

**Reauthorizing the Higher Education Act:
Improving College Affordability**

**Testimony Provided to the
Committee on Health, Education, Labor, & Pensions
United States Senate**

Robert E. Anderson
President
State Higher Education Executive Officers

February 6, 2018

The views expressed in this testimony are those of the author alone and do not necessarily represent those of the State Higher Education Executive Officers Association or its membership.

Robert E. Anderson was appointed President of the State Higher Education Executive Officers (SHEEO) Association on August 1, 2017. SHEEO is the national association of the chief executives of statewide governing, policy, and coordinating boards of postsecondary education. SHEEO serves its members as an advocate for state policy leadership, as a liaison between states and the federal government, as a vehicle for learning from and collaborating with peers, as a manager of multistate teams to initiate innovative programs, and as a source of information and analysis on educational and public policy issues.

Before joining SHEEO, Dr. Anderson most recently served as Interim Chief Academic Officer and Executive Vice Chancellor for Academic Affairs for the University System of Georgia (USG). He also served as Vice Chancellor for Academic Affairs and Policy at the same organization. As a senior leader at USG, he addressed academic program approval, college completion initiatives, distance education, new delivery models, K-12 policy, teacher education, and grants administration and evaluation. Prior to his appointment, Dr. Anderson worked as Executive Vice Chancellor for Administration at the West Virginia Higher Education Policy Commission in Charleston, West Virginia. He previously served as Vice Chancellor for Policy and Planning at the same agency, Director of Research and Planning for the Tennessee Higher Education Commission in Nashville, Tennessee, and as an administrator and instructor at Montreat College in Montreat, North Carolina. A native of Augusta, Georgia, Dr. Anderson holds degrees from The Citadel (B.A.), The Southern Baptist Theological Seminary (M.Div.), and The University of Georgia (Ph.D.).

Summary

For the first time in our nation's history, we are at the cusp of college students and their families paying the majority of college costs. In 2016, net tuition revenue accounted for 47.3 percent of total revenue in higher education, up from 36.7 percent ten years earlier. This increased reliance on tuition dollars most adversely impacts those students who can least afford it – our historically underserved populations. The combination of increased costs and stagnant wage growth has resulted in an increasingly large gap between the cost of college and a family's ability to pay for college.

Unfortunately, the most recent higher education recovery has not been as robust as we have experienced in the past. State investment in higher education declined by 26 percent per student between 2008 and 2012. In constant dollars, this marked the lowest funding level per student since 1980. By 2016, funding had partially recovered but remained 15% below pre-Recession levels. Only four states report 2016 state and local funding that exceeds 2008 levels.

Conversely, over the same eight-year period, per student net tuition revenues increased 35 percent in constant dollars from \$4,682 in 2008 to \$6,321 in 2016. In other words, tuition rate increases helped institutions offset reductions in per student state funding, but at a significant cost to students. The empirical evidence in the peer-reviewed literature has established that state appropriations are related to the price institutions charge students. The exact scale of this relationship is still being analyzed, but the overwhelming consensus supports this finding of a causal impact.

Concurrently, states realize they need a more educated workforce to meet workforce demands and grow their economies. Forty-one states have enacted state attainment goals to raise the percentage of their population with postsecondary credentials. The combination of decreasing college affordability (driven in part by tuition rate increases), and the focus on increasing college attainment has resulted in some states enacting new policies designed to expand access to public institutions while removing financial barriers to college completion.

Given what we know about state best practices, and the long-term trends that risk further privatization or federalization of higher education, I recommend that the HEA reauthorization fund and implement a federal-state partnership that includes incentives for states to bring down college prices. These additional resources should be targeted and focused on outcomes, particularly the outcomes of underrepresented students. This initiative is not just a matter of resources but also leadership and alignment. Our nation should have confidence that state governments, higher education systems and campuses are working together to address this cost and affordability crisis.

Chairman Alexander, Ranking Member Murray and Members of the Committee, thank you for the opportunity to testify today.

My name is Rob Anderson, and I am the President of the State Higher Education Executive Officers (SHEEO) Association. SHEEO is the national association of the chief executives of statewide governing, policy, and coordinating boards of postsecondary education. We seek to advance public policies and educational practices to achieve more widespread access to and completion of higher education, more discoveries through research, and more applications of knowledge that improve the quality of human lives and enhance the public good.

I have been asked to address the issue of college affordability. As the only national membership organization representing the state perspective on higher education, I feel a special obligation to focus on the role of higher education finance and policy in either removing or raising barriers to college student success and to address how we might utilize the tools available to us to move our states and our country forward toward greater prosperity and equity. To do this, I will be addressing the following interrelated topics: 1) state higher education finance trends, 2) the implications of cost and affordability, 3) the implications of institutional resources, 4) aligning state appropriations and tuition policies with strategies for affordability, 5) the concept of a federal/state partnership for affordability, and 6) recommendations moving forward.

State Higher Education Finance Trends

It is well known that the cost of attending college has been rising for students and families for decades. This steady increase in cost has constrained student choice and priced generations of potential students out of higher education. Every state and federal higher education finance decision made moving forward ought to reflect this reality. In order to accurately understand and respond to the reality of this cost crisis, accurate data and relevant high-quality research are needed. In that regard, the *State Higher Education Finance (SHEF)* report brings important context and trend analysis to help inform policy decisions made in this arena. Since 2003, SHEEO's *State Higher Education Finance* report has been a leading national resource for tracking national and state-level trends in state and local funding, tuition revenue, and enrollment. These trend data go back to 1980, and depict the impact of the economic cycle on the balance between tuition and state appropriations.

