

STATE FINANCE POLICY BEST PRACTICES



Prepared for the NATIONAL COMMISSION ON FINANCING 21ST CENTURY HIGHER EDUCATION By: Martha Snyder, Brian Fox, and Cristen Moore, HCM Strategists



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LETTER FROM THE COMMISSIONERS

The University of Virginia Miller Center created the National Commission on Financing 21st Century Higher Education in 2014 to recommend policy and funding changes to help the nation attain the goal of 60 percent of the labor force with a postsecondary degree or certificate by 2025. This means that 62 million Americans must graduate with a postsecondary degree or credential between 2015 and 2025. At current rates, the United States will produce only 39 million such graduates, leaving a gap of 23 million—a shortfall of more than 2 million per year.

To meet the goal, the nation must maintain high school graduation and college entrance rates at or above 75 percent and 70 percent, respectively—reachable goals close to historical norms. The nation must also *increase* college graduation rates from 40 percent to 60 percent. Increasing the college graduation rate is inherently challenging but made even more so because of major demographic changes. Many of the upcoming college-aged individuals will be people of color or from low-income families, populations that traditionally have needed additional counseling, mentoring, academic support, and financial assistance to successfully enter into and complete higher education. How to increase access and graduation rates and thus equality for these two population groups is the major focus of the commission.

The need to address these issues is also urgent given that other nations are catching up to—and even surpassing—the United States in postsecondary degree- and credentialattainment rates. The United States ranked 13th relative to other Organization for Economic Cooperation and Development countries in 2014 in the percentage of 25- to 34-year-olds with higher education degrees or credentials. The cost of failure in attaining this goal—to the nation in terms of international leadership and to citizens in terms of job creation and income—is too high, and so action is required now.

To learn more about these issues, the commission engaged highly qualified experts to create 10 white papers on different dimensions of the higher education problem. The commission asked all the authors to push the limits of their knowledge and engage in "blue sky" thinking on individual topics. Each paper represents the views of the individual authors, not the commission. Nevertheless, the papers provide a foundation for the recommendations in the final report. In addition, the commission hopes the papers stimulate further discussion and debate about higher education policy and funding.

The 10 papers and the final report focus on answering three primary questions related to reaching the 60 percent goal. First, how do we realign incentives and retarget existing public funding to make the entire system more efficient and to increase graduation rates for students generally and students of color and from low-income families in particular? Second, what are the new, innovative models to deliver postsecondary education that can both lower the cost and increase the productivity of the entire system? Third, what options do federal and state governments and the private sector have for increasing funding for higher education? It is important to stress here that the interest is in the "value proposition " that underlies these three primary questions. The" value proposition " focuses on the national imperative of building a more highly skilled and educated work force not merely a more credentialed one.

The U.S. higher education system is still the envy of the world, but it must become more affordable for the next generation. It must also become more innovative and adaptable, especially in its use of technology, and be more productive with regard to graduation rates. Finally, additional funding must be available from federal, state, and private-sector sources to reach the goal.

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WHITE PAPERS WRITTEN FOR THE NATIONAL COMMISSION ON FINANCING 21ST CENTURY HIGHER EDUCATION

Paper 1. Crowded Out: The Outlook for State Higher Education Spending Authors: Dan White and Sarah Crane, Moody's Analytics

Paper 2. Transformations Affecting Postsecondary Education Author: Jeffrey J. Selingo, Arizona State University and Georgia Institute of Technology

Paper 3. State Higher Education Finance: Best Practices Authors: Martha Snyder, Brian Fox, and Cristen Moore, HCM Strategists

Paper 4. Financing American Higher Education in the 21st Century: What Can the United States Learn From Other Countries?

Author: D. Bruce Johnstone, professor, Higher and Comparative Education Emeritus, University at Buffalo

Paper 5. State Strategies for Leveraging Employer Investments in Postsecondary Education Authors: Robert Sheets and Stephen Crawford, George Washington Institute of Public Policy, The George Washington University

Paper 6. Understanding State and Local Higher Education Resources Authors: Sandy Baum and Kim S. Rueben, Urban Institute

Paper 7. New Directions in Private Financing Author: Andrew P. Kelly, American Enterprise Institute

Paper 8. Higher Education: Social Impact Bonds and Income Share Agreements Author: Carlo Salerno, higher education economist/analyst

Paper 9. State Support for Higher Education: How Changing the Distribution of Funds Could Improve College Completion Rates Author: Bridget Terry Long, Harvard Graduate School of Education

Paper 10. The Federal Role in Financing 21st-Century Higher Education: Effectiveness, Issues, and Alternatives

Author: Gabriel R. Serna, Virginia Polytechnic Institute and State University

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Raymond Scheppach Professor of Public Policy, Batten School of Leadership and Public Policy Economic Fellow at the Miller Center University of Virginia

Executive Summary

S tate financial policy for higher education plays an important role in framing state priorities and enabling innovation in postsecondary education. Increasingly, these state priorities are focusing on the need to raise the level of postsecondary attainment in response to increasing and often unfilled labor force demands for highly skilled employees with relevant credentials.

Best practices in state finance policy

For most states, increasing postsecondary attainment over the coming decade will require altering the traditional paradigm of postsecondary education, expanding how education is delivered and the types of students that postsecondary education typically serves. States must frame their individual and collective finance policies within the context of how well these policies support state credential-attainment needs. In particular, states should pay attention to how well these policies address the persistent access and attainment gaps seen among racial and ethnic minorities, low-income students, and older students. Further, states can design their finance policies to encourage institutions to adopt alternative delivery models that support accelerated completion.

State appropriations

Traditionally, states have largely based institutional allocations on inputs (enrollment) or prior levels of support, but several states have recognized the disconnect between these funding approaches and state needs, and so have begun to incorporate outcomes-oriented elements to determine how state dollars are allocated across institutions, an approach known as *outcomes-based funding* (OBF). Well-designed OBF models can counter the overwhelming dependence on enrollment funding for institutions, freeing colleges and universities to accelerate its adoption and scale systems that rapidly increase credential attainment. Elements of strong OBF models include:

- Aligning such approaches to state priorities, with degree or credential completion serving as a primary component;
- Providing a significant portion of general institutional support to sustain the model while balancing the historical incentives paid for with other institutional revenue sources; and
- Creating incentives for institutions to support the success of underserved student groups in reaching desired credential-attainment goals.

Capital finance

Financing new capital investments, mostly in the form of new or renovated buildings, has long been an area that needs significant overhaul within the higher education landscape. The use of capital funds to accommodate institution and student needs and meet state expectations must be strategic and intentional. Currently, this process is often queue-based or steered by a political process. Instead, states should employ a process that evaluates capital requests based on state needs and focuses on areas such as programmatic and regional considerations.

Student financial aid policies

State student aid generally refers to loan and grant programs that the state funds and administers. States should, however, view financial aid as a critical policy strategy to help offset the increased costs borne by students and families—particularly lower-income students for whom increased costs have an exponentially negative effect on attendance and degree completion. Implementation of comprehensive, targeted financial aid helps create an affordable pathway that increases student access and encourages completion. Evaluation of state financial policies should consider how well they meet the following goals:

- Support student progress and completion, such as encouraging completion of 30 credit hours per year or encouraging students to enroll in 15 credit hours per semester;
- Target students most likely to benefit, particularly low-income students, who may otherwise not consider postsecondary education because of financial barriers; and
- Design assistance programs that lead to credential completion by providing direct payments to students (instead of rebates or reimbursements), increasing opportunity for adult students to access aid, and rewarding students for establishing a degree plan and meeting milestones.

