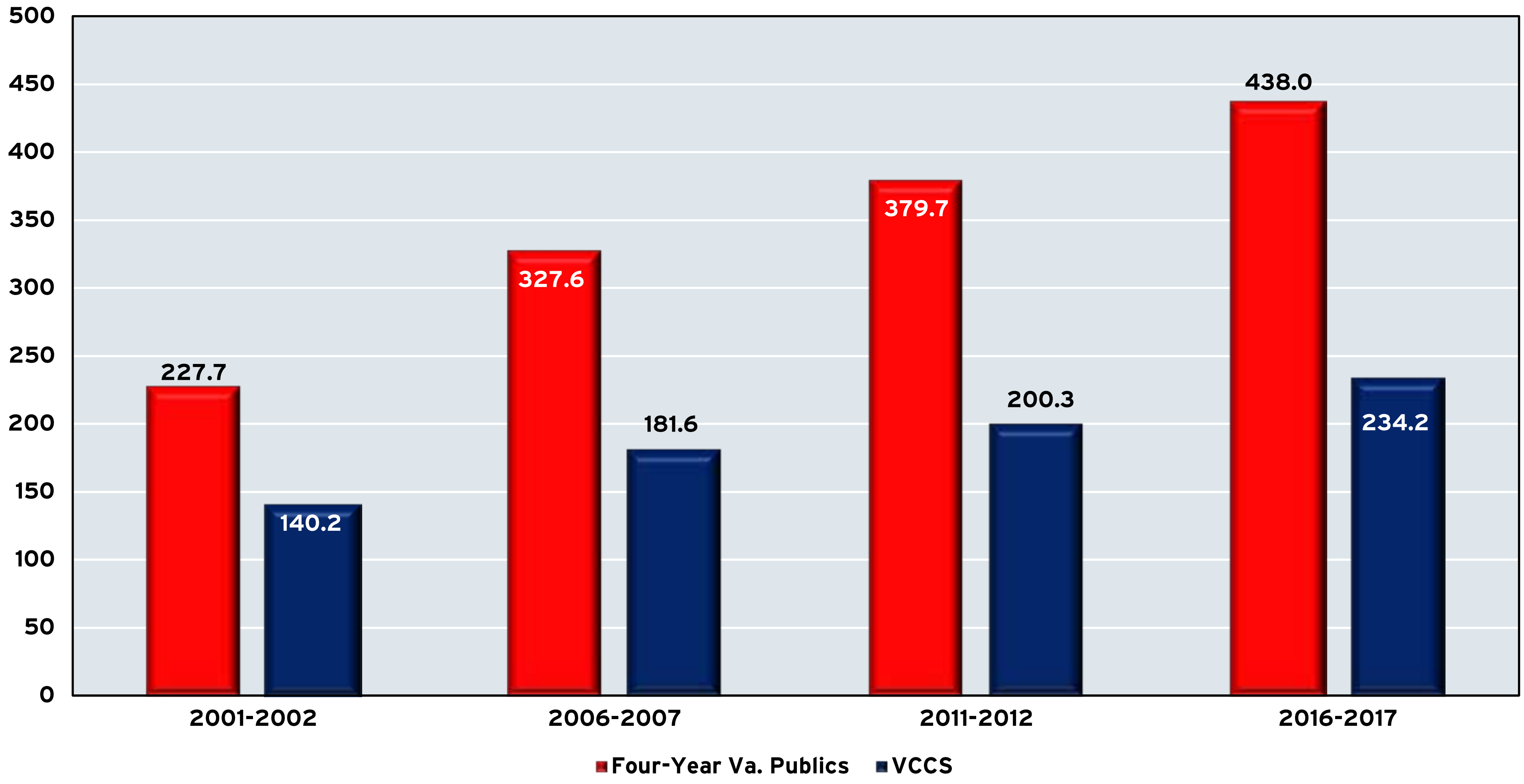
COMPARING AVERAGE FOUR-YEAR PUBLIC TUITION AND FEE INCREASES AT VIRGINIA PUBLIC INSTITUTIONS TO THE CONSUMER PRICE INDEX, FY 2001 TO FY 2016



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

GRAPH 6

NUMBER OF WORK HOURS REQUIRED 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 and State Council of Higher Education for Virginia for tuition and fees

Net Prices Are Most Important

The tuition and fee numbers presented thus far have been "sticker prices" – the charges approved by each institution's board of visitors and subsequently published in their catalogs. At some colleges and universities, only small proportions of the student bodies actually pay these sticker prices and the massive remainder pays lower prices because they receive financial grants. These grants can be need-based or merit-based, the latter perhaps reflecting superior grades and standardized test scores, or a particular talent 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. Instead of, or in addition to Pell Grants, institutions may provide students with other financial grants that do not need to be paid back. Institutional endowments commonly are thought to be the major source of such funds, but reality is that internally redistributed tuition and fee monies provide the most dollars for such grants. There are two primary sources of redistributed funds. First, out-of-state students are charged premium prices and the dollars they contribute subsequently are allocated by institutions for a variety of purposes, including financial grants to students. Second, students hailing from families with higher incomes effectively are charged higher prices and often their tuition dollars are reallocated via grants to other students who come to campus from lower-income families.

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) administer a collegiate version of a steeply progressive income tax, taking from the more wealthy and giving to the less wealthy by means of the net prices each group pays.[4] Again, "net price" here refers to 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 price.

