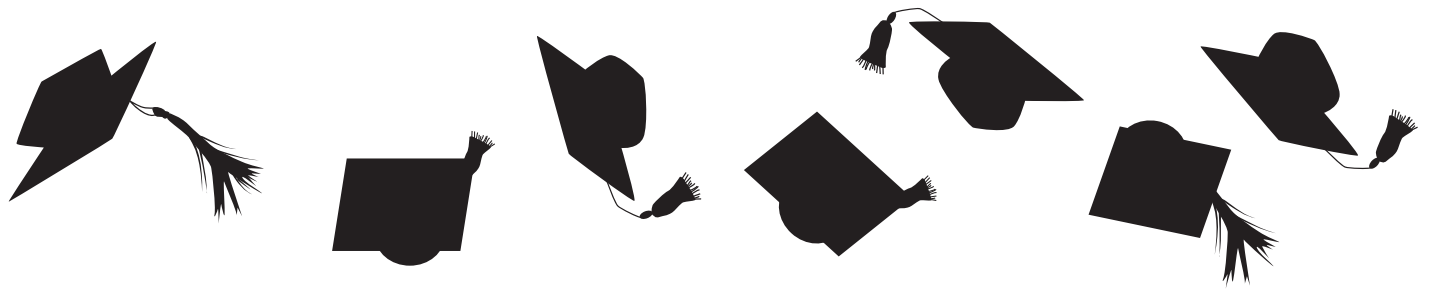
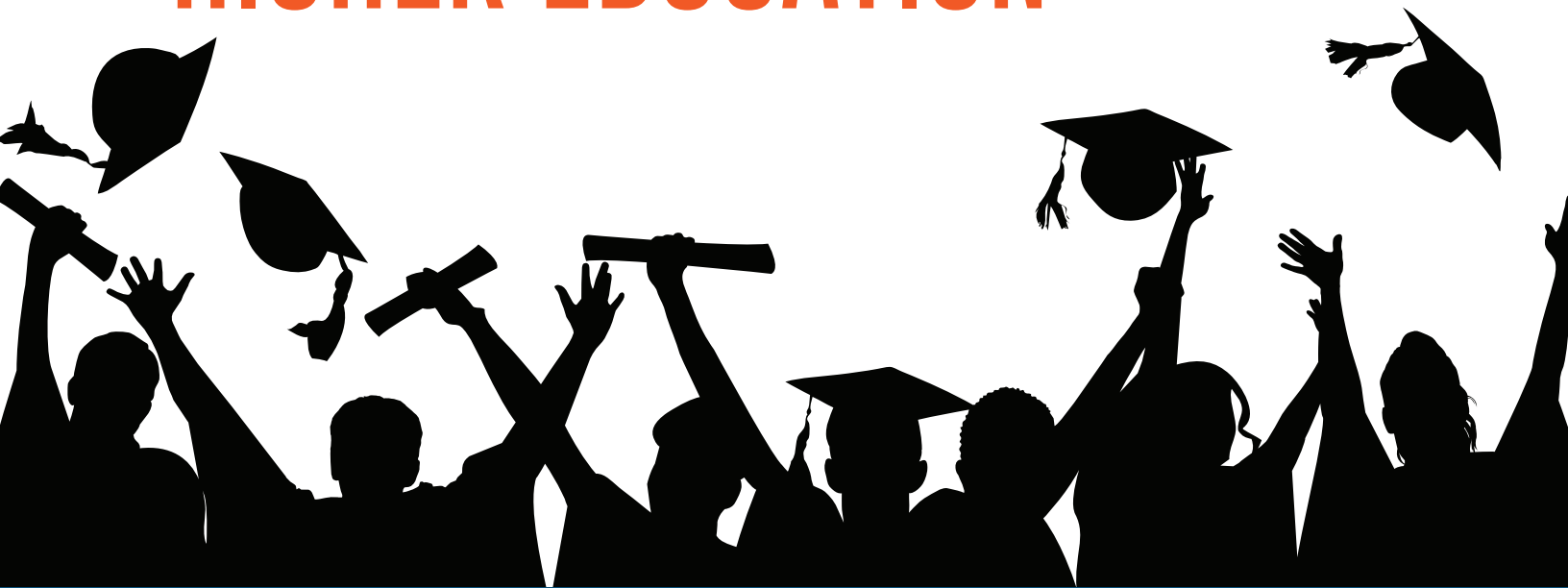


2015



A GUIDEBOOK ON STATE BUDGETING FOR HIGHER EDUCATION



THE NATIONAL ASSOCIATION OF STATE BUDGET OFFICERS, founded in 1945, is the instrument through which the states collectively advance state budget practices. The major functions of the organization consist of research, policy development, education, training, and technical assistance. These are achieved primarily through NASBO's publications, membership meetings, and training sessions. Association membership is composed of the heads of state finance departments, the states' chief budget officers, and their deputies. All other state budget office staff are associate members. NASBO is an independent professional and education association.