Tuition

Tuition policies do not typically rest with state policymakers, although attention to this issue has increased. However, states can take these approaches to help frame and shape tuition policies and better align them with completion needs:

- Encourage full-time enrollment by providing block tuition policies that allow students to take up to 15 credit hours per semester at no additional charge beyond 12 credits, which will better allow students to complete a credential on time; and
- Provide predictable tuition policies that hold tuition at a constant level for a full four years or establish predictable increases that allow students and families to plan over multiple years.

Financing of innovative models

In addition to framing broader state finance policies that align with state credential-attainment priorities and promote student progress and degree completion, states are making direct investments in various models that better serve today's students, particularly adult learners. These models include programs that accelerate credential attainment, such as Completion Colleges that recover prior learning and translate work experience into college credits or accelerated programs that students can complete in less than the traditional two or four years.

Introduction

For the United States to remain competitive in an increasingly educated and dynamic world, estimates are that 60 percent of new entrants into the U.S. workforce by 2025 will have to have a college degree or certificate of postsecondary training. Current projections suggest that the United States will fall short of this level, endangering the nation's future economic health, social well-being, and national security.

This trend will continue unless the U.S. higher education system does more to reach and serve an increasing population of adults without college degrees, low-income students, and racial and ethnic minorities. Although it is likely that additional funding will be necessary to meet such objectives, states must start by making the current system more inclusive, efficient, and cost-effective. Realigning funding systems to create incentives for institutions to slow the rate of cost increases and accelerate degree completion—while maintaining quality—is a foundational policy strategy. States can also more effectively employ investments in student financial aid by focusing resources on low-income, minority, and adult students and rewarding milestones and activities that increase the likelihood of credential completion.

At the state level, this means restructuring the higher education financing system. There is an urgent need to create and adopt state higher education finance strategies that promote lower cost pathways, increased access, and higher completion rates and eliminate long-standing equity gaps to meet the nation's educational attainment goals.

Recognizing this, states and public institutions are analyzing how best to align a variety of revenue streams—many with relevant incentives and priorities—to better advance state priorities and objectives. If used effectively, the following resources can improve results for underserved students:

- State and local operating support for public colleges and universities
- State support for capital investment in buildings
- Federal and state student financial aid
- Tuition policy

Further, these practices can promote advances in teaching and learning that effectively expand capacity and support student progress and outcomes.

There is an urgent need to create and adopt state higher education finance strategies that promote lower cost pathways, increased access, and higher completion rates and eliminate long-standing equity gaps to meet the nation's educational attainment goals.

¹ Lumina Foundation, A Stronger Nation, http://strongernation.luminafoundation.org/report/2016 (accessed May 30, 2016).

National Trends in State Appropriations for Public Colleges and Universities

Despite students' considerably increased share of investment in higher education in recent years, state support for public colleges and universities remains the largest single source of funding for institutions. State investment is an important component in the nation's overall spending on higher education, and these funds continue to be central to how institutions evaluate priorities, establish budgets, and respond to the direct or indirect incentives created by state policy.

As the State Higher Education Finance fiscal year (FY) 2015 report indicates, overall state and local funding for higher education has increased for the third year in a row, reaching \$90.9 billion. The lion's share of this money—77.7 percent—was spent on general operating expenses for public higher education institutions, with just 7.6 percent spent on student financial aid programs at public institutions. States invested another \$11.1 billion in capital expenditures for higher education.

Even with recent increases in general operating support for public institutions, the overall balance of tuition (student contribution) compared to state investment has been substantially altered, with tuition becoming a larger portion of the revenue for institutions (see Figure 1). The shift to students subsided between 2013 and 2014, but net tuition revenue still made up 42.4 percent of revenue for higher education in 2015—significantly higher than the 2006 prerecession 32.6 percent.



Distribution of Funding Sources, FY 2006-2015

Source: State Higher Education Executive Officers Association, SHEF: FY 2015 (2016).

Figure 1: Distribution of Funding Sources, 2006–2015

² State and local appropriations are funds appropriated through state and local budget and legislative processes. They do not include capital appropriations or other grants and contracts. See Table 1 on page 16 of State Higher Education Executive Officers Association, *SHEF: FY 2015. State Higher Education Finance* (Boulder, CO: State Higher Education Executive Officers, 2016), http://sheeo.org/sites/default/files/project-files/ SHEEO_FY15_Report_051816.pdf (accessed May 30, 2016).

³ National Association of State Business Officers, *State Expenditure Report: Examining Fiscal 2013–2015 State Spending* (Washington, DC: National Association of State Business Officers, 2015), http://www.nasbo.org/publications-data/state-expenditure-report (accessed May 30, 2016). ⁴ *Net tuition revenue* includes tuition and fees as well as grant and loan aid (state, federal, and private) that students use to pay tuition. It does not include institutional student aid. State Higher Education Executive Officers Association, *SHEF: FY 2015*.

State higher education funding tends to be procyclical, increasing during economic upswings and declining during recessions. Enrollment tends to be highly countercyclical, increasing during recessions and remaining flat or declining during economic upswings. Because of the magnitude of the economic decline during the Great Recession of 2007 to 2009, state higher education funding on a per-student basis for the period 2009 to 2015 has remained significantly below prerecession levels. Future state investment in higher education appears to be challenged, given the significant pressures facing state budgets, including rising personnel, pension, and health care costs.

As Moody's April 2015 report cites, state funding for discretionary spending categories has deteriorated significantly, with Medicaid taking a larger share of total state spending. Growing state pension obligations and an increasing gap between pension liabilities and assets add further—and significant—pressures on state discretionary spending. Higher education has sustained the largest reduction in funding of any major state budget area, falling from 14 percent of total state spending in the 1980s to only 12 percent in FY 2014. Moody's analysis indicates that higher education funding over the next decade for all states will grow at relatively anemic rates as other state obligations crowd it out.

In addition to these national trends, there has been significant variation across states in recent years, in terms of overall investment and the relative proportion of institutional revenue deriving from state or tuition support. Students in some states have access to relatively affordable state institutions and generous grant aid; others have access to neither.

Other revenue sources for public institutions

Operating support for public institutions generally comes from the state, but institutions receive local and tuition revenues from a variety of other sources, creating various incentives that modify institutional policies. Figure 2 illustrates this breakdown across all public institutions. In the aggregate, direct state support to institutions and tuition collected from students make up 40 percent of total institutional revenue; the primary purpose of these sources is to support state public institutions' operating and educational mission. Other funding sources are often tied to research grants, housing and dining facilities, hospitals, and other enterprise activities.



Source: Digest of Education Statistics, simplified version of table 333.20 (2014). Figure 2: Revenues of Public Degree-Granting Postsecondary Institutions by Revenue Source, Fiscal Year 2012–2013

⁵ State Higher Education Executive Officers Association, *SHEF: FY 2015*, State Higher Education Finance, 26, Table 3.

⁶ Dan White and Sarah Crane, Crowded Out: The Outlook for State Higher Education Spending (West Chester, PA: Moody's Analytics, 2015), http://

web1.millercenter.org/commissions/higher-ed/2015-higherEdFunding-Moodys.pdf (accessed May 30, 2016).