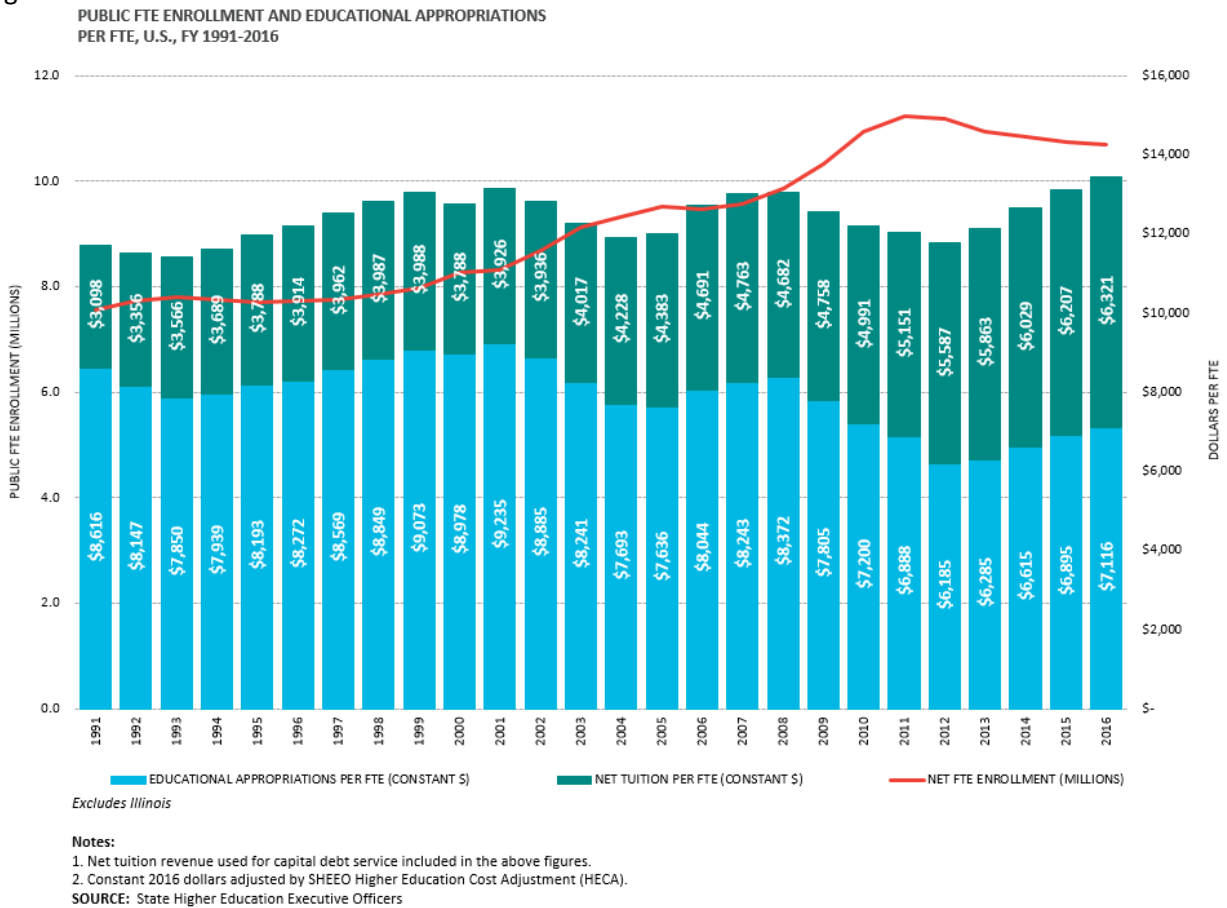
The *SHEF* report depicts educational appropriations from state and local sources and how these resources interact with tuition. In 2016, net tuition revenue accounted for 47.3 percent of total revenue in higher education, up from 36.7 percent ten years earlier.¹ This increased reliance on tuition dollars most adversely impacts those students who can least afford it—our historically underserved populations.

There are several noticeable trends during economic downturns. First, per student funding declines as states struggle to maintain current levels of support for higher education. Concurrently, enrollments increase as the newly unemployed enter higher education for upskilling and retraining. Third, during downturns, institutional reliance on tuition revenue increases as do tuition rates in most cases. During periods of economic recovery, these trends reverse. Per student funding levels increase, enrollments decline, and reliance on tuition stabilizes.

Figure 1 indicates that the Great Recession had a profound impact on state funding for higher education. Immediately before the downturn, in 2008, educational appropriations per student in the United States were \$8,372. By 2012, this amount declined to \$6,185. In constant dollars this is the lowest per student

funding level since 1980. By 2016, funding per student had recovered to \$7,116, still 15 percent below pre-Recession levels. Only four states report 2016 state and local funding that exceeds 2008 levels.

Figure 1:

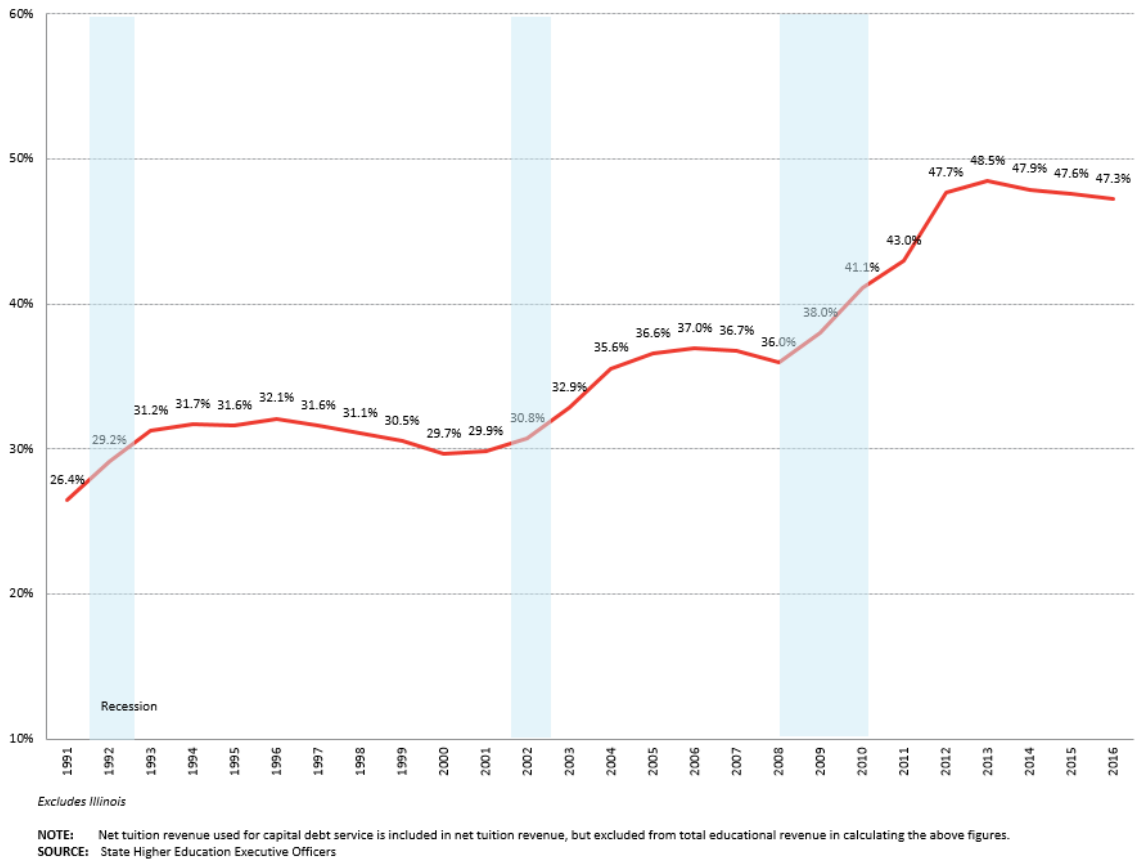


Of further concern is an easily missed downward trajectory in the data. Focusing on state educational appropriations per FTE (the light blue bars in Figure 1), reveals not only declines resulting from the recessions, but that each of the subsequent recoveries has been sequentially smaller, indicating a steady downward trend in state support.

It is evident why this matters for affordability when we look at the other side of the revenue equation, net tuition revenue. Over the same eight-year period, per student net tuition revenues increased 35 percent in constant dollars from \$4,682 in 2008 to \$6,321 in 2016. In other words, tuition rate increases helped institutions offset reductions in per student state funding, but at a significant cost to students. Figure 2, below, clearly shows the trend toward greater reliance on tuition revenue. Before the Great Recession (in 2008), 35 percent of higher education revenue came from tuition. This share peaked in 2013 at 48.5 percent and declined only slightly to 47.3 percent by 2016. If history is any indication, the next downturn will result in tuition reliance that exceeds 50 percent, meaning students and families will be paying the majority of the cost. While this would be a significant development for the United States as a whole, it is worth noting that 24 states have already reached this point.

Figure 2:

NET TUITION AS A PERCENT OF PUBLIC HIGHER EDUCATION TOTAL EDUCATIONAL REVENUE, U.S., FY 1991- 2016



Further recessions could accelerate these trends. It is impossible to make precise projections of what will happen to state funding for higher education in the future, but recent history portends an alarming outcome. One attempt at extending state support of higher education trends from the 1980s into the future projects that if trends persist into the future, states would reach zero support for higher education in 2056.² This represents the increasing privatization of public higher education. Read another way, if the federal investment in higher education takes on a larger and larger percentage of overall revenue (in addition to student tuition and fees) this would also represent an increasing *federalization* of higher education. While I do not believe that states will zero out public higher education, such projections highlight the serious dilemma facing state lawmakers, SHEEOs, and institutional leaders. Action needs to be taken now to correct current trends.

To compound these trends, the recently adopted *Tax Cuts and Jobs Act* (Public Law No: 115-97) will likely affect state decisions on funding for higher education. This legislation placed a \$10,000 cap on the state and local income and property tax (SALT) deduction, which has significantly changed the revenue decisions that states and localities can make to support public investments through their income and sales taxes and is already a source of debate in many state legislatures. Limiting additional revenue sources could stagnate or further reduce state funding for higher education.

In considering the shift toward a majority tuition-financed public higher education system, it is important to recognize the factors driving a greater reliance on tuition. The need for institutions to raise tuition stems from many factors, including covering inflation costs, salary increases for faculty, rising health

insurance expenses, expanded institutional financial aid and, in some cases, pension obligations.³ Many public institutions have already made cuts in recent decades to trim costs and expenses in areas where efficiencies could be found, often in an effort to avoid raising tuition. This is particularly true for those institutions that are state appropriations dependent and enroll larger shares of low-income students. However, the biggest factor in public institutions deciding what tuition rate is charged is the level of state funding support.

The empirical evidence in the peer-reviewed literature has established that state appropriations are related to the price institutions charge students. The exact scale of this relationship is still being analyzed, but the overwhelming consensus supports this finding of a causal impact. Most recently, in a peer reviewed study, Douglas Weber estimated an average pass-through rate from state appropriations to tuition and fee revenue of between 25 percent and 41 percent. Put differently, for every \$1,000 per student cut in state appropriations, over time, the average student has paid \$257 more in tuition.⁴ That same research also showed that students are shouldering higher tuition increases from these cuts in recent years than in previous decades. Since 2008, the pass-through rate has been 41.2%.