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Price: \$45.00

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TABLE OF CONTENTS

Acknowledgments..... ix

PART I: Navigating the Landscape of Higher Education Finance Policy..... 1

Chapter 1: How is Higher Education Funded?..... 2

Overview of Revenue Sources2
A Detailed Look at Revenue Streams5
 State Appropriations.....5
 Tuition as a Revenue Source6
 Student Financial Aid7
 Revenues for Capital Projects9
 Auxiliary Enterprises.....10
 Private Sources of Revenue.....11
Revenue Patterns and Trends11
 Boom and Bust Cycle.....11
 Decline in State Support.....11
 Cost Shifting11

Chapter 2: How Are Higher Education Dollars Spent?..... 16

Overview of Expenditures16
A Detailed Look at Instructional Costs.....16
 Salaries and Workload16
 Employee Benefits18
 Levels of Instruction18
 Discipline Mix19
Other Costs.....19
 Administrative or Non-Instructional Costs19
 Non-Personnel Operating Expenses.....19
 Capital Infrastructure.....19
 Deferred Maintenance.....19
 IT Infrastructure19
Trends Over Time19
 Institutional Costs are Rising.....19
 Primary Cost Drivers19
 Inflationary Pressures21
Theories on Rising Costs.....22
 Competition and Rising Prices.....22
 The Revenue Theory of Costs.....22
 Theory of Cost Disease22

| | |
|--|-----------|
| Chapter 3: State-Level Governance and Budgeting | 25 |
| Statewide Governance Structures | 25 |
| Coordinating Entities | 26 |
| State Budget Process..... | 26 |
| Incremental Budgeting..... | 27 |
| Line-Item Budgeting..... | 28 |
| Formula Budgeting | 28 |
| Program Budgeting..... | 29 |
| Performance Budgeting | 30 |

| | |
|--|-----------|
| Chapter 4: Institution-Level Governance and Budgeting | 34 |
| Tradition of Independence | 34 |
| The Multiple Roles of Governing Boards | 35 |
| Institutional Budgeting Methods | 36 |
| Incremental Budgeting..... | 36 |
| Formula Budgeting | 36 |
| Performance Funding | 36 |
| Zero-based Budgeting..... | 37 |
| “Responsibility Center” Management or Budgeting..... | 37 |
| University Accounting Systems & Financial Data | 38 |
| GASB Financial Standards and Annual Financial Statements..... | 38 |
| Limits of Fund Accounting | 39 |
| Financial Accountability and Monitoring | 40 |

**PART II: A Path Forward—Strategic State Budgeting
for Higher Education**..... **43**

| | |
|---|-----------|
| Chapter 5: Know Where You’re Going: Setting Goals for Higher Education | 44 |
| Types of Goals | 44 |
| Goal-Setting Considerations | 45 |

| | |
|---|-----------|
| Chapter 6: Where the Real Work Begins: Strategies for Aligning Expenditures to Goals | 48 |
| The Base | 49 |
| Analyzing Historical Trends..... | 50 |
| Understanding Cost Drivers..... | 50 |
| Using Funding Exclusions | 50 |
| Targeted Investments and Requirements..... | 50 |
| Funding Outcomes and Performance..... | 52 |
| Outcomes-Based Funding Formulas..... | 53 |
| Evaluating Outcomes-Based Funding Models | 54 |
| Strategic Capital Finance..... | 56 |
| Student Aid and Tuition Policy..... | 57 |
| Influencing Student Behavior | 57 |
| Influencing Institutional Behavior..... | 58 |
| Aid to Private Institutions..... | 60 |

Chapter 7: Beyond the State Budget Act: Identifying Policy Leverage Points 62

Paving Efficient Pathways through Higher Education62
Removing Remedial Education Roadblocks.....63
Improving Transfer64
Eliminating Barriers to Dual Enrollment64
Improving College and Career Readiness.....64
Institutional Policies that Cut Costs and Increase Efficiency.....65
 Online Education.....65
 Competency-Based Education.....66
 Data Analytics66
 Administrative Efficiency66