⁷ D. White and S.Crane, *Crowded Out*.

Sources of general operating support vary significantly across two-year and four-year institutions. A larger portion of revenue for two-year colleges comes from state and local support than from tuition; tuition at public four-year institutions outweighs state investment. Figures 3 and 4 illustrate this variation across institution types. State policymakers should consider the distinct funding mix of particular sets of state institutions when aligning funding systems with state credential-attainment goals.



Source: Digest of Education Statistics, table 333.20 (2014).

Figure 3: Primary Funding Sources for Public Two-Year Institutions, Fiscal Year 2012–2013



Source: Digest of Education Statistics, table 333.20 (2014).

Figure 4: Primary Funding Sources for Public F our-Year Institutions, Fiscal Year 2012–2013

State Allocation Approaches

In many states, the primary method of distributing general operating support to institutions—enrollment, generally measured in full-time enrollment or course completions—reinforces the input-focused incentives created by tuition revenue. Although common, this is not the only enrollment-driven approach states use, however.

States have historically used three principle-allocation methods—base plus, enrollment driven, and performance-based—to distribute general operating support to institutions. James Hearn provides background for and development of these funding methodologies. Recently, states have adapted performance-based approaches to more squarely focus resources on student progression and degree completion. When these funding systems are designed to reinforce student progression, with metrics such as reaching key credit accumulation benchmarks or outcomes such as degree, certificate, or credential completion, they are referred to as *outcomes-based funding* (OBF). Although there is a general shift in many states toward inclusion of some elements of more recent OBF approaches, few states use the outcomes-based model as their primary or sole method of determining general operating fund distribution.

State allocation models compared

No two states have identical funding, policy, or institutional contexts, and many states employ multiple funding approaches. Each state's approach is reflective of not only the state's goals but also its chosen path of implementation. Every approach has trade-offs—strengths and challenges. Arguably, the OBF approach provides the best opportunity for states to alter the underlying business model, create innovation in educational delivery, close student educational equity gaps, and align with the increased credential-attainment needs of the state.

Base-plus funding

Base-plus funding has historically been the way most states finance public colleges and universities. This approach is merely the continuation of funding for institutions from one budget cycle to the next, including a percentage increase (or decrease) from the previous cycle's funding level. This system requires minimal administrative data, has low administrative costs, and is similar to funding for other state agencies. Although this system provides simplicity for states and predictability and stability for institutions, it provides no direct incentives for institutions to respond to state priorities for higher education. States with long-held base-plus approaches inevitably face significant funding inequities across institutions because the approach fails to respond to the changing circumstances of institutions and the state. Longer-established or more politically powerful institutions tend to fare well from these approaches, while newer and faster-growing institutions garner lower full-time-equivalent (FTE) funding from the state.

⁸ James Hearn, *Outcomes-Based State Funding in Historical and Comparative Context* (Indianapolis: Lumina Foundation, 2015), https://www. luminafoundation.org/files/resources/hearn-obf-full.pdf (accessed May 30, 2016).

⁹ J. Hearn, Outcomes-Based State Funding.

Enrollment-based funding

Enrollment-based allocations are determined by the number of students enrolled, typically early in the semester. This allocation is data informed and predictable, and it promotes increased access, but it is not linked to state or student attainment and completion goals. Tuition-based and enrollment-based funding systems have a single underlying driver—the student credit hour—and thus share a common incentive. This input-driven funding environment creates a single incentive for institutions: Maximize credit-hour production to maximize resources. Colleges and universities can accomplish this maximization in a variety of ways, some productive in terms of increased learning for students and credential completion, others counterproductive, such as increased credit-hour requirements for degree completion and higher cost per credit hour.

Early performance funding

Early performance funding systems link a small portion of funding to specific indicators. They have often taken the form either of bonus payments or small carve-outs or of state withholdings from allocations until an institution meets a predetermined performance target. In many cases, the goals and aligned indicators of these early models of performance were too broad to be meaningful or not explicitly tied to a state's credential-completion or -attainment goals. These goals and aligned metrics ranged from increased access for certain populations to diversity in faculty to higher expenditures on research. Riddled with poor design, less-than-substantial funding, unaligned priorities, and ineffective implementation, most efforts were not sustainable.

These systems more closely resembled accountability systems, with marginal levels of funding attached rather than systematic funding methodologies. The bulk of funding and incentives under early performance-based funding systems remained associated with enrollment or base-plus systems. Such efforts, however, signaled to institutions the various priorities of states and laid the foundation on which more advanced funding systems—as in, OBF—grew.

Outcomes-based funding

Similar to the goals of prior performance funding, OBF seeks to encourage and reward institutional performance. OBF differs from performance-based funding in both design and implementation, however, with a more direct focus on state attainment needs, student completion and equity, and refined development and modeling approaches (Figure 5). The sections that follow discuss the distinction between early performance-based models and more refined OBF models and key design principles for the development of robust OBF models.

¹⁰ Martha Snyder, Driving Better Outcomes: Typology and Principles to Inform Outcomes-Based Funding Models (Washington, DC: HCM Strategists, 2015; revised 2016), http://hcmstrategists.com/wp-content/uploads/2015/03/Driving-Outcomes.pdf (accessed May 30, 2016).

Historical (Base-Plus)	 Allocation based on prior levels of funding Adjusted up or down based on available funds Primary goal: institutional fiscal stability Challenge: equity in institutional funding; unresponsive to or disconnected from changing state priorities

	Number of students enrolled at census date
Enrollment	 Recent shift to course completion Primary goal: expanded access
	 Challenge: incentive for prolonged persistence or retention; reinforces tuition-based incentives

	 Reward for reaching performance milestones or goals Completion not necessarily the key objective 		
Early Performance	 Often "bonus" (new allocation) or small percentage of general allocation 		
	Challenge: sustainability and funding		

Outcome-Based	 Funding based on student success and degree completion Significant portion of general allocation to institutions (not reliant on new money–only/separate allocation) Challenge: institution's ability to respond

Figure 5: Summary of State Allocation Methods

Outcomes-Based Funding: Aligning Funding and Completion¹¹

Research and policy literature, focused primarily on the effects of early models of performance-based funding, indicate that such models resulted in institutional changes, particularly in academic and student service policies and practices aimed at improving student outcomes.¹² In addition, research found that these systems increased institutional awareness of state priorities and relative performance, with expanded and more strategic use of data in planning.¹³

Despite increasing institutional attention, the relatively low funding associated with early systems does not alter institutions' underlying business models to better align them with student and state goals. These systems are insufficient to support the adoption and scaling of completion-focused initiatives. Although these models raised issues of completion to institutional leaders, the issues were often countered by the overwhelming scale of enrollment-related incentives.

Performance-based funding systems tend to focus on rates and changes in performance, whereas OBF systems tend to more strongly align investment with institutional output or students' meaningful progress. New OBF models have greater potential to support broader adoption and the scaling of institutional investments in student success initiatives that foster progression and decrease time to credential completion. OBF is the only funding model that directly counters the overwhelming dependence on enrollment and thus provides financial incentives for institutions to accelerate adoption of these reforms. Institutions can do so without OBF, but it may come at a cost in terms of credit-hour production and thus may not be financially viable in the long term. This is particularly true for low-performing and financially challenged institutions that typically serve students who would benefit the most from programmatic reforms and student support systems.