4 Critics argue that these pseudo-taxes have not been approved by the Virginia General Assembly.

Graph 7 presents the average net price paid by undergraduate students at Virginia's four-year public colleges and universities in 2014-15, the latest year for which comparable data are available. The data in Graph 7 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.

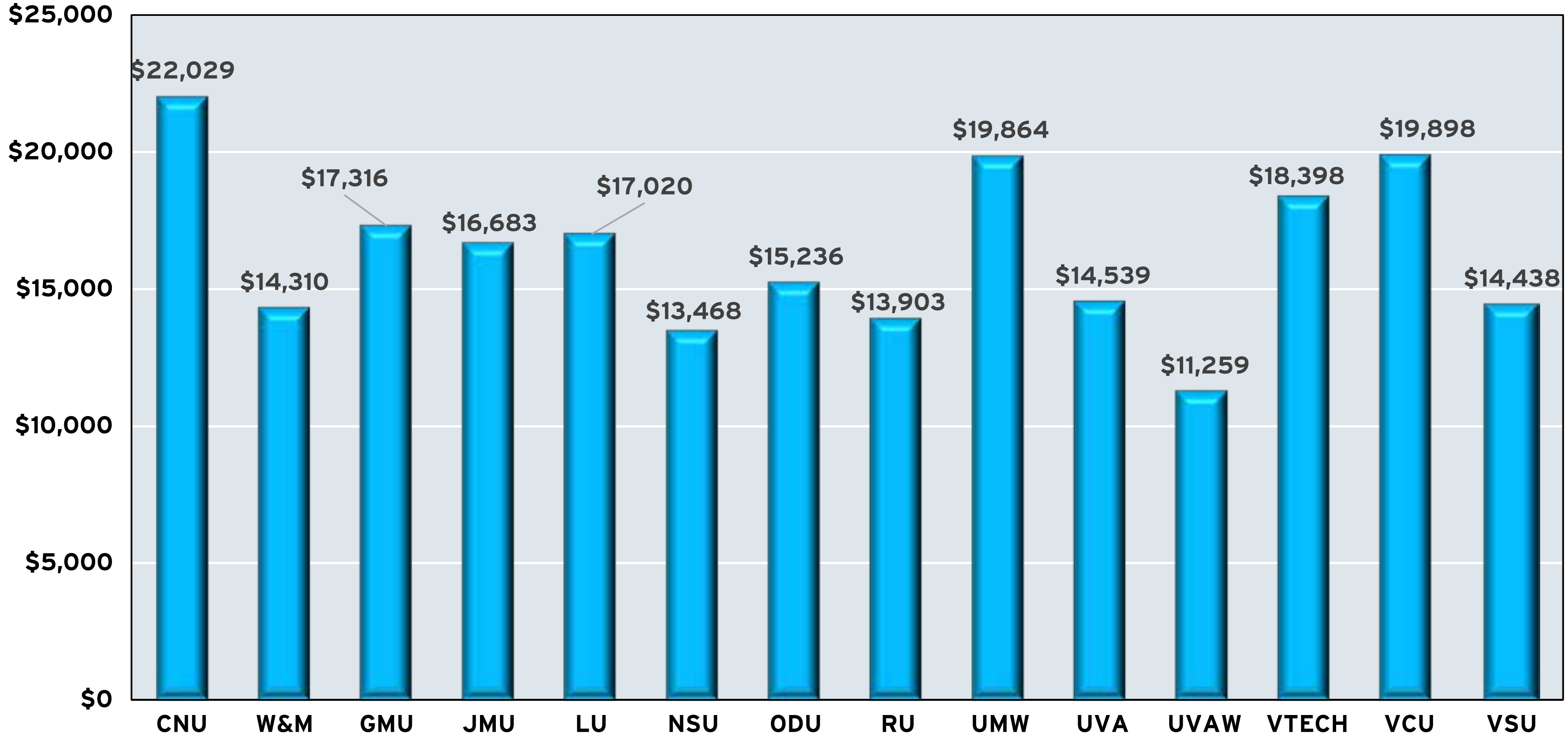
The net price data provided in Graph 7 make it clear that every institution is providing significant need-based grants to its students. Has this aid been sufficient to compensate students and their families for the tuition and fee increases that have been imposed? The simple answer is no and this is not a disputed judgment, either in Virginia or nationally. **The Appropriations Committee of the Virginia House of Delegates 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, but 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 – after inflation.

Nevertheless, there is considerable variation among institutions where net prices are concerned. Institutions with larger endowments typically provide larger financial grants to students that need not be repaid, though the impact of these grants is reduced because their tuition and fee charges are higher as well. Also, as noted above, some institutions are very aggressive price discriminators – they charge different students 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 7

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 enjoys brand magnetism that enables it to do so. As time passes, the pricing and financial aid policies of each institution mold the composition of its student body.

In January 2017, The New York Times published revealing data for more than 2,000 institutions that disclosed the percentage of each institution's student body 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 Patrick Henry 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 five Virginia public institutions (University of Virginia, William & Mary, Virginia Tech, University of Mary Washington and Christopher Newport University) have relatively few common people in 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. It is evident 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 average[5] and hence fewer Virginians qualify for Pell Grants; and (2) tuition and fees at Virginia institutions are higher than the national average. 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.

The College of William & Mary's 11 percent Pell Grant percentage for its undergraduate student body was the lowest of any public college or university in the United States and the University of Virginia's 12 percent was not far behind. *Prima facie*, neither institution is very accessible to student applicants from lower-income families. Additions to this list might include James Madison, Christopher Newport, Virginia Tech and Mary Washington. One could question whether this is consistent with their status as public institutions serving the entire citizenry.