Some other analyses of state fiscal support over time have shown a smaller and less causal relationship between state appropriations and tuition. However, many of these studies fail to properly account for the complexity of state laws in appropriation and tuition-setting authority; states vary in how and when institutions can increase tuition and fees—and these decisions often change over time and many years after a recession. Legislatures also do not make uniform appropriation decisions for each college, so it is important to measure the impact of this institution-specific state support to institution-specific net tuition and fee revenue. Additional research is needed to continue to monitor this question and add great clarity and specificity to the relationship.

Implications of Cost and Affordability

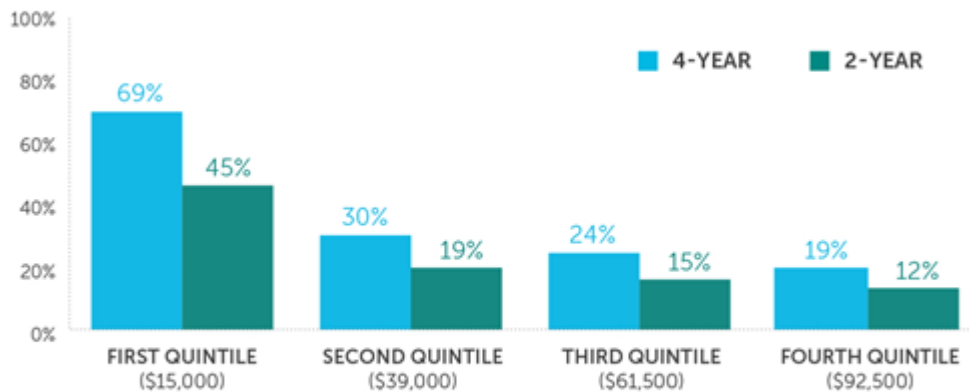
Student loan debt and the cost of higher education in the United States have received considerable attention in the popular media and in the academic literature. The price of higher education has grown faster than the cost of health insurance, prescription drugs, and family income.⁵ According to the College Board, tuition and fees at public four-year institutions have increased at an average annual rate of 3.2 percent above inflation over the last ten years. Tuition and fees at public two-year institutions have risen at an annual rate of 2.8 percent above inflation over the same period.⁶ This growth in tuition prices has slowed since the peak of the Great Recession, but continues to outpace inflation.⁷ Concurrent with the increasing price has been stagnant wage growth for the average worker. While, on average, top earners have experienced significant income growth over the last several decades, middle- and lower-income earners have not experienced comparable growth.⁸ The combination of increased costs and stagnant wage growth has resulted in an increasingly large gap between the cost of college and a family's ability to pay for college.

Not surprisingly, both college participation and attainment rates are considerably higher for students in the highest income quartile compared with those in the lowest income quartile.⁹ Researchers further find that low-income students are less likely to enroll in college even when controlling for student achievement.¹⁰ This is concerning for many reasons, including that future earnings are clearly associated with educational attainment. According to the Georgetown Center on Education and the Workforce, the average difference between a high school and college graduate's wages is \$1 million over a lifetime.¹¹ And the impacts reverberate across generations as children from higher-income families, and those whose parents went to college, are significantly more likely to attend and graduate from college.¹²

Figure 3 shows average net price^a as a percent of median income within each of the lowest four income quintiles. As this figure shows, those who come from families earning \$15,000 (the median income of the bottom income quintile) experience a disproportionately larger burden in paying for college, with net price making up as much as 69 percent of their annual income. By comparison, net price at a four-year institution makes up only 19 percent of annual income for families in the fourth income quintile.

Figure 3

AVERAGE U.S. NET PRICE AT PUBLIC 2- AND 4-YEAR INSTITUTIONS AS A PERCENT OF INCOME, FOR FAMILIES IN THE FIRST FOUR QUINTILES, 2014



Note: Based on the middle-point income for each of the lowest four income quintiles (\$0-\$30,000, \$30,001-\$48,000, \$48,001-\$75,000, \$75,001-\$110,000).

Source: IPEDS 2013-2014 average net price calculations in Table A-1 in the Appendix

Issues related to affordability take on even more significance when one considers the changing makeup of college students in the United States. As the Center for Postsecondary and Economic Success notes, “today’s typical college student is no longer an 18-year-old recent high-school graduate.”¹³ Between 2004 and 2014, part-time student enrollments grew by 17 percent and enrollments of students age 25 and over increased by 16 percent.¹⁴ Students over the age of 25 now comprise 40 percent of undergraduate students in postsecondary education. A majority of students work full- or part-time while enrolled, and over a quarter are parents.¹⁵ These trends are expected to continue and are likely to increase. These formerly “nontraditional” students face significant cost barriers and unique and significant challenges in earning a postsecondary degree.

It is imperative for states to develop long-term strategies to address these concerns in order to meet the needs of their citizenry and workforce. If states are to achieve their postsecondary education attainment goals, they must take direct and immediate action to address the equity gaps between underserved populations and upper-income white and Asian students (who are succeeding at higher rates). As Steve Murdock, demographer and former director of the U.S. Census Bureau, has said, the economic prosperity of the entire nation hinges on reducing these gaps, since reducing them is the single greatest way for us to drive economic growth.¹⁶ One necessary step in closing these gaps is to make college affordable for low-income individuals

^a Net price is calculated by subtracting the average amount of federal, state/local government, and/or institutional grant and scholarship aid from the total cost of attendance using IPEDS 2013-2014 Average Net Price by Income Quintile and Total Price for In-State Students (weighted by living situation).