To varying degrees, current state efforts to support and align funding to specific student completion and outcome goals address many of the challenges that early performance-based funding efforts presented. A variety of state finance approaches still exist, however, and the evolution toward embodying the principles and design features of more robust OBF policies continues. Many states' efforts to incorporate a focus on outcomes remain rudimentary in their design and continue to share significant features of early performance-based funding models.

¹¹ This section includes adaptations of prior work and research conducted by HCM Strategists as they relate to the common features, elements, and effectiveness of robust outcomes-based funding policies. A comprehensive analysis is available in M. Snyder, *Driving Better Outcomes: Typology and Principles* and Martha Snyder and Brian Fox, *Driving Better Outcomes: Fiscal Year 2016 State Status & Typology Update* (Washington, DC: HCM Strategists, 2016), http://hcmstrategists.com/wp-content/uploads/2016/03/2016-Report.pdf (accessed May 30, 2016).

¹² M. Snyder, Driving Better Outcomes: Typology and Principles.

¹³ Kevin Dougherty and Vikash Reddy, *The Impacts of State Performance Funding Systems on Higher Education Institutions: Research Literature Review and Policy Recommendations* (New York: Community College Research Center, 2011), http://ccrc.tc.columbia.edu/publications/im-pacts-state-performance-funding.html (accessed May 31, 2016).

An HCM Strategists report describes this situation through the development of a typology that analyzes current state approaches based on adherence to key OBF principles.¹⁴ In FY 2016, only two states—Ohio and Tennessee—were implementing the most advanced (Type IV) OBF models. Type IV models have the following characteristics:

- Significant and stable funding is their foundation. For OBF to alter financial incentives for institutions, it must be a central part of a state's funding structure and not reliant on new or increased funding. In addition, the design should be formula driven, not a target/recapture approach that sets aside a specific amount of money for institutions to earn back if they meet certain benchmarks.
- All public institutions in the state are included, and metrics are differentiated to reflect and reinforce goals (as applicable to two-year and four-year institutions).
- Degree and credential completion is clearly reflected as a key priority within the funding model.
- Outcomes for underrepresented students are prioritized to emphasize the need for increased access *and* success with these populations for states to achieve attainment needs.

The Ohio and Tennessee funding policies are also anchored by and aligned to a statewide completion or attainment goal and related priorities—a key element for sustainability and evaluation.

Table 1 shows metrics commonly used in many of today's OBF models. Not all states using OBF include each metric, and the relative weighting (or priority) given to any individual measure varies across states, often depending on specific state priorities or the level of implementation associated with the OBF model.

Types of Measures	Examples		
Student Progression and Momentum	Remedial education success		
Intermediate outcomes and key milestones are	Completion of first college-level		
important to students' progress toward degree	mathematics and English courses		
completion.	• Credit accumulation (e.g., 15 or 30 credit hours)		
Completion and Outcomes	Number or rate of those students		
Promote certificate or degree completion	completing programs ¹⁵		
or transfer.	Number of transfers		
Productivity and Institution Mission	Cost per undergraduate to the institution		
Promote efficiency and affordability, and focus	• Degrees per 100 FTEs		
dollars on core mission functions.	• Research		
	Workforce training		
Priority	Adult students		
Student categories or degree types that are a	Academically underprepared students		
priority for the state to meet attainment and	• Low-income (Pell grant-eligible) students		
job needs. Student focus is on progressio and	Minority Students		
completion, not just access.	 Science, technology, engineering, 		
	mathematics, and health degrees		
	<i>Note: Priority is often reflected by providing extra</i>		
	weight to progress and competion metrics.		

Table 1: Common Outcomes-Based Funding Metrics¹⁶ Funding associated with OBF

¹⁴ M. Snyder, Driving Better Outcomes: Fiscal Year 2016.

¹⁵ States should prioritize numbers of students completing degrees over graduation rates. First, graduation rates can be increased by limiting the number or types of students enrolled (e.g., encouraging institutions to enroll only well-prepared, "traditional" students), running contrary to the overall attainment goals and needs of the state. Second, graduation rates are often not an accurate calculation of institutions' productivity.
¹⁶ M. Snyder, *Driving Better Outcomes: Fiscal Year 2016* (2016).

Wide variation exists across state OBF in the level of funding associated with student success and completion. Figure 6 from HCM Strategists' 2016 Driving Better Outcomes report illustrates that although many states have some form of outcomes-oriented funding, for most states, OBF is not the primary component of state allocations to institutions.



Outcomes-Based Funding as a Percentage of Overall State Institutional Support

Broken out by course completion, progression/degree completion, and mission components (all sectors combined)

Source: M. Snyder, Driving Better Outcomes: Fiscal Year 2016 (2016).

Figure 6: Outcomes-Based Funding as a Percentage of Overall State Institutional Support

Evidence of OBF effectiveness

Few states have implemented robust OBF systems, and so widespread research is not available. Ohio and Tennessee are the two longest-standing examples, with Colorado and Oregon's four-year institutions recently implementing such systems.¹⁷ There is an increasing body of research, however, indicating that OBF systems are effective at aligning institutional priorities and policies with state attainment goals.

Quantitative data from Tennessee indicate increases in degrees awarded at the state's two-year and fouryear institutions,¹⁸ while a study by the Community College Research Center in three states that have sophisticated OBF systems demonstrates the wide-ranging and positive impact on student services, advising and counseling, developmental education, transfer policies, and the orientation of institutional executives and mid-level decision makers toward increasing degree and credential completion.¹⁹

Policy principles for the design of effective OBF policies²⁰

As states consider the development of OBF models, they can use general research- and practice-informed principles to guide their policy and technical development. The more closely a state adheres to these principles, the more robust the OBF model is likely to be, resulting in greater alignment of state finance policies with state objectives and priorities for higher education and long-term sustainability.

Establish state goals and priorities for higher education that will guide policy development and state investment and funding priorities.

The development and articulation of clearly established, understood, and commonly accepted state goals and priorities for higher education can inform how the state directs its investment in postsecondary education and ensure the longer-term sustainability of various policies. The effectiveness of earlier performance-based funding models was hampered by their not being clearly grounded in state objectives and needs; rather, they were trying to be all things to all priorities, which resulted in disjointed and complicated funding models that limited alignment to student success and degree completion. States such as Tennessee, Oregon, and Indiana all have strong and well-known higher education goals that serve not only to guide general policy development but prioritize investments, including the development and implementation of OBF models.

¹⁷ M. Snyder, Driving Better Outcomes: Fiscal Year 2016.

¹⁸ Nate Johnson and Takeshi Yanagiura, *Early Results of Outcomes-Based Funding in Tennessee* (Indianapolis: Lumina Foundation, 2015), https://www.luminafoundation.org/files/resources/early-results-tn-0314-1.pdf (accessed May 30, 2016).

¹⁹ Kevin J. Dougherty et al., "Looking Inside the Black Box of Performance Funding for Higher Education: Policy Instruments, Organizational Obstacles, and Intended and Unintended Impacts," *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2, no. 1 (2016): 147–173, http://www.rsfjournal.org/doi/full/10.7758/RSF.2016.2.1.07 (accessed May 31, 2016).

²⁰ M. Snyder, Driving Better Outcomes: Typology and Principles.

Foster alignment of funding policies with state goals by allocating meaningful levels of general fund support for institutions on the basis of student success and degree completion measures.

