Tuition at public four-year institutions has increased faster than inflation every year since 1980. Over time, these consistent increases have compounded, causing concern among students, families and legislators about college affordability. Tuition, along with general appropriations and financial aid, represent the three primary policy levers legislatures may wish to use to craft a strong higher education finance policy. It is wise to consider the three levers together, since pulling one is likely to cause ripple effects in the other two. This brief is part of a series focusing on appropriations, financial aid and tuition policy. It highlights recent trends in tuition prices, some causes of tuition increases, and policy options states have considered.

Definitions

Several terms will be used throughout this brief—tuition, net price, price and cost. Because these terms sometimes are used interchangeably, it is important to clearly define each. Tuition as used here refers to the sticker or published price—the tuition amount published on institutional websites before any financial aid is applied. If a student were to receive no financial aid, sticker price tuition is the amount he or she would pay for courses each year. However, most students receive some type of financial aid—grants, scholarships, tax credits or tuition waivers—and do not pay the published price. Net price represents tuition minus any financial aid or discounts a student receives. Because individual students receive financial aid from many sources and for many different reasons, it is difficult to calculate a representative net price for all students. Most calculations for net price are, at best, estimates of what students at various income levels or types of institutions will pay in tuition after factoring in widely available forms of aid such as federal and state grants.

Price and cost frequently are used interchangeably, but when considering higher education institutional finances, it is important to draw a distinction. Price simply represents tuition—it is the amount institutions charge students for educational opportunities. Cost, on the other hand, refers to what institutions must pay to educate students. In other words, all institutional inputs—such as faculty and administrative salaries, benefits, building maintenance and student services—are costs. The difference between cost and price is especially important at public institutions because price does not equal cost. All states provide operational support to institutions; this allows resident students to pay a tuition price that is lower than the cost of educating them.

Trends

Since 1990, the national tuition average at public four-year institutions has increased by 161 percent after adjusting for inflation. At two-year institutions, the national tuition average has increased by 102 percent after adjusting for inflation since 1990. Figure 1 illustrates these increases in inflation-adjusted dollars. The national average for tuition at public four-year institutions increased by $5,653, from $3,486 in 1990-91 to $9,139 in 2014-15. At public two-year institutions, the national average tuition increased by $1,692, from $1,655 in 1990-91 to $3,347 in 2014-15.
Total Price of Attendance

Although tuition prices receive significant attention, the true price of attending a postsecondary institution is much more than tuition. Students also must pay for room and board, textbooks, school supplies and transportation specifically related to their education. The sum of all these expenses is known as the total price of attendance. At public two-year institutions, tuition is approximately 19 percent of the total price of attendance, and at public four-year institutions it is approximately 40 percent.\(^3\)

Most students receive some form of financial aid to help offset the price of attendance. The net price students pay after all forms of financial are factored in is often much lower than the published price. An average net price is difficult to calculate for all students because of the forms of aid available tend to vary by family income and academic ability.

Figure 2 illustrates the approximate net prices by family income for first-time, full-time dependent students. The net price calculations subtract only grant aid and represent the price the average student in each income level would pay for tuition, fees, books, housing, supplies, transportation and personal expenses. The net price figures highlight the importance of state appropriations to public institutions. Students in the lowest income category who are attending public four-year institutions have an average net price of approximately 62 percent of the amount paid by similar students at private nonprofit four-year institutions.

Why Does Tuition Increase?

Some disagreement exists about the causes of tuition increases. This is primarily because the reasons for tuition increases in one state or institution may differ from those in a neighboring state or similar institution. Tuition setting is also an inherently political process and, in most states, often involves many people who have varying levels of influence and control over the process. External events such as recessions and the earnings differential between college graduates and high school graduates also influence tuition rates. In recent years, enrollment growth and recessions have been two of the primary causes of tuition inflation; however, institutional behavior and decisions also can lead to tuition increases.