Implications of Institutional Resources

Not only must we ensure that college is affordable for all students, we must also ensure that our colleges and universities have the resources to serve them properly. In her paper, *State Support for Higher Education: How Changing the Distribution of Funds Could Improve College Completion Rates*, Bridget Terry Long argues that increasing the resources committed to public institutions and addressing current funding inequities between institutions could help the country make significant progress toward increasing the number of adults with postsecondary credentials.¹⁷

Long gives particular attention to the unequal distribution of resources between different types of institutions and between institutions that serve students with varying levels of preparation. In her analysis, Long found that while holding other factors constant, public research institutions received \$2,504 per full-time equivalent student more than other public four-year schools and \$5,227 more than public two-year colleges. She further showed that institutions that enroll the students who are best prepared academically to succeed, and therefore may require the fewest resources, are receiving a disproportionate amount of state funding relative to institutions that enroll students who are less prepared academically.¹⁸

These differences in funding and institutional resources matter. Deming and Walters found that at appropriations-dependent institutions (community colleges and non-selective public four-year universities), an institution's financial resources had a substantial impact on degree completion.¹⁹ At community colleges, a 10 percent rise in spending increases associates degree completions by 10.6 percent and certificates by 23.2 percent (one year after the spending increase). For bachelor's degrees, a 10 percent rise in spending increases completions by between 4 and 5 percent (2 to 3 years after the spending increase). Further, Deming and Walters found that when the institutions in their study experienced revenue increases, the institutions directed those resources primarily toward student and academic support services. Increases in spending in such areas have been shown to directly and positively impact student success.²⁰ The authors conclude that institutional spending increases are more effective per-dollar than price cuts as a means of increasing postsecondary attainment.²¹

The research is clear—if the goal is to improve rates of degree completion and increase educational attainment, states and the federal government will need to get serious about increasing the resources at institutions that serve the largest share of students at risk of dropping out.

The State Imperative: Aligning State Appropriations and Tuition Policies with Strategies for Affordability

As I have tried to establish, it is critical that we address the affordability crisis with the urgency it deserves. It is also critical that we ensure that our appropriations-dependent institutions, where the majority of our underserved populations are enrolled, have adequate institutional resources to foster student success. To do this, the states and the federal government will need a coordinated and strategic effort.

States need a more educated workforce to meet workforce demands and grow their economies. States also accrue benefits from an educated populace, including higher tax revenues, better civic engagement, and an overall higher quality of life.²² Realizing this, 41 states have enacted state attainment goals to raise the percentage of their population with postsecondary credentials.²³ The combination of decreasing college affordability (driven in part by tuition rate increases), and the focus on increasing college attainment has resulted in some states enacting new policies designed to expand access to public

institutions while removing financial barriers to college completion. Ideally, these policies have the support of state government, higher education system offices, and postsecondary institutions. Concerted alignment between these entities creates the greatest opportunity for a rational path forward. I will highlight a few examples of states that have developed coordinated approaches addressing college costs and helping students enroll and succeed in college.

Best Practice – Colorado

Colorado's legislature utilizes the Colorado Department of Higher Education (CDHE) to assist the legislature by estimating tuition changes based on an increase or decrease in the state general fund appropriation. CDHE develops an estimate of the additional revenue that each postsecondary institution will need to cover inflation and increases due to other cost drivers, (e.g., utilities, employee benefits). Once a total additional-revenue figure is developed, CDHE models how much the tuition rate would need to be increased if state funding is to be kept constant, and for each potential percentage point increase or decrease in state appropriations. This allows legislators to explore the hypothetical, "If we cut the appropriation to higher education by 2 percent, tuition will increase by this amount at each of our public institutions."²⁴

Best Practice – Tennessee

Tennessee was the first state to implement a statewide "Free Community and Technical College" program. The first cohort of Tennessee Promise students enrolled in fall 2015. The program grew out of a local promise program in Knox County. Now in its fourth year, Tennessee Promise functions as a last-dollar scholarship for students enrolling in one of the 13 community colleges or 27 colleges of applied technology in the state. Eligible students must apply and complete specific tasks (fill out the Free Application for Federal Student Aid, meet with a volunteer mentor, and complete community service hours) during their senior year of high school.

Early results indicate that Tennessee Promise is proving effective, and that non-financial aspects of the program have contributed to its success. The mentorship component of Tennessee Promise is key to helping low-income and traditionally underserved populations navigate postsecondary education. Furthermore, the first years of the statewide program have clarified the importance of messaging. For many of the students enrolled in Tennessee Promise, community college would be "free" without the program (tuition and fee costs are covered by federal aid). Many students may not realize this, however, and making it clear that Tennesseans can attend community and technical colleges with very little cost has boosted access significantly across the state. According to the Tennessee Higher Education Commission, enrollment at community colleges has increased by 25 percent in the first two years of the program, while retention rates have not changed from prior years. Approximately 30 percent of the additional students come from the lowest income quintiles.²⁵ Although many of these students may not receive additional funds, the Tennessee Promise program is proving effective in increasing access and success for low-income students.

Other states have implemented or proposed other promise programs similar to Tennessee. These programs often include structuring financial aid policies to make community college tuition-free or debt-free. Some of these proposals limit the benefits of "free" college to low-income students by enacting eligibility restrictions that have not always allowed all students to access the programs or in ways that do not reflect the student body of today, including requirements to remain in state after college or to pass drug tests. Further, programs have often restricted eligibility to students starting college right out of high school. Unfortunately, these restrictions may reduce the potential benefit and reach of the initiatives.