OBF should be a component of how general-fund ("base") support to institutions is allocated, not dependent solely on the availability of new money that may never materialize. Further, the share of institutional funding devoted to outcomes must be large enough to garner attention, shape priorities, and influence actions. This central feature makes the OBF model a key element of institutional revenue and decision making not easily disregarded or replaced with other revenue sources.

More advanced states allocate a significant portion (the most robust being Tennessee and Ohio at nearly 85 percent) of general operating support to institutions through an outcomes-based model. States such as North Dakota and Nevada have taken steps to alter funding from census-based enrollment to course completion, but these models remain mostly disconnected from attainment needs, with little or no reflection of student progress and degree completion. Thus, they continue to place primary emphasis and incentives on enrollment, not on timely progression toward a credential.

Although there is no definitive research on a "tipping point" for the percentage of support states should allocate through outcomes, previously noted research on earlier performance-based funding models indicates that low levels of funding and models that depend on new funding were not effective in garnering institutional change and were difficult to sustain over time (Figure 7). Further, the relative level of funding associated with outcomes should be considered within the broader context of state financial policy. For example, the lower proportional share a state has in the overall higher education revenue profile, the more the investment should focus on student equity and completion outcomes.



Two-Year Institution Core Funding: Selected States With Outcomes Funding

Source: M. Snyder, Driving Better Outcomes: Fiscal Year 2016 (2016).

Figure 7: Two-Year Institution Core Funding in Selected States With Outcomes-Based Funding

Include limited, measurable metrics, with a focus on student success and degree completion.

As noted earlier, research into early models of performance-based funding indicates that too many and too diffuse (that is, not squarely aligned to student success and completion) metrics are not effective at encouraging institutions to meet state attainment goals. State funding models should be allocated according to a limited number of metrics so as not to dilute the focus on key priorities.

What constitutes the optimum number of metrics or their proper weighting for advancing student equity and increasing completion has not yet been studied. As a general rule, states should not have more than 10 metrics within the funding formula. Some states, such as Oregon, essentially use only two primary measures: course completion (credit-hour production) and degree completion. By limiting metrics to those outcomes most directly aligned with the state's attainment goal, institutions can adjust their business models and academic and student support systems to encourage student completion.

States should also consider metrics that link workforce needs and the varying costs of programs that may be a priority to states and regional workforces. The Texas State Technical College System is an early and comprehensive adopter of such a system. The system's recently adopted "returned value" funding model funnels a proportion of graduates' wages and taxes back into the system to support ongoing operations. The funding model is designed to reward institutions for effectively linking their program offerings with the state's labor force needs.

Apply the funding approach to all public postsecondary institutions, and engage them in the model's development and design.

Achieving state goals and objectives requires the contribution of each public institution of higher education, but it is also important that models recognize a *system* of higher education and the specific mission or role that institution within that system plays in moving the state toward its higher education goals and priorities. To that end, some states, such as Indiana, have chosen to apply a few metrics across all institutions while adopting other, unique metrics and weighting them differently across institution types. Other states, such as Ohio, have developed separate formulas for different sectors, often with common categories of metrics but different operational definitions, including degree levels, course completion milestones, and mission-aligned measures such as research for the four-year institutions and job placement for community colleges. Many states employ multiple strategies to ensure and reinforce mission alignment.

²¹ Texas Higher Education Coordinating Board, *Texas State Technical College System Returned Value Funding Methodology* (Austin, TX: Texas Higher Education Coordinating Board, 2013), http://www.thecb.state.tx.us/reports/pdf/3207.pdf (accessed May 31, 2016).

Encourage the success of underserved student populations.

Most states that have an OBF model provide a premium for institutions to be successful with at-risk, low-income, or underrepresented students. The intention of this approach is two-fold: (1) to mitigate the potential incentive for institutions to increase the number of successful outcomes by restricting access to only those students most likely to succeed and (2) to align with state attainment needs that require an increased focus on students not typically well served by higher education. The premium is intended to offset the increased costs to institutions of successfully serving students, such as enhanced and focused student support services, and providing incentives for alternative and innovative approaches that other funding models do not currently support at scale, such as remedial education reform and competency-based education.

Recognize that implementation matters, and appropriately phase in the effects of a new funding model.

Policymakers should support a robust OBF approach, but it is equally important that the chosen funding model not result in large, disruptive shifts in institutional funding. This is particularly true in the first few years of a model's implementation, when funding changes may be more reflective of a change in policy than actual institutional performance and outcomes. Numerous approaches have been employed to ease the implementation of new funding approaches.

Tennessee calibrated its OBF model with the enrollment funding model and phased in the effects over a three-year period. In the first several years of implementation, Ohio used a stop-loss provision that prevented any institution from losing more than a certain percentage of prior-year funding. Oregon is employing a similar approach for its four-year funding formula. Other states, such as Nevada and Maine, have a policy to incrementally increase the amount of funding they allocate based on outcomes over a multiyear period.

Capital Finance

Capital investment in public colleges and universities, including the construction of new buildings and the renovation of old facilities, has long needed a significant overhaul. That said, the capital investment that does occur in higher education is generally dictated by how states budget and finance capital investment

for all state agencies. All 50 states have capital budgets, but their definitions and the degree of integration with operating budgets differ substantially. For example, many states do not include transportation investments in capital budgets, and three states specifically exempt higher education. Over the past decade, the costing estimations for proposed projects and the overall capital budget process have improved significantly. The politics of donor-matched or complex, multiparty involvement in higher education projects create additional hurdles for increasing the efficiency and effectiveness of the capital allocation process. More effective planning for and processing of capital investment in higher education will likely need to occur as part of a comprehensive overhaul of states' capital programs.

Making matters more complex, there is a persistent lack of clarity and strategic planning among states with regard to how best to determine the amount and targeting of capital investment directed toward higher education institutions' missions and states' needs. Although somewhat dated, A Public Higher Education Capital Funding Survey of 37 States echoes this sentiment.

Historically, there has been no set strategy for how best to use capital finance. In fact, the Texas survey revealed that even what constitutes operating and capital funding varies among states. Certain states outline capital budgets as only major building projects, while others include equipment and renovations. Further findings outlined that the majority of states did not include a regular review of facilities in their formal master plan for higher education.

The use of capital funds to accommodate institution and student needs as well as state expectations must be strategic and intentional. Currently, this process is often queue based or steered by a political process. Instead, states should employ a process that evaluates capital requests based on state needs and focuses on areas such as programmatic and regional considerations and modernizing and extending the use of current facilities. The use of capital funds to accommodate institution and student needs as well as state expectations must be strategic and intentional.

²² Texas Council of Public University Presidents and Chancellors, *Public Higher Education Capital Funding: A Survey of 37 States* (Austin, TX: Texas Council of Public University Presidents and Chancellors, 2006), http://www.cpupc.org/images/CPUPC_Capital_Funding_Report_4-06.pdf (accessed May 31, 2016).

Leveraging State Student Aid Programs

States should view financial aid as a critical policy strategy to help offset the effects of increased price on students, particularly lower-income students, for whom increased prices have an exponential effect on their attendance and degree completion. A comprehensive financial aid system is a key component in creating an affordable pathway to higher education for low-income students. State student financial aid and direct institutional support should be mutually reinforcing systems oriented toward increasing degree and credential completion, particularly for those students least likely to enroll in a college or university or complete a degree.