In defense of several of these institutions (and especially W&M), 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.

William & Mary's generously low $4,459 net price for students 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 net price ($2,660). The University of Virginia also deserves kudos for lowering the net price paid by its lowest-income students by more than $600 between 2014-15 and 2015-16.

5 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 1 FAMILY INCOMES OF UNDERGRADUATE STUDENTS AT SELECTED VIRGINIA INSTITUTIONS		
	Percent Students From Families Upper 1%	Percent Students From Families Bottom 40%
Washington and Lee	19.1%	8.4%
U Richmond	15.1%	20.6%
U Virginia	8.5%	15.0%
William & Mary	6.5%	12.1%
Hampden Sydney C	6.1%	22.3%
U Mary Washington	2.9%	17.6%
Virginia Tech	2.8%	15.0%
James Madison U	2.6%	12.6%
Christopher Newport U	1.7%	18.1%
George Mason U	1.5%	26.2%
Radford U	<1%	26.4%
Va Commonwealth U	< 1%	31.0%
Old Dominion U	< 1%	33.2%
Northern Va CC	<1%	42.3%
Liberty U	<1%	43.4%
Blue Ridge CC	<1%	50.9%
Thomas Nelson CC	< 1%	52.4%
Norfolk State U	< 1%	66.0%
Patrick Henry CC	<1%	75.8%

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

TABLE 2 PERCENTAGE OF ALL UNDERGRADUATES RECEIVING PELL GRANTS AT SELECTED VIRGINIA INSTITUTIONS, 2015-16	
Washington and Lee U	9%
C of William & Mary	11%
U of Virginia	12%
James Madison U	14%
Virginia Tech	16%
Christopher Newport U	16%
U of Mary Washington	17%
U of Richmond	18%
Roanoke C	23%
Randolph-Macon C	23%
Longwood U	24%
Virginia Average	26%
George Mason U	27%
Virginia Commonwealth U	28%
Dabney Lancaster CC	29%
Radford U	31%
Old Dominion U	37%
National Average	39%
U Virginia Wise	38%
J. Sargeant Reynolds CC	39%
Thomas Nelson CC	42%
Eastern Shore CC	43%
Mountain Empire CC	46%
Liberty U	47%
Norfolk State U	62%
Virginia State U	71%

Source: National Center for Education Statistics' College Navigator

TABLE 3

NET PRICES PAID BY STUDENTS COMING TO SELECTED CAMPUSES FROM FAMILIES WITH INCOMES $30,000 OR BELOW IN 2015-16

William & Mary	$4,459
U of Virginia Wise	$9,396
U of Virginia	$9,463
Old Dominion U	$11,470
Radford U	$12,720
Norfolk State U	$13,952
Virginia State U	$12,998
U of Mary Washington	$11,899
James Madison U	$12,872
Virginia Tech	$11,998
Longwood U	$15,786
George Mason U	$15,089
Virginia Commonwealth U	$13,593
Christopher Newport U	$15,500

Source: National Center for Education Statistics' College Navigator

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 at 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 colleges and universities whose pricing of undergraduate education to Virginians often imitates private institutions? Is it appropriate for the citizenry to subsidize institutions that increase social and economic inequality rather than provide the traditional 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.[6]

There are undeniable financial considerations attached to institutional admission strategies. Pell Grant students can be expensive to educate because they require more institutionally based financial aid and 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.

Rare is the president of a top-ranked institution who wants to preside over a noticeable decline in his or her institution's rankings. What member of an institution's board of visitors will brag about the lower national ranking that came about because more Pell Grant students were admitted?

Are there other reputable national models available for consideration? Yes. At the University of California at Berkeley, for example, 30 percent of undergraduates were Pell Grant recipients in 2015-16, while at UCLA it was 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 all but a few of Virginia's four-year public institutions. Further, these institutions offer rather low net prices to their lowest-income students – 8,677 at Berkeley and $7,900 at UCLA in 2015-16.[7]

Georgetown University's Center on Education and the Workforce recently examined Pell Grant enrollments in highly selective colleges and universities and concluded "selective colleges can afford to admit more Pell Grant recipients." Anthony Carnevale and Martin Van Der Werf of Georgetown recently proposed a "20% Solution" such that the undergraduate student bodies of selective institutions should include at least 20 percent Pell Grant recipients. The duo argue that the institutions can afford to do so and that this "could equalize opportunity in higher education."[8]

6 With respect to graduation rates, see Sarah Butrymowicz, "Billions in Pell Dollars Go to Students Who Never Graduate," Hechinger Report (Aug. 17, 2015).
7 College Navigator.
8 https://cew.georgetown.edu/wp-content/uploads/The-20-Percent-Solution-web.pdf.

Ultimately – 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. Several Virginia institutions have done so in recent decades (notably James Madison and Christopher Newport), though they have moved away from, not toward, the Pell 20 model. Nevertheless, the example of the University of California campuses suggests that institutions may be able to retain both rankings and reputation even while they become more accessible to students from lower-income backgrounds.

A bipartisan proposal in Congress would assign financial penalties to institutions that take the lowest proportions of Pell Grant students.[9] At least half a dozen Virginia public four-year institutions appear to have made strategic decisions that effectively restrict the access of lower-income Virginians to those campuses. Is this a trend that the citizenry should support? We do not have the answer to this question, but it is easy to observe that what is perceived to be good for an individual institution's national rankings may not be synonymous with what is good for Virginians.