Recessions have a significant negative effect on state revenue, which, in turn, limits the amount states are able to allocate to any single budget item. Higher
education appropriations—unlike spending on primary and secondary education, for which a specific amount is often legally mandated, or Medicaid spending, for which spending levels are tied to federal dollars—tend to be one of the most discretionary items in state budgets. Colleges and universities can offset reductions in state support by increasing tuition. Consequently, during economic downturns when states must reduce spending to meet balanced budget requirements, higher education funding tends to decline and tuition tends to rise. Given the severity of the most recent recession and the slow recovery—more than half of states still have not rebounded to pre-recession revenue levels—declines in state appropriations have been a central factor in recent tuition increases at many public institutions.

Because enrollment in higher education institutions has increased rapidly in recent decades, it represents a second leading factor for tuition increases. The college earnings premium—the bump in earnings college degree earners receive compared to high school graduates—has steadily increased since the 1980s. Thus, a postsecondary credential represents a sound investment for most individuals, and has led more people to pursue postsecondary credentials. Students who receive a bachelor’s degree earn approximately 65 percent more than someone who holds only a high school diploma. Since 1989, full-time equivalent enrollment at public institutions has increased by approximately 3.6 million students, representing a 48 percent growth in FTE enrollment. As enrollment increases, institutions must increase capacity to serve additional students. Institutions may need to hire additional faculty members, build more classrooms or residence halls and improve student services by hiring more advisors or expanding career counseling. Building capacity increases the costs associated with providing educational opportunities. In addition, when demand for higher education opportunities is high—as it has been at elite institutions for several years— institutions are able to charge a higher price. Market forces allow institutions with excess demand—typically flagship institutions that are able turn away a sizable portion of applicants—to charge more without affecting demand.

Beyond changes in state support and enrollment, tuition increases are primarily driven by changes in an individual institution’s cost structure. All expenditures on instruction, research, administration, stu-
dent services, public service, and plant operation and maintenance comprise an institution’s cost structure. If expenditures in one category go up, a concomitant increase in revenue or decrease in another expenditure category must occur. Compensation increases for faculty members, the decision to hire more administrators, benefit increases, lower teaching loads, energy prices, debt service, and efforts to improve institutional rankings all have caused tuition to rise since the 1980s.

Institutions also compete for students, especially those of high academic ability. In pursuit of students, institutions have upgraded amenities and increased scholarships in recent years. Amenities—including upgraded recreational facilities, modern residence halls, and technology infrastructure capable of handling modern mobile devices and streaming demands—typically are associated with increased tuition and fees necessary to pay for construction and operation of new facilities. The amount of tuition and fee revenue public institutions spend on debt service has increased by 35 percent since 2009, from $522 million to $706 million. In pursuit of students with certain characteristics, many colleges and universities provide institutional scholarships to lower the price highly desired students will pay. This practice, known as tuition discounting, has a long history at private institutions and has become increasingly common at public institutions. To award these scholarships, institutions must increase the sticker price to ensure they earn adequate net tuition revenue.

Although intercollegiate athletics play an important role in many colleges, athletic departments are expensive to operate and few generate enough revenue to fully cover expenses. As a result, tuition and fees frequently are used to subsidize athletic ventures. In recent years, athletic expenses have increased and now may require larger subsidies from tuition and fee revenue at many colleges. In response to growing athletic costs, Virginia enacted legislation that capped the percent of operating revenue athletic programs can receive from institutions and student fees.

Policy Options

Tuition policy is a primary tool states have to influence college affordability and access. In most states, legislatures do not directly set tuition rates. Rather, they indirectly influence tuition rates through the annual budget process and by establishing broad policy parameters institutions and governing boards must follow when setting tuition. Tuition policy is often a delicate balancing act between restraining tuition increases, and considering institutions’ revenue needs. If tuition policy is too restrictive and limits revenue, the educational quality of institutions may decline, institutional bond ratings may be downgraded, and unintended consequences may arise should institutions aggressively seek alternative revenue sources, such as enrolling more nonresident students. If tuition rates rise faster than family incomes, students will likely need to borrow to finance their education, and price-sensitive students may attend an institution that does not match their academic credentials or may forego attending college entirely. The following section outlines several tuition policies states have enacted or considered.