State student aid generally refers to loan and grant programs that states fund and administer. In the most basic sense, these programs are designed to reduce the net tuition that students pay. It is important to note, however, that state student aid programs are separate from institutional aid provided directly from a college or university to its students. From an institution's perspective, state aid programs are factored into the institution's total net tuition revenue (as something received from the state or students), while college aid programs are an expense for institutions. This paper focuses on the design and administration of state student aid programs.

State student financial aid and direct institutional support should be mutually reinforcing systems oriented toward increasing degree and credential completion, particularly for those students least likely to enroll in a college or university or complete a degree.

Breakdown of student aid programs

Most states have at least one student aid program in the form of a scholarship or grant. In FY 2015, states invested a total a total of \$9.9 billion in student financial aid programs. Many states have a collection of small-scale programs, each intended to address specific populations, priorities, and eligibility requirements. In analyzing the effectiveness of student aid programs, it is important to consider how the programs interact with one another and how their design aligns to state objectives and priorities, particularly the need to increase attainment and close equity gaps for low-income and other underserved student populations.

²³ National Association of State Grant and Aid Programs, 45th Annual Survey Report on State-Sponsored Student Financial Aid: 2013–2014 Academic Year (Washington, DC: National Association of State Grant and Aid Programs, 2015), 6 Table 1.

The level and targeting of student aid

Need-based aid programs create a targeted approach to increasing access and completion for lower-income students. The Federal Pell Grant, the federal government's primary need-based aid grant, has lost purchasing power compared to recent increases in tuition and nontuition costs of enrollment, such as books and living expenses. Although there has been recent action to increase Pell grants, many low-income students still have substantial unmet needs that serve as barriers to credential completion. A 2014 MDRC report cites the significant rise in unmet need. From 1995– 1996 to 2003–2004, the unmet need for students increased 68 percent, with low-income students experiencing the brunt of the rise.

The design of state financial aid programs that promote degree completion and reduce equity gaps

With increasingly scarce resources available for student financial aid and increasing stress on degree and credential completion, states must begin to focus on program design. Studies indicate a pressing need to focus aid on closing the substantial gap for low-income students because most middle- and high-income students will attend college regardless of assistance. This gap is often highlighted in the "merit versus need" aid debate. Merit-based aid is awarded for a student's academic achievement without regard to his or her financial need. In contrast, need-based aid is determined by a family's need, often by subtracting the student's expected family contribution from the cost of attendance at a college or university. Merit-based aid has been shown to increase college participation rates but not equally among different groups of students; in fact, it tends to disproportionally help higher-income students.

Research indicates that top-achieving students who are lowincome high school graduates attended college in the same proportion as low-performing high-income peers. Another study indicates that 71 percent of students at the highest income level finished college within six years, with only The purpose of the significant public investment in higher education is to increase opportunity, create a vehicle to economic mobility, and enable a more meritocratic society. The reality—that academically prepared low-income students have a significantly lower chance of completing postsecondary credentials than equally prepared high-income students—indicates that significant progress can be made.

 ²⁴ Rashida Welbeck et al., *Piecing Together the College Affordability Puzzle: Student Characteristics and Patterns of (Un)Affordability* (New York: MDRC, 2014), http://www.mdrc.org/sites/default/files/Piecing_together_the_College_affordability_puzzle.pdf (accessed May 31, 2016).
 ²⁵ These calculations factor in other sources of financial support, such as the Federal Pell Grant program.

46 percent of their counterparts at the lowest income level completing at the same rate. It is important to note that such inequities are not exclusive to income but are also magnified by race and ethnicity. The purpose of the significant public investment in higher education is to increase opportunity, create a vehicle to economic mobility, and enable a more meritocratic society. The reality—that academically prepared low-income students have a significantly lower chance of completing postsecondary credentials than equally prepared high-income students—indicates that significant progress can be made.

States are developing and implementing comprehensive approaches to student financial aid that are clear, predictable, and focus resources where they will have the greatest effect. This is important because large gaps remain in educational achievement between students from low-income families and their high-income peers. The literature on price sensitivity is well established. A \$1,000 increase in tuition is associated with a 3.5 to 5 percent decrease in enrollment, with effects most profound among black men and part-time students.

Policy principles for informing state aid policies

Well-designed state financial aid policies should use federal financial aid effectively, helping state dollars more efficiently address unmet needs for more students. In addition, similar to the design of state support to institutions, financial aid programs should align with state credential-attainment goals and support student progress and timely degree completion.

Numerous states have taken steps to examine the effectiveness of their state aid programs and how they support broader state completion and attainment goals. The lessons from these states can inform considerations for the design and implementation of state financial aid policies.

Support student progress

Many state financial aid programs are not designed to support student progress toward timely degree completion. First, they often prioritize student grade point average (GPA) as the basis of award renewal. Although a minimum GPA threshold may be necessary, state financial aid programs should place an emphasis on a student's progress toward degree completion (for example, credit-hour thresholds). Indiana made such a change in 2013 for both of its major aid programs: the Frank O'Bannon Grant and the 21st Century Scholarship program. For students to maintain a full award, they must complete 30 credit hours per year, which puts them on track to complete most four-year degrees in four years. Students who do not complete those benchmarks receive a reduced award amount. The changes also allow students to earn bonus awards for maintaining a high GPA, and students can use a portion of their awards for the summer term, incentivizing year-round enrollment. Early evidence indicates that a substantially higher number of students participating in the aid program are completing 30 credit hours per year.

²⁶ R. Welbeck, *Piecing Together the College Affordability Puzzle*.

²⁷ Bridget Terry Long, "Making College Affordable by Improving Aid Policy," *Issues in Science and Technology* 26 no. 4 (2010), http://issues.org/26-4/long-2 (accessed May 31, 2016).

²⁸ Don Hossler, Shouping Hu, and Jack Schmit, "Predicting Student Sensitivity to Tuition and Financial Aid," *Journal of Student Financial Aid* 29 no. 1 (1999), http://publications.nasfaa.org/jsfa/vol29/iss1/2 (accessed May 31, 2016).

²⁹ Indiana Commission for Higher Education, Frank O'Bannon and 21st Century Scholarship Credit Completion Requirements (2014), http:// www.in.gov/che/4501.htm (accessed May 31, 2016).

Another limitation of many state programs is that they define full-time enrollment according to federal aid standards and cap financial awards at 12 credit hours per semester—a threshold that does not allow students to complete a degree "on time." In addition to the changes made in Indiana, financial aid programs in Minnesota, Washington, and Illinois allow students to take up to 15 credit hours per semester, and West Virginia ties renewal of its merit-based program to completion of 30 credit hours per year.

Target students for whom financial barriers are likely to affect postsecondary enrollment

Financial aid programs that support students who would otherwise enroll (and graduate) are misaligned to the state's need to increase completion and attainment, particularly among low-income and other underserved student populations. Given the limited resources available for student aid programs, states should prioritize supporting students who, without financial support, would otherwise not enroll or complete postsecondary education. This is not to say that there is no room for consideration of academic standing in the design and distribution of financial aid programs. Several state early promise aid programs have both academic/performance-based and financial components. Washington's College Bound Program, Indiana's 21st Century Scholarship program, and West Virginia's Promise program, among others, provide early commitment to students who have demonstrated financial need and also fulfill certain academic requirements, such as completing college-and-career-ready curricula or meeting academic success benchmarks. For example, California recently expanded funding for its well-known Cal Grant Competitive program, which provides awards of various levels to students based on their GPA and financial need, as determined by the Free Application for Federal Student Aid.