Student Debt

When students and their families cannot afford 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. **SCHEV found that 62 percent of 2015-16 baccalaureate degree graduates borrowed an average of $29,822 to pay for their education.** The 62 percent debtor number for 2015-16 graduates was up from 56 percent for 2006-007 graduates. SCHEV labels these debts "known" and cautions that its report may not capture all debt these graduates incurred.

9 Jon Marcus, "Top Universities Could Take Thousands More Low-Income Students, Study Says," *Hechinger Report* (May 2, 2017), http://hechingerreport.org/top-universities-take-thousands-low-income-students-study-says.

TABLE 4

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

Year	Percent of Known Debtors	Average Level of Debt
2011-2012	61%	$26,407
2012-2013	62%	$27,582
2013-2014	63%	$28,322
2014-2015	63%	$29,267
2015-2016	62%	$29,822

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

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.

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.[10] 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 8).[11] Thus, Virginia's public colleges and universities have been increasing tuition for other reasons as well. This conclusion is consistent with recent national studies.[12]

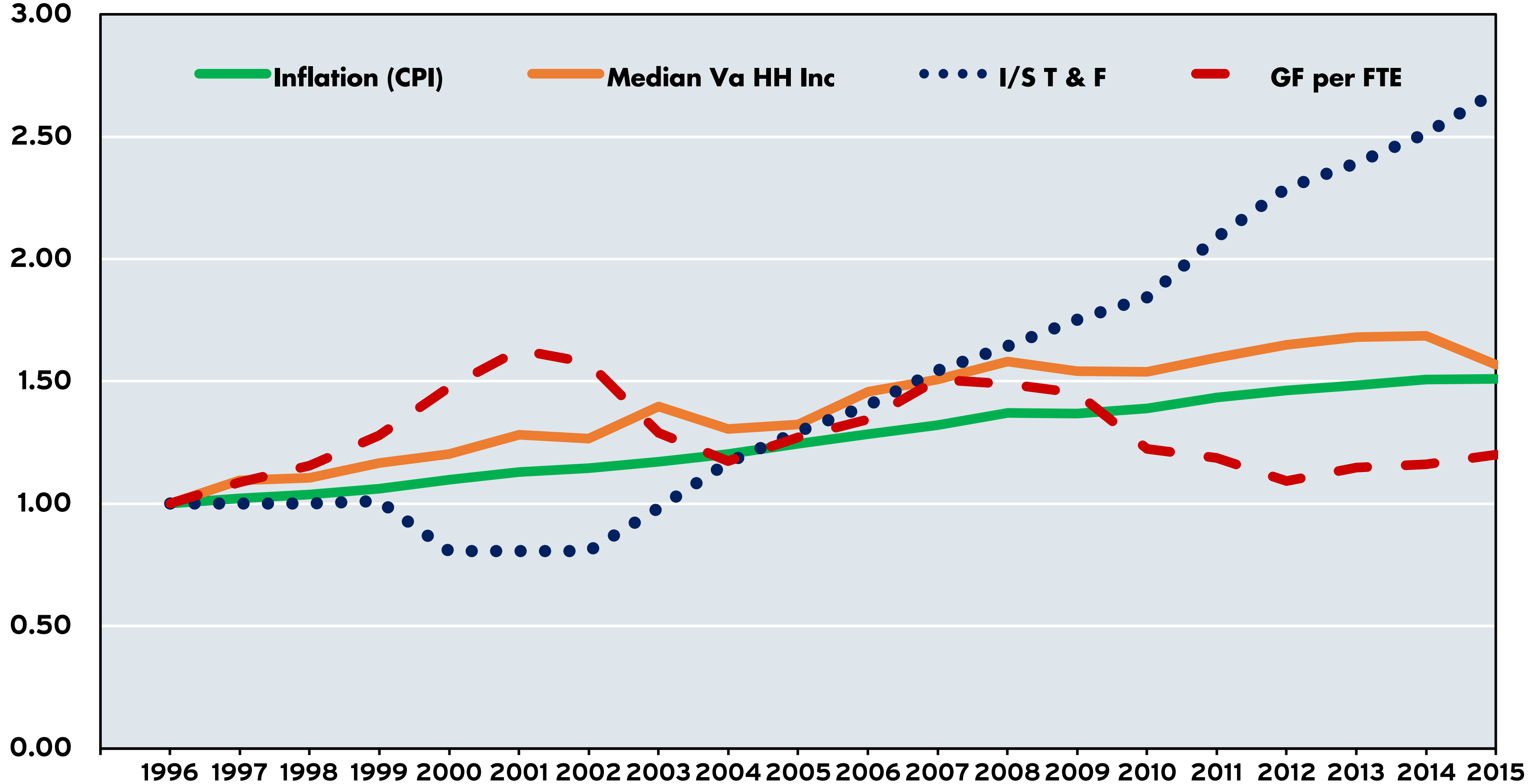
10 "Higher Education Affordability," House Appropriations Committee Retreat, Nov. 15-16, 2016, http://hac.virginia.gov/committee/files/2016/11-15-16/III%20-%20Higher%20Education%20Affordability.pdf.
11 "Higher Education Affordability," House Appropriations Committee Retreat, Nov. 15-16, 2016, http://hac.virginia.gov/committee/files/2016/11-15-16/III%20-%20Higher%20Education%20Affordability.pdf.
12 One example is Neal McCluskey, "Not Just Treading Water," Policy Analysis (Cato Institute, Feb. 15, 2017).