Limitations on Annual Tuition Increases.
Several states have enacted limitations on the maximum amount tuition can increase over the
previous year. Missouri implemented one of the strongest limitations in 2008-2009 when it tied tuition increases to inflation measured by the Consumer Price Index (CPI). Missouri institutions with tuition amounts above the state average may raise tuition only by the annual change in CPI. If an institution charges tuition below the state average, then it may raise tuition by the change in CPI multiplied by the average state tuition. If institutions exceed the maximum allowed tuition increase, they must return 5 percent of their state appropriations. Institutions also may receive a waiver to increase tuition more in certain circumstances, such as when state support declines during a recession. Other states provide institutions more flexibility or restrict the limitation to a single budget cycle. For example, Colorado allows tuition to increase by as much as 6 percent each year without additional approval. In the most recent higher education appropriation bill, North Dakota limited tuition increases to 2.5 percent in the 2015-2016 and 2016-2017 academic years.

Other states use changes in median income to influence tuition increases. Maryland has set a goal of using a three-year rolling average change in median income for tuition increases. Washington enacted legislation in 2015 that ties tuition rates to the median wage in the state—research institutions charge a higher percent of median wage, while community colleges charge a lower percent. For states to tie tuition to a measure such as median income, state support for higher education institutions must remain relatively stable. Maryland uses a tuition stabilization fund to help meet the state tuition goal. In Washington, state support for higher education is expected to increase by the rate of inflation each year. Linking tuition to the median wage led to a 5 percent to 20 percent tuition reduction in Washington. The state increased its investment in higher education by more than $200 million to pay for the tuition reduction.

**Linking Tuition with Institutional Performance.**
Texas considered linking tuition increases to the performance of individual institutions. Texas Senate Bill 778 proposed limiting tuition increases to the rate of inflation at institutions that do not meet target levels on the majority of 11 performance measures. Institutions that meet the target levels on most performance measures would have been able to increase tuition by the rate of inflation plus 3 percent. The proposed performance measures were similar to the metrics other states use in performance funding models and include number of degrees awarded, number of students making progress toward degrees, graduations rates and administrative costs. Virginia allows institutions that meet certain performance benchmarks to retain interest earned on tuition and fee revenue that is deposited in the state treasury. While the current Virginia law is not tied to tuition increases, it does offer incentives for institutions to meet delineated state goals.

**Tuition Stabilization Fund.** Maryland created a Higher Education Investment Fund in 2007 to “invest in public higher education and workforce development” and “keep tuition affordable for Maryland students and families.” Within the investment fund, Maryland created a Tuition Stabilization Account which functions similar to a rainy day fund for higher education. Funds from the account can be used only to stabilize tuition at higher education institutions. If higher education appropriations are lower than the previous year, the funds from the stabilization account can be used to offset the decline in appropriations and therefore limit tuition increases. The stabilization account is one way Maryland links tuition policy with annual appropriations to help meet state higher education goals.

**Tuition Freezes.** Tuition freezes are fairly common following the large tuition increases that tend to occur during recessions. Freeze frequently are informal agreements negotiated during the budget process between institutions and legislatures. In exchange for increasing state support by a certain amount, institutions agree not to raise tuition for a certain period. An analysis by the California Legislative Analyst’s Office found that tuition freezes often are followed by rapid tuition increases in ensuing years, making current students the primary beneficiaries of the freezes. Tuition freezes do link appropriations and tuition; however, they are temporary fixes that
last for only one or two budget cycles and do not address institutional cost structures or create long-term affordability solutions.

**Tuition Tax Credits and Deductions.** A few states offer state tax credits or deductions for tuition expenses. South Carolina offers a maximum refundable tax credit of $850 for students who are attending four-year institutions and $350 credit for those attending community colleges.\(^{14}\) New York offers a refundable tax credit that varies based on how much tuition a student must pay. Students who pay less than $5,000 in tuition receive a maximum credit of $200. Students who pay more than $5,000 receive the maximum credit of 4 percent of qualified tuition expenses. In addition, at least 33 states offer income tax credits or deductions for contributions to college savings plans.\(^{15}\) Although these tax benefits may not directly offset current tuition charges, they provide incentives for families to save for future educational expenses, including tuition.