Provide students with more direct and interim payments

In many cases, financial aid disbursements first go to institutions to cover a student's tuition and fees; the remaining amount is "refunded" to students to cover other expenses. MDRC's performance-based scholarships and Aid Like a Paycheck program are two examples of the organization's experiments with alternative Given the limited resources available for student aid programs, states should prioritize supporting students who, without financial support, would otherwise not enroll or complete postsecondary education.

distribution methods that provide direct payments to students in intervals rather than lump-sum refunds. Although research is still being conducted on the effects of alternate distribution methods, the intent of their design is twofold: to limit financial management burdens for students and to provide incentives for students to remain enrolled and progressing toward completion to receive the full award amount. This is an example of financial aid that is designed to support student behavior while facilitating successful progress toward degree completion.

³⁰ Nate Johnson, "Aligning Student and Institutional Incentives in Higher Education Finance," in press.

³¹ Michelle Ware, Evan Weissman, and Drew McDermott, "Aid Like a Paycheck: Incremental Aid to Promote Student Success," *Policy Brief* (New York: MDRC, 2013), http://www.mdrc.org/sites/default/files/ALAP%20brief.pdf (accessed June 1, 2016).

Prioritize a larger number of awards over larger award amounts

Many state programs are designed to provide full assistance to students. Unless designed as an entitlement program, this approach artificially limits the number of students receiving support. For states with limited allocations to their financial aid programs, a better design would be to spread resources over a larger number of students while maintaining meaningful amounts of aid. States can tier awards based on demonstrated unmet need while continuing to expect some contribution from students and families. State programs like Oregon's Opportunity Grant and Minnesota's State Grant are designed in this manner.

Provide opportunity for other, "nontraditional" student populations to access student aid

The design of many state aid programs, particularly those that provide "Promise" opportunities for students, focuses primarily on traditional students, overlooking student populations such as adults. In an effort to target adult students, in July 2014 Connecticut implemented its return to college program, Go Back to Get Ahead, with \$18 million allotted to provide financial incentives. The program will pay for up to three free courses plus standard fees at the part-time rate. To be eligible, students must matriculate and carry a minimum of six credit hours per semester. The program provides a clear pathway for returning students and is flexible about how and where they go. Although it is too early for definite results, the program provides insight into a promising approach.

³² Adult College Completion Network, "Connecticut's Degree Completion Program Takes Shape" (Boulder, CO: Adult College Completion Network), http://www.adultcollegecompletion.org/node/227 (accessed June 1, 2016).

Setting Effective Tuition Policies

In many cases, tuition policy is the financial policy over which states exercise the least jurisdiction. For the majority of states in both the two-year and four-year sectors, institutional governing boards set tuition rates, with the state setting the outer limits on tuition rates. Table 2 depicts tuition-setting authority in all 50 states.

Sector	Individual Institutions	Legislature and Governor	Local District Governing Boards	Institution Governing Boards	Statewide Coordinating Body			
Two-Year Programs								
	California	California		All other states (15)	Kentucky			
		Louisiana			North Dakota			
		Ohio*			Oklahoma			
Four-Year Programs								
	Delaware	Florida	Texas	All other states (21)	Iowa			
	Ohio*	Louisiana			Kentucky			
	Wyoming	Ohio*			North Dakota			
		Washington			Oklahoma			
					South Dakota			

* Provided two responses.

Table 2: State Tuition-Setting Authority³³

Control over tuition policies is often not centrally located with state policymakers, but attention on this issue has increased. Because public colleges and universities, unlike nearly every other state enterprise, have an external revenue source in the form of tuition, states have been able to reduce funding with limited effect on service delivery. Although delayed, students and parents have become increasingly vocal over tuition increases and student loan debt.

Regardless of this reality, political interest among state policymakers—particularly governors—remains focused on limiting tuition increases as a way of addressing affordability. Contrary to conventional wisdom, however, state caps on tuition may be counterproductive because they tend to benefit wealthy students who could otherwise pay yet have little effect on low-income students for whom tuition will always be a financial barrier. Fortunately, states and institutions can employ other tuition policy strategies to help encourage degree completion and address issues of affordability.

³³ Andrew Carlson, *State Tuition, Fees, and Financial Assistance Policies for Public Colleges and Universities: 2012–13* (Boulder, CO: State Higher Education Executive Officers Association, 2013), http://www.sheeo.org/sites/default/files/publications/Tuition%20and%20Fees%20Policy%20Report%2020131015.pdf (accessed June 1, 2016).

Establish block tuition policies that encourage a full course load

Many institutions charge students by the credit hour, which can have the unintended consequence of creating a financial disincentive for students to increase the number of credit hours enrolled. A promising approach for encouraging on-time degree completion and student attainment is block or "flat-rate" tuition. A banded tuition structure allows students to increase their course load at no extra cost. Students who elect to attend full time would pay the same price regardless of whether they are taking 12, 15, or more credits. This approach begins to address the federal Pell Grant's 12-credit-hour full-time maximum.

The University of Minnesota (UMN) implemented a banded tuition policy in 2002. UMN students enrolled for 12 or fewer credit hours are charged per credit. Students taking more than 12 credit hours per semester are charged a flat rate, without any extra costs for increased credit loads. Similarly, the Indiana Commission of Higher Education passed a resolution in August 2015 encouraging the use of banded tuition as a strategy for student success and degree completion. In both of these cases, the tuition policy is aligned with requirements and incentives within the respective state financial aid programs that encourage full-time enrollment and timely progress toward a degree.

Hawaii developed a significant public relations campaign encouraging students to enroll in 15 credit hours, advertising that students would save up to \$12,000 by enrolling in a full course load and graduating on time. Since the launch of the 15 to Finish campaign, the percentage of students enrolled in 15 or more credits has increased by nearly 20 percent at four-year institutions and by more than 6 percent at community colleges. Data also demonstrate that students taking 15 credits or more persisted at higher rates at all campuses than students taking fewer than 15 credits.

Provide predictable and transparent tuition policies that allow students and families to plan

Fixed-tuition policies refers to policies that hold tuition flat for students for a set number of years, typically the amount of time necessary to complete a degree on time. The tuition rate is typically based on the rate that was set in the student's first semester. States such as Texas and Illinois passed legislation that requires all or some of the state's public institutions to give students the option of fixed tuition. Several institutions use this system of their own accord.

Multiyear tuition setting, or "rational tuition," is another method to be considered because it provides predictable, transparent increases in tuition. This method sets a limit on the maximum amount tuition is allowed to increase over a set amount of time. Multiyear tuition setting creates a predicable tuition environment for students and allows them to plan their postsecondary enrollment. These tuition-setting plans are often negotiated among legislatures, governors, and institutions in exchange for institutional funding.

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<sup>35</sup> University of Hawai'i, "15 to Finish: Data," http://15tofinish.com/data (accessed June 1, 2016).
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³⁴ University of Hawai'i, "15 to Finish," http://15tofinish.com/why-15-to-finish (accessed June 1, 2016).