Most of these “last dollar” programs are structured only to cover tuition with state or local resources after other federal aid has been applied. Other models include some stipends for other costs of attendance. In many cases, college affordability is addressed “at the margins,” meaning that very specific categories of students who are likely to benefit from increased aid are targeted by these proposals and policies. Further research is needed to see how these programs are meeting students’ total financial needs.

Best Practice – Washington State

The State of Washington provides a case study that demonstrates how state support and tuition rates are inextricably linked, and the key role of state policy in protecting affordability for students.

In the depths of the Great Recession, Washington policymakers granted their public colleges and universities additional flexibility in setting tuition rates. This meant that institutions could enact increases, sometimes double-digit percentage increases, to meet revenue needs and offset state funding reductions. However, in 2014, as the economy began to recover, Washington legislators reasserted their role in the tuition-setting process. Tuition rates were decreased in exchange for a large increase in state appropriations to institutions. Reductions in tuition rates are rare, and Washington’s was made possible through a significant state reinvestment. Legislators in Washington clearly understood the relationship between state funding and tuition, and considered institutional revenue needs.

As these changes in tuition-setting authority were being made in Washington, the impact on state financial aid was on the minds of state policymakers. Washington has one of the best funded need-based financial aid programs in the country.²⁶ Washington’s Need Grant program is a flexible award that is explicitly tied to tuition. A student’s maximum award is determined by both her family’s income (as a percentage of the state’s median income) and the tuition rate charged at the public institution she attends. Students who attend high-tuition universities in Washington receive higher awards than those who attend less expensive institutions. Their impact on the state’s need-based grant program was a key factor in deciding how to adjust the parameters for tuition setting. When tuition rates increased sharply, the appropriation for need-based aid also increased in the state. Washington has a long history of protecting need-based aid from changes in tuition levels brought about by changes in policy.²⁷

Best Practice – Ohio

In Ohio, an annual report is due to the legislature and governor to track progress on how efficiency gains made at the state’s public universities benefit students.^b The Ohio Board of Regents estimates that the savings from efficiency gains across its public institutions in 2016 totaled \$250 million. In the most recent report, institutions outlined how their cost savings were redistributed to students, either in the form of decreased tuition or increased financial aid. Institution-level information for cost savings is available in the full report and this information is updated on an annual basis.

SHEEO Federal State Partnership for College Affordability

States alone may not be able to reach true college affordability. In 2014, Lumina Foundation organized an effort to generate innovative ideas for approaches to student financial aid. As a component of this effort, SHEEO proposed a federal/state student financial aid partnership. Under the proposed SHEEO model, federal funds would match any additional funding the states provided to support low-income students, with the goal of each state eventually meeting an affordability threshold of students devoting no more

^bhttps://www.ohiohighered.org/sites/ohiohighered.org/files/uploads/affordability-efficiency/2016-efficiency-advisory-committee-report_FINAL_011317.pdf

than 10 percent of their discretionary income toward student loan repayment. These matching funds would incentivize states to prioritize the increased investment of any higher education resources.

There are additional examples of federal-state partnerships and proposed partnerships in other areas that lead us to believe such a model could prove fruitful to higher education. President Trump recently proposed an initiative to address our nation's infrastructure needs that includes the framework of a federal/state/local partnership where federal funds would incentivize matches from the other two entities. Other areas of the Higher Education Act embrace the concept of institutions matching federal funds to enhance the combined impact, including college access and campus-based aid programs. A similar incentive within core higher education investments to encourage state investment in our traditionally underserved populations would mitigate a portion of the price sensitivity that often prohibits college access and completion.

While we believe federal involvement is needed to properly incent state action, we also realize that state and institutional action can and should be taken now. The primary responsibility is with the states, and each state needs to approach increasing student access and success in a manner that reflects state needs as well as innovative approaches and interventions that are proven to increase efficiency. The recent rise in performance funding models is indicative of a more widespread acknowledgment that student outcomes are of significant importance—and many states are working to refine these models to achieve the desired results. The investment of family, state, and federal resources must result in a meaningful credential to prove worthwhile.

Policy Recommendations

Federal Policy

Given what we know about state best practices, and the long-term trends that risk further privatization or federalization of higher education, **I recommend that the HEA reauthorization fund and implement a federal-state partnership that includes incentives for states to bring down college prices for students, and in particular for lower-income students.** The federal investment must be sufficiently large to adequately leverage new state commitments, given that states may need to seek new revenue sources or change existing budget allocations. The new federal investment should reflect an intentional and rational balancing of shared roles between the federal government and the states.

State Policy

In regard to state higher education finance policy I recommend the following and further encourage that any federal-state partnership should also recognize or promote the following components:

Link state financial support for higher education to long-term state goals: Cuts and inadequate support for higher education may limit its ability to support states in accomplishing their broader goals. For example, as indicated earlier, the financial resources of an institution directly impact the quality of education and student completions. Both factors, in turn, impact a state's economy and workforce. In this regard, state appropriations to higher education should be viewed as investments.

Focus financial aid on the students who need it the most: As states consider revising their existing financial aid programs or adopting new ones, the most efficient use of resources would be to focus their scarce state dollars on those students for whom cost is a limiting factor. Financial aid can be the deciding factor between whether they enroll and persist to graduation or not. The research on the impact and importance of need-based financial aid is overwhelming.²⁸

Ensure adequate resources at the institutions that serve underrepresented students: Intentional efforts are needed to ensure that institutions have the necessary resources to support their students to graduation. State policymakers should evaluate their institutions' current resources and the allocation of state dollars. If inequalities exist, states should take deliberate corrective action. Further, if a state has or decides to adopt a performance funding program, policymakers should ensure that the formula rewards institutions for enrolling and graduating underserved students.²⁹

Evaluate tax and revenue structures to ensure an adequacy in capturing the appropriate level of state resources: The changing economy has made capturing sales tax and other resources much more difficult. States should evaluate their tax and revenue structures to ensure that they are receiving adequate resources to appropriately fund state obligations, including higher education.