**Guaranteed or Fixed Tuition.** Fixed or guaranteed tuition policies set a single tuition price for each incoming class that cannot increase for a certain period—usually four years. Under such policies, once enrolled, students do not face rapid tuition increases from one year to the next, allowing families to better plan for college costs. However, if institutional costs or revenue fluctuate greatly from one year to the next, one class of entering students may pay much more than the previous year’s class. These policies shift the uncertainty of tuition increases from students to institutions, which must estimate the tuition revenue needed through the duration of the guarantee period. Policies in at least six states allow or require state institutions to offer guaranteed tuition rates. Among these states, Illinois requires all public institutions to offer a plan.

**Linking Tuition with Financial Aid.** Because low-income students are sensitive to price changes, tuition increases can adversely affect their enrollment and decisions to remain in college. To counter the negative effects of tuition increases among low-income students, some states require a certain amount of all tuition increases be reserved for need-based aid. Prior to implementing a tuition reduction, Washington required institutions that increased tuition above the amount expected in the appropriations bill to set aside 5 percent of tuition revenue for need-based aid.

**Resident and Non-Resident Tuition Tradeoffs.** In response to lower state appropriations per student, many institutions have increased nonresident student enrollment in an effort to boost revenue. Several public research institutions have kept resident enrollment flat, while substantially increasing the number of non-resident students.\(^{16}\) In most states, institutions and governing boards have significant flexibility to set nonresident tuition rates. A few states establish baseline nonresident tuition amounts that usually are tied to the resident rate or instruction costs. For example, Alabama requires that tuition for nonresidents be a minimum of twice the resident rate,\(^{17}\) and West Virginia requires non-resident tuition to cover the full cost of instruction.\(^{18}\) This practice of increasing nonresident enrollment can limit access to more selective public institutions.\(^{19}\) Consequently, some states place caps on the percent of nonresident students a university can enroll. Colorado limits nonresident enrollment to 45 percent of each incoming freshman class.\(^{20}\)

**Connecting Tuition Policy to a State Public Higher Education Agenda**

Because higher education lacks a good definition of quality, higher prices may be equated with higher quality. In the current era of limited tax revenue and competing budget priorities, however, higher education institutions need to be more efficient—educating more students with less revenue—and more productive—providing students with the skills needed to be successful in the workforce in a timely manner. A growing number of states are creating higher education public agendas that outline specific goals for higher education institutions. Once higher education goals are established, linking tuition policy with state appropriations for institutions and financial aid policy provides states with an opportu-
nity to influence institutional behavior and achieve state goals without micromanaging decisions.

At public institutions, successful tuition policy will likely be linked to state appropriations. Because so many institutions rely on appropriations and tuition as primary sources of revenue, a decline in one revenue source means the other one must increase or costs must decrease. While many institutions could find cost savings in various areas, maintaining stable appropriations and tuition revenue will help institutions better plan long-term budgets and identify cost savings. Students and families also will be better able to plan for future tuition payments if increases are moderate and predictable. Linking tuition increases to median family income—as Maryland and Washington have done—will require a stable investment from state appropriations.

In addition to appropriations, linking tuition policy with financial aid can help maintain affordability, even if tuition prices increase. A policy that requires institutions to reserve a portion of tuition increases (if the increase crosses a predetermined threshold) can help offset the impact of tuition increases for the most price-sensitive students. Financial aid can also be an efficient method of financing higher education opportunities, since the funding goes directly to the students who need the most financial support.

Tuition, appropriations and financial aid can be linked in a number of ways, and each state may wish to consider the political, economic and demographic context to determine the best course of action. It remains important to monitor both the effectiveness and the unintended consequences of any change in tuition policy.

Notes

2. Ibid.
8. Ibid.