What are those other reasons? They include:

- Institutional concern with national rankings is epitomized by U.S. News & World Report rankings. Fixation on rankings can lead to a variety of decisions considerably 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 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 and headcount enrollments are declining. Modernization and rehabilitation of existing space may make more sense and be less expensive.
- Institutions increasingly assess mandatory fees to support items ranging from student centers to athletic teams. In 2016-17, eight Virginia four-year public institutions charged their full-time undergraduate students athletic fees of $1,538 or more. Consider Christopher Newport's $1,886 annual fee. This corresponds to a charge of $188.60 per three-hour undergraduate 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 9). 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.

GRAPH 8

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



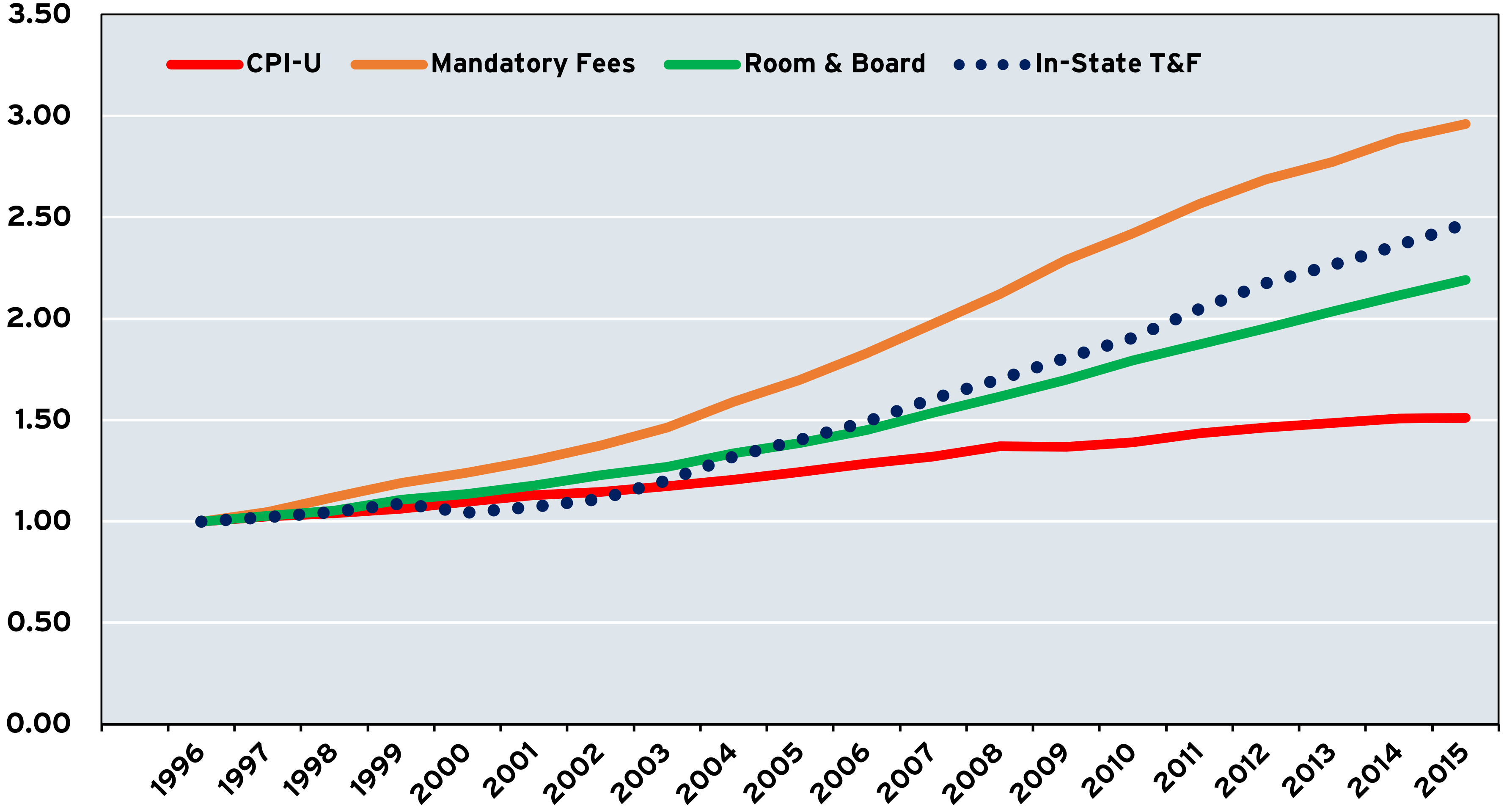
Source: "Higher Education Affordability," House Appropriations Committee Retreat, Nov. 15-16, 2016, http://hac.virginia.gov/committee/files/2016/11-15-16/III%20-%20Higher%20Education%20Affordability.pdf

- Institutions have reduced the proportion of their budgets they spend on instruction (see Graph 10).
- Disproportionate growth in spending on employee fringe benefits (which sometimes have 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.
- 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 with other institutions, even in low-enrollment areas such as foreign languages and literatures.
- Institutions are averse to pricing the resources they use internally, such as space, and this leads to suboptimal behavior and hoarding.
- Institutional mission creep has propelled many institutions into offering new, low-enrollment programs, often at the graduate level.
- Faculty productivity, as measured by faculty credit hours generated, has declined on most campuses.
- Subsidies from undergraduate students often are required to support faculty research activity and this is true even in cases where the research also 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 in Virginia, where institutional independence is relatively high compared to many other states, not the least because each institution has its own board of visitors. Collectively, 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 9