Incorporate tuition policy into broader affordability and attainment strategies: Consider tuition policy within the broader context of affordability and attainment strategies so that tuition setting at the institution level does not undermine comprehensive strategies. Encouraging or requiring longer-term tuition setting that allows students and families to plan ahead may facilitate better planning and enrollment decisions. Further, tuition policy that facilitates progress toward completion should be considered.

Seek coordination of key institutional revenue sources: State policymakers, SHEEOS, and boards of higher education institutions should coordinate institutional revenues—including state appropriations, financial aid and tuition—toward meeting broader state college attainment goals. While the unique demographic, economic, and political circumstances of each state will influence the level of coordination, considering the primary revenue streams based on progress toward state attainment goals can help stakeholders make tough decisions. There are many ways that appropriations, tuition, and financial aid policies can be coordinated to ensure that changes in one or more revenue streams are linked with meeting the state educational attainment goal. For example, allowing for an increase in tuition but reserving a portion of the increase for need-based aid during a period of declining appropriations can mitigate tuition increases for the most price-sensitive students.

Consider the impact of tuition policy on state financial aid programs: State policymakers and SHEEOs should understand how tuition policy impacts state financial aid programs. In some states, state need-based grants cover the full cost of tuition and fees. When tuition rates increase in these states, unless there is a concomitant increase in the total amount of state aid, the number of students who receive grants is reduced. In other words, the tuition increase lessens the impact of the state's aid program. Care should be taken to understand how tuition policy and aid programs interact and make sure state needs are addressed along with institutional revenue needs.

Allow for longer-term, multiyear strategies around tuition rate setting: In many states, the limitations on how much tuition can increase vary from year to year. One year, the legislature may limit tuition increases to an inflationary adjustment; the next year they may freeze the allowable rate increase. In this environment, there is little incentive for governing boards to raise tuition to an amount below the allowed limit in a single year as there is no way to anticipate what the future will allow. A more rational approach would provide allowable increases for three to five years and be based on state revenue projections and policy direction from the state. This would allow for better planning by institutions, and create a more transparent environment for the students and families who ultimately must pay the tuition costs.

-
- ¹ Carlson, A. and Laderman, S. (2016). *State Higher Education Finance 2015, Figure 5*. Retrieved from http://sheeo.org/sites/default/files/project-files/SHEEO_SHEF_2016_Report.pdf
- ² Mortenson, T.G. (2017). State fiscal investment effort in higher education: FY 1961 to FY 2017. *Postsecondary Education Opportunity*, 292.
- ³ Carlson, A. and Laderman, S. (2016). *State Higher Education Finance 2015, Figure 8*. Retrieved from http://sheeo.org/sites/default/files/project-files/SHEEO_SHEF_2016_Report.pdf
- ⁴ Webber, D. A. (2017). State divestment and tuition at public institutions. *Economics of Education Review*, 60, 1-4.
- ⁵ College Board (2016). *Trends in College Pricing* (Trends in Higher Education series). Washington, DC: College Board.
- Bureau of Labor Statistics (2017). *Consumer Price Index Summary*. Washington, DC: Bureau of Labor Statistics.
- ⁶ Ma, J., Baum, S., Pender, M., and Welch, M. (2017). *Trends in College Pricing 2017*. Retrieved from https://trends.collegeboard.org/sites/default/files/2017-trends-in-college-pricing_0.pdf
- ⁷ Ibid.
- ⁸ Stone, C., Trisi, D., Sherman, A., & Horton, E. (2016). *A Guide to Statistics on Historical Trends in Income Inequality*. Washington, DC: Center on Budget and Policy Priorities.
- ⁹ Bailey, M. J., and Dynarski, S. (2011). *Gains and Gaps: Changing Inequality in U.S. College Entry and Completion* (University of Michigan Population Studies Center Report 11-746). Retrieved December 1, 2013, from <http://www.psc.isr.umich.edu/pubs/pdf/rr11-746.pdf>.
- Belley, P. & Lochner, L. (2007). The Changing Role of Family Income and Ability in Determining Educational Achievement. *Journal of Human Capital*. University of Chicago Press, vol 1(1). Pages 37-89
- ¹⁰ Bowen, W.G., Chingos, M.M., and McPherson, M. (2009). *Crossing the Finish Line: Completing College at America's Public Universities*. Princeton, New Jersey: Princeton University Press.
- Hoxby, C.M. and Avery, C. (December 2012). The Missing "One-Offs": The Hidden Supply of High-Achieving, Low Income Students . *NBER Working Paper No. w18586*. Available at SSRN. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2186316
- ¹¹ Carnevale, A. P., Cheah, B., & Hanson, A. R. (2015). *The Economic Value of College Majors*. Washington, DC: Georgetown University Center on Education and the Workforce.
- ¹² Putnam, R. D. (2016). *Our Kids: The American Dream in Crisis*. New York, NY: Simon and Schuster.
- ¹³ Center for Postsecondary and Economic Success (2015). Yesterday's Non-Traditional Student is Today's Traditional Student. <https://www.clasp.org/sites/default/files/public/resources-and-publications/publication-1/CPES-Nontraditional-students-pdf.pdf>
- ¹⁴ NCES (2016). *Characteristics of Postsecondary Students*. Washington, D.C.: National Center for Education Statistics.
- ¹⁵ Taliaferro, W. and Duke-Benfield, A. (2016). *Redesigning State Financial Aid to Better Serve Nontraditional Adult Students: Practical Policy Steps for Decisionmakers*. Washington, DC: CLASP.
- ¹⁶ Murdock, S. (2015). *Population Change in the United States: Implications for Education and Socioeconomic Development*. Presentation at SHEEO Higher Education Policy Conference, Newport Beach, CA.
- ¹⁷ Long, B. T. (2016). *State Support for Higher Education: How Changing the Distribution of Funds Could Improve College Completion Rates*. The Miller Center. http://web1.millercenter.org/commissions/higher-ed/Long_No9.pdf
- ¹⁸ Ibid.
- ¹⁹ Deming, D. J., & Walters, C. R. (2017). The Impact of Price Caps and Spending Cuts on US Postsecondary Attainment (No. w23736). *National Bureau of Economic Research*. <http://www.nber.org/papers/w23736>
- ²⁰ Ehrenberg, R. G., & Webber, D. A. (2010). Student Service Expenditures Matter. *Change: The Magazine of Higher Learning*, 42(3), 36-39.
- ²¹ The relationship between state support, institutional resources, and student outcomes has been investigated in a number of other studies which likewise show that institutional resources, and state support in particular, matter for student outcomes. See, for example:
- Bound, J., Lovenheim, M. F., & Turner, S. (2012). Increasing Time to baccalaureate Degree in the United States. *Education*, 7(4), 375-424.