³⁶ Sandy Baum, Marie McDemmond, and Gigi Jones, *Maximizing Resources for Student Success. Institutional Strategies for Increasing Affordability* and Success for Low-Income Students in the Regional Public Four Year Sector: Tuition and Financial Aid (Washington, DC: HCM Strategists, 2014) http://hcmstrategists.com/maximizingresources/images/Tuition_Paper.pdf (accessed June 1, 2016).

With legislative preempting, the State University of New York (SUNY) system used rational tuition to help keep tuition affordable and students' costs low. Through this method, SUNY agreed not to raise tuition more than \$300 for five years (2011 to 2016). Prior to the implementation of rational tuition, increases in tuition were unpredictable and costly, surging as high as 36 percent in a single academic year. Even more alarming, from 1992 to 2010, the increase ranged from 7 to 43 percent.³⁷

Develop tuition plans that balance affordability, quality, and completion

Effective tuition policy should take into account the overall funding environment, including institutional aid, state general fund support for institutions, and investments in state student financial aid programs. Tuition policy should seek to balance institutions' need to fund programs while maintaining affordability for low-income students. The state should require that increases in tuition, particularly those increases above changes in median family income, be offset by increases in institutional aid to low-income students.

Recent legislation in Colorado mandated that the Colorado Commission on Higher Education provide tuition policy recommendations particularly focused on balancing access and success and aligned to state appropriations and financial aid. The legislation had four initial recommendations:

- Establish tuition policy in concert with the state's strategic plan and goals for higher education.
- Align state institutional support, financial aid, and tuition policy to act in concert.
- Develop tuition policies that balance the responsibility of students, institutions, and the state.
- Create tuition rates that reflect the unique niche and role of each institution (one size does not fit all).

³⁷ Stacey Hengsterman, "A History of Rational Tuition" (paper presented at the Student Assembly Fall Conference, Rochester, NY, October 18, 2014), http://sunysa.org/wp-content/uploads/2015/04/2014-10-18-SH-Rational-Tuition-History.pdf (accessed June 1, 2016).

³⁸ Colorado Commission on Higher Education, "Tuition Policy Informational Paper: Overview of Tuition Policies" (Denver: Colorado Commission on Higher Education, 2015) https://highered.colorado.gov/CCHE/Meetings/2015/jun/jun15_ivd_attachA.pdf (accessed June 1, 2016).

State Financing of Innovative Delivery Models

As student demographics shift, the approach to higher education must be increasingly flexible to support the diversity of students and education delivery models. There are potentially great benefits to new, innovative models of academic delivery that expand the capacity of higher education systems in a costeffective and quality-enhancing manner to serve more students. Innovation models employ advances in teaching, learning, and technology to increase educational attainment, with the objective of using evidence-based designs to support affordable academic experiences. State financing can influence the adoption and expansion of innovative models by investing directly in their development or properly structuring OBF focused on quality outcomes regardless of educational methodology. This section focuses on the direct investments states have made to build innovative models. Where appropriate, state policymakers should facilitate the development of these models by incorporating them into the broader state higher education finance structure.

Partnerships

In 2012, Missouri launched the Innovation Campus initiative. With \$9 million in grants, the program established partnerships among high schools, community colleges, four-year institutions, and local businesses to train students for career opportunities in high-demand fields while shortening the time to degree or certificate and reducing student debt. High school students are allowed to take classes from Metropolitan Community College (MCC) and the University of Central Missouri (UCM) starting in their junior year to earn college credit. After high school graduation, students will have their associate degree from MCC. Students who finish their entire MCC curriculum are eligible to complete a bachelor's degree from UCM in only two years.

Completion Colleges

Completion Colleges are another form of innovation that provide a cost-effective avenue to high-quality degrees for students who have significant college credits or skills that translate into credit through prior learning assessment. Fashioned to serve adult students, several states have explored new academic delivery models. Through legislation, states such as New Jersey established state-supported, separately accredited four-year colleges. Such colleges create a lower-cost pathway for their students by recovering college credits that they otherwise would not use. Data indicate that Completion Colleges spend \$17,000 to \$43,000 for every degree awarded compared to the average of \$61,000 among public four-year institutions. One approximation shows that if Completion College services were more accessible, potentially 800,000 more students could earn degrees within 10 years, with total savings of \$36 billion dollars. Furthermore, Completion Colleges support states' overall credential-attainment agendas by ensuring student credit transfer, increasing college access, creating college affordability, and encouraging degree completion.

 ³⁹ University of Central Missouri, "The Missouri Innovation Campus," https://www.ucmo.edu/mic (accessed June 1, 2016).
 ⁴⁰Nate Johnson and Alli Bell, *Scaling Completion Colleges Services as a Model for Increasing Adult Degree Completion* (Indianapolis: Lumina Foundation, 2014), https://www.luminafoundation.org/files/resources/scaling-completion-college-services.pdf (accessed June 1, 2016).

Learn on Demand

Kentucky's Learn on Demand program also explores innovation, with a focus on nontraditional students such as adults and low-income students. Learn on Demand gives students the ability to build their degree by selecting only relevant courses or modules. Regular college course last about 15 weeks, while modules (that is, portions of courses) last from three to eight weeks. Most importantly, this program allows students to pay only for the courses or modules they need. Flexible in both timing and design, the online program allows students to start at any time and focus on acquiring their desired credential, including a degree or a professional certification. Learn on Demand is a model for an increasingly student-tailored postsecondary education system.

⁴¹ Kentucky Community and Technical College System, "Learn on Demand," http://learnondemand.kctcs.edu (accessed June 1, 2016).

Key Takeaways

State finance policies are critical policy levers in creating access and increasing educational attainment. Each state must develop, implement, and sustain strategies that align with its goals and values. The systematic application of state funding and policy can increase postsecondary degree and credential completion. In creating their policies, states should keep the following points in mind:

- Examine, independently and collectively, all state finance policy strategies, including direct student aid, funding allocation models, investments in delivery models, and tuition.
- Develop OBF policies that support institutions' missions, student progress, degree completion measures, and state priorities.
- Target state student financial aid more intentionally at students who need it most, particularly lowincome students whose decisions financial aid is likely to alter, and encourage degree completion.
- Use tuition policies to create predictable, transparent approaches aligned with student needs first.
- Encourage the use of innovative education delivery models to support lower costs, increased attainment, and fairer educational outcomes for all students.
- Focus, both strategically and intentionally, the use of capital funds to advance state credential completion needs.

Conclusion

Additional investment will be needed to meet the nation's attainment needs, but much more can be done to spend current dollars more effectively. The nation's political landscape is not simple, and it is unrealistic to expect that states will have different outcomes if they do not more intentionally align and target current dollars in ways that change the underlying business model of higher education.

Increasing attainment rates to meet the education needs of the 21st-century economy will require a clear focus on increasing opportunity and success in postsecondary education for racial and ethnic minorities and low-income students and reengaging adult students who may have some college experience but no degree. These demographic groups are not typically well served by the current structures of higher education; increasing their success will require altered delivery models and increased focus on student support. In far too many cases, state finance policy, either individually or collectively, is disjointed and misaligned to this pressing need, and the incentives it creates reinforce traditional practices and approaches to higher education, both in students served and in institutions' delivery models.

Given the restricted nature of state funding and investment in higher education, states must comprehensively examine their current approaches and ensure that they are targeted in ways that support increased attainment. This means focusing on outcomes, targeting support to students most in need, and fostering an environment of innovation that provides opportunities for students beyond the traditional models of higher education.