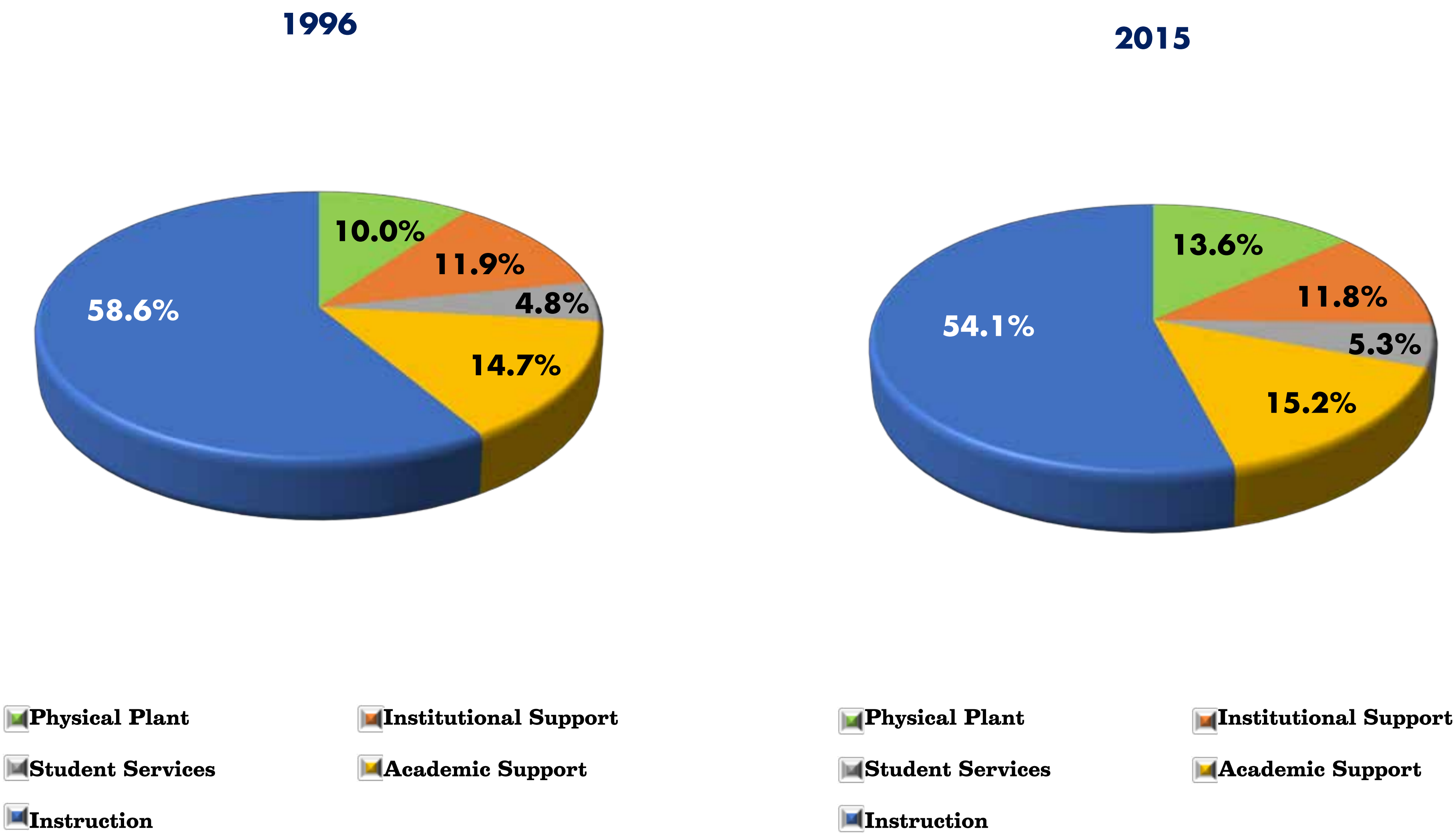
COMPARING CHANGES IN THE MAJOR ELEMENTS OF THE COST OF ATTENDANCE AT VIRGINIA PUBLIC INSTITUTIONS TO CHANGES IN THE CONSUMER PRICE INDEX, 1996-2015



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 10

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 or the State Council of Higher Education for Virginia constrain increases and improve the situation? Perhaps.

Let's utilize an example to clarify the situation. Graph 11 compares the University of Virginia'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 subsequent years, 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 UVA's per student in-state tuition and fee charge in 2016-17. Specifically, UVA's published tuition and fee price in 2016-17 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 CPI,[13] then in 2016-17 its tuition and fee charge would have been only $6,047 – 38.5 percent of the actual cost.

One 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 they would have saved $106.11 million – a rather tidy sum. In effect, 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.[14]

13 July to July of each year.

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 even while these tuition increases were being imposed, UVA was accumulating a $2 billion-plus 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 billion-plus 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 previously noted? Ultimately, such decisions reflect the values held by the senior officers of institutions and their board members.

The point here is not that UVA misused the $721.38 million (or the $2 billion-plus fund), but instead that as economists point out, there were real opportunity costs – foregone alternatives – attached to this approach to managing the institution. Alternatively, 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 a low-tuition policy have done damage to UVA's rankings and its ability to accomplish its stated institutional goals? Quite possibly, given the fashion in which rankings usually are assigned. This is an important reason why our discussion here will not lead to a definitive conclusion. The goal of this chapter has been to highlight affordability and access issues and the costs associated with current tuition and fee regimens, not to

14 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.