-
- Kane, T., & Orszag, P. (2003). Funding Restrictions at Public Universities: Effects and Policy Implications. *Brookings Institution Working Paper*.
- Koshal, R. K., & Koshal, M. (2000). State Appropriation and Higher Education Tuition: What is the Relationship?. *Education Economics*, 8(1), 81-89.
- Robst, J. (2001). Cost Efficiency in Public Higher Education Institutions. *Journal of Higher Education*, 730-750.
- Titus, M. A. (2009). The Production of Bachelor's Degrees and Financial Aspects of State Higher Education Policy: A Dynamic Analysis. *The Journal of Higher Education*, 80(4), 439-468.
- Toutkoushian, R. K., & Hillman, N. W. (2012). The Impact of State Appropriations and Grants on Access to Higher Education and Outmigration. *The Review of Higher Education*, 36(1), 51-90.
- Volkwein, J. F. (1989). Changes in Quality among Public Universities. *The Journal of Higher Education*, 136-151.
- Zhang, L. (2006). Does Public Funding for Higher Education Matter? *Cornell University, School of Industrial and Labor Relations, Working Paper*. Retrieved from: <http://digitalcommons.ilr.cornell.edu/workingpapers/149/>
- ²² Li, J. (2009). *How Taxpayers Benefit When Students Attain Higher Levels of Education*. Retrieved from https://www.rand.org/pubs/research_briefs/RB9461/index1.html
- ²³ Lumina Foundation (2017). *A Stronger Nation 2017*. Retrieved from <https://www.luminafoundation.org/resources/a-stronger-nation-2017-report>
- ²⁴ Armstrong, J., Carlson, A., Laderman, S (2017). *The State Imperative: Aligning Tuition Policies with Strategies for Affordability*. Retrieved from http://www.sheeo.org/sites/default/files/State_Tuition_Fees_Financial_Assistance_2017.pdf
- ²⁵ E. House, phone call with John Armstrong, September 22, 2017.
- ²⁶ See <http://www.nassgap.org/viewrepository.aspx?categoryID=421#>
- ²⁷ See <https://education.illinoisstate.edu/downloads/csep/stateprofiles.pdf>
- ²⁸ Goldrick-Rab, S., Harris, D., Kelchen, R., & Benson, J. (2012). Need-Based Financial Aid and College Persistence Experimental Evidence from Wisconsin. SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1887826
- Heller, D. E. (1999). The Effects of Tuition and State Financial Aid on Public College Enrollment. *The Review of Higher Education*, 23(1), 65-89.
- Alon, S. (2011). Who Benefits Most from Financial aid? The Heterogeneous Effect of Need-Based Grants on Students' College Persistence. *Social Science Quarterly*, 92(3), 807-829.
- Heller, D. E. (2013). The Role of Finances in Postsecondary Access and Success. *The State of College Access and Completion: Improving College Success for Students from Underrepresented Groups*, 96-114.
- Kim, J. (2010). The Effect of Prices on Postsecondary Access: An Update to Heller. *Higher Education in Review*, 7.
- ²⁹ Umbricht, M. R., Fernandez, F., & Ortagus, J. C. (2017). An Examination of the (Un)Intended Consequences of Performance Funding in Higher Education. *Educational Policy*, 31(5), 643-673.
- Kelchen, R., & Stedrak, L. J. (2016). Does Performance-Based Funding Affect Colleges' Financial Priorities?. *Journal of Education Finance*, 41(3), 302-321.
- Hillman, N., & Corral, D. (2017). The Equity Implications of Paying for Performance in Higher Education. *American Behavioral Scientist*, 61(14), 1757-1772.
- Gándara, D., & Rutherford, A. (2017). Mitigating Unintended Impacts? The Effects of Premiums for Underserved Populations in Performance-Funding Policies for Higher Education. *Research in Higher Education*, 1-23.
- Kelchen, R. (forthcoming). Do Performance-Based Funding Policies Affect Underrepresented Student Enrollment? *Journal of Higher Education*.
- Hillman, N. & Crespín-Trujillo (forthcoming). *State Accountability Policies: Can Performance Funding be Equitable?*
- Jones, T., Jones, S., Elliott, K. C., Owens, L. R., Assalone, A. E., & Gándara, D. (2017). *Outcomes Based Funding and Race in Higher Education: Can Equity be Bought?*. Springer.