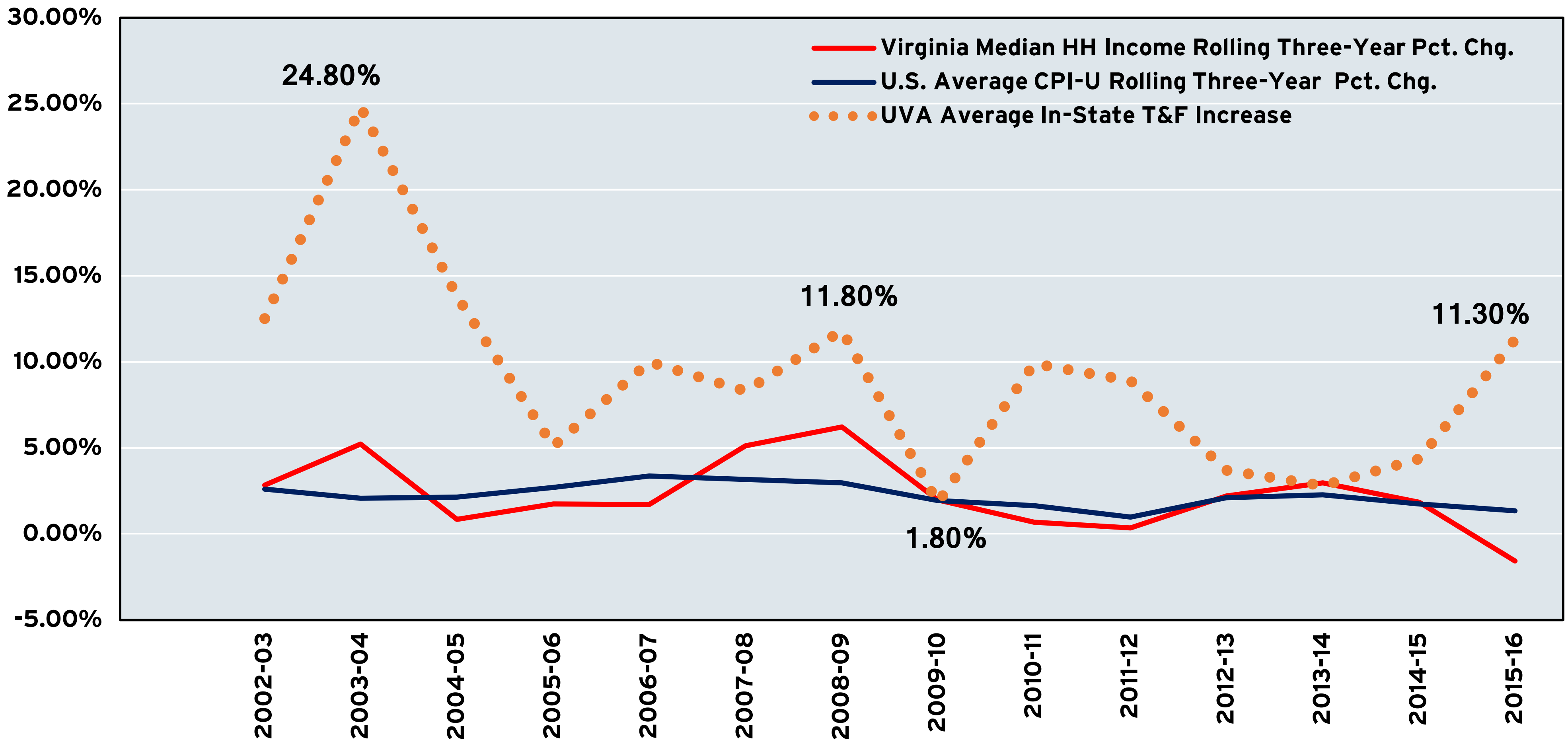
prescribe an operating plan for any Virginia public institution, including UVA.

Lest anyone view tuition and fee rules such as the one we have just illustrated for the CPI as a panacea, we 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) to sidestep an overall tuition cap. 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 their residence hall operations (or any other auxiliary enterprise) for central services provided.

One could go on, but the implications are clear: Regulatory authorities nearly always must struggle to impose their wills on those they regulate. Human imagination seemingly is infinite and those who are regulated are adept at finding new ways to circumvent what initially might appear to be ironclad behavioral rules. The law of unintended consequences still holds sway.

GRAPH 11

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

Is "Free" Tuition A Solution?

Considerable attention nationally has been focused on proposals for "free" tuition. Tennessee led the way in this regard for adult community college students and political candidates in both parties have picked up free tuition as a popular campaign plank. The notion has simple appeal – simply abolish tuition at public institutions, or at least at community colleges.

Alas, this is a notion that does not survive careful analysis. First, at most community colleges, large numbers of students pay little or no tuition already because of the need-based financial aid they receive. Hence, free tuition ends up supporting large numbers of students who have no demonstrated financial need. This represents a questionable redistribution of income and use of public funds.

Second, place yourself in the role of a college president who has just been informed that henceforth the state will cover tuition costs for her students. What incentive does she now have to control costs? Little or none. Free tuition fails to address an obvious problem in public higher education – rampant cost inflation. On the contrary, it accentuates the difficulty.

Third, if institutions no longer collect tuition from many students, then they will become heavily dependent upon state appropriations. Unfortunately, state general fund support is highly variable and on a per-student basis has declined substantially over past decades. Institutions would find themselves dealing with highly cyclical finances.

Free tuition is a Band-Aid solution to the much more deep-seated problem of public college price inflation. It does not respond to the forces that have generated our current challenges.

Governors, Boards Of Visitors And The General Assembly Are Crucial

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. One can cut to the chase by observing that many, perhaps most, members of the boards of Virginia colleges and universities come to believe that 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 positive 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 periodically arise at some meetings, but they are matters that nearly always receive less attention than items relating to new buildings and academic programs.

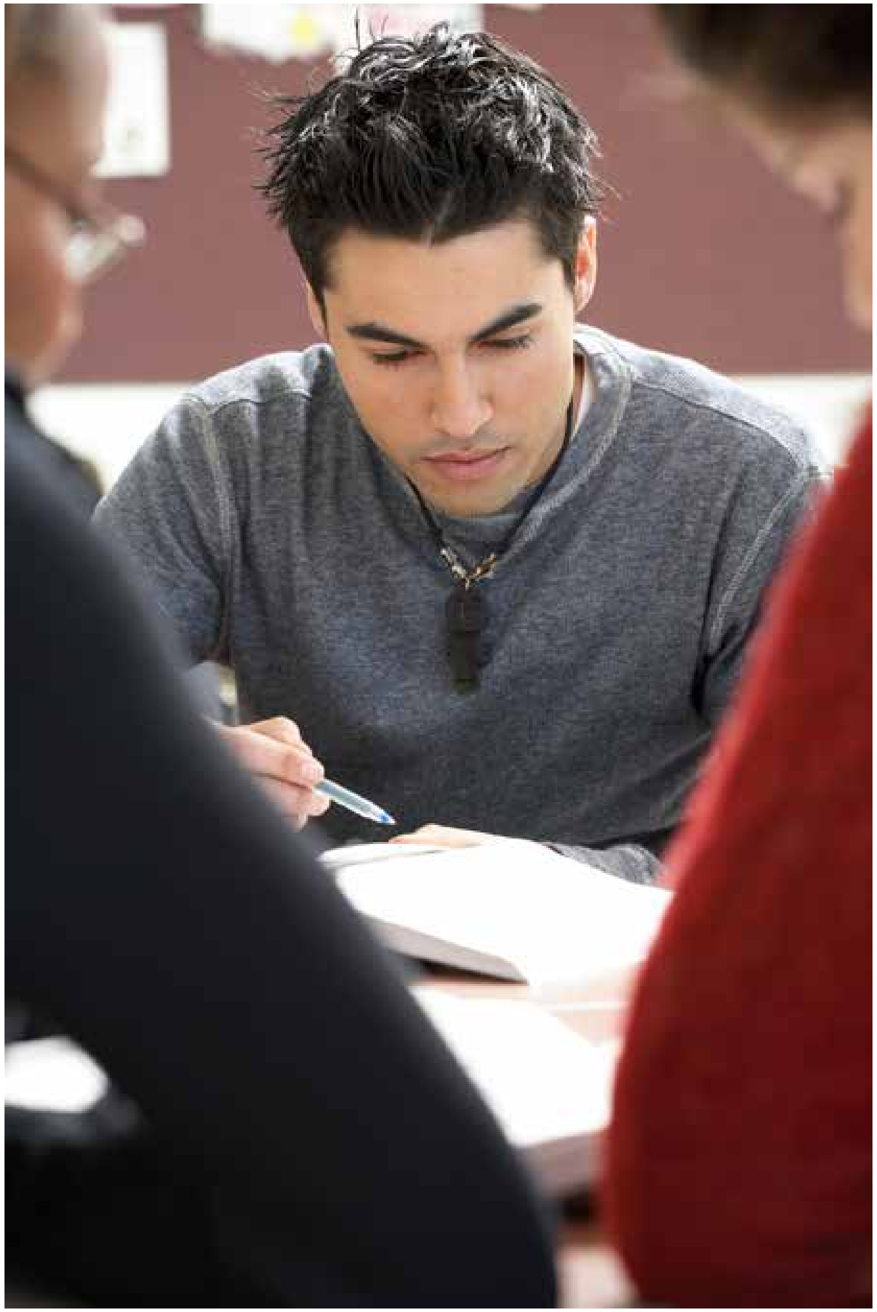
Lunches and dinners during board meetings are filled with the likes of Fulbright Scholar faculty members, those who have garnered large research grants, string quartets and jazz groups, students who have been admitted to prestigious graduate schools, and members of the campus community who are local 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 the uncomfortable territory of affordability and access, may find themselves being counseled by senior board members and advised to stick to the agenda and avoid being contentious.

Given this environment, what if future Virginia governors were to choose 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 only if governors, legislators and board members understand what has been going on and how the game is played on campus. It will take definitive action by future governors, legislators and board members for the Commonwealth to pull itself out of the current rut.

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?[15] Legislators can and should ask significant questions of prospective board of visitors 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, then the rewards will be higher economic growth rates and, some might argue, a more equitable society that emphasizes the opening of opportunities rather than the closing of doors.



15 Old Dominion University provides an instructive example. As Graph 1 reveals, ODU's tuition and fee increases have been the lowest in Virginia among four-year institutions and *Business Insider* named the institution the "most affordable" four-year public institution in Virginia. It enrolls large percentages of financially needy students who aspire to social and economic mobility. Its reward has been visibly lower per student general fund financial support (compared to other doctoral institutions). Restraint has been penalized.