Appendix: Resources for State Budget Offices 69

General Higher Education Finance69
State-Level Budgeting and Finance70
Student Tuition, Fees and Financial Aid.....71
Inflationary Indices72
Understanding, Analyzing and Addressing University Cost Models.....72
Goal-Setting and Performance Benchmarking74
Outcomes-Based Funding.....74
Identifying and Using State Policy Levers.....75

ACKNOWLEDGMENTS

This resource, prepared by the National Association of State Budget Officers under the direction of Scott D. Pattison, NASBO Executive Director, and funded by the Bill & Melinda Gates Foundation, is the culmination of extensive research, writing, and collaboration between NASBO staff, consultants and subject matter experts, and state budget officers and analysts. Amy Supinger and Camille Esch, both Policy Consultants with extensive subject matter expertise in state education policy, and Kathryn Vesey White, Senior Policy Analyst with NASBO, were instrumental in drafting, organizing and preparing this guidebook. Jane Wellman, Dennis Jones, Robert Powell and Rob Nelson also made significant contributions and provided valuable input during the preparation of this resource, as did NASBO Senior Staff Associate, Stacey Mazer, and former NASBO staff member, Michael Streepey. Lauren Cummings, Brukie Gashaw, Brian Sigriz, and Leah Wavrunek also provided assistance in reviewing this document.

NASBO would like to thank the Gates Foundation for providing the resources necessary to carry out this project, and Travis Reindl for the support and guidance he provided. NASBO would also like to thank the state budget officers and analysts who served as members of the Higher Education Finance Advisory Board. These members (both current and former), listed below, participated in a roundtable discussion and a series of conference calls to help inform and guide this project to ensure that it met the needs of state budget offices. Many of these members also contributed short case study examples about their states for use in the guidebook.

| | | | |
|------------------------------------|--|---|--------------------------------------|
| Molly Bench , Massachusetts | Tammy Dolan , North Dakota | Elizabeth Lewis , Delaware | Bob Murphy , Michigan |
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| Philip Dean , Utah | Steven Kohler , South Dakota | Marianne Mills , Missouri | |
| Kyle Deen , Arkansas | | | |

Additionally, NASBO was able to convene the following individuals from 32 states and the District of Columbia—including many of the Advisory Board Members listed above—for a special Higher Education Finance Workshop in Denver, Colorado on June 3–4, 2015. The feedback, contributions and presentations shared at that meeting also helped to inform this guidebook. Representatives from the Education Commission of the States, HCM Strategists, National Association of College and University Business Officers, National Center for Higher Education Management Systems, National Conference of State Legislatures, National Governors Association, State Higher Education Executive Officers, and the Colorado Department of Higher Education also made valuable contributions to this workshop.

| | | | |
|---|---|-------------------------------------|---|
| Laura Anderson , Wyoming | Kayla Effertz , North Dakota | Laneita Littleton , Alabama | Nathan Schwanz , Wisconsin |
| Jim Bennett , Ohio | David Hahn , Idaho | William Willoughby , Georgia | Alexis Senger , Colorado |
| Cherie Berthon , Washington | Kevin Highfill , Missouri | Kathi Marshall , Kentucky | Greg Stack , Rhode Island |
| Adam Brueggemann , North Carolina | Christine Hultin-Brus , Montana | Michael Maul , Virginia | Lia Tepker , Oklahoma |
| Jordan Butler , Maryland | Kerry Kelley , Connecticut | William McGee , Oregon | Melinda Terry , Arkansas |
| Allan Cooper , Mississippi | John Kerr , Tennessee | Edward Moore , New York | Lori Vasquez , District of Columbia |
| Amelia Cruver , Minnesota | Steven Kohler , South Dakota | Bob Murphy , Michigan | Jacob Wright , Utah |
| John Doyle , West Virginia | Elizabeth Lewis , Delaware | Alecia Nafziger , Indiana | Melanie Young , Nevada |
| | | Latishia Ortiz , New Mexico | |

This publication is based on research funded in part by the Bill & Melinda Gates Foundation. The findings and conclusions contained within are those of the authors and do not necessarily reflect positions or policies of the Bill & Melinda Gates Foundation.

HOW TO USE THIS GUIDE

In recent years the state political landscape has changed as resources have diminished and expectations for performance have increased. While challenging, higher education budget analysts may find this an opportune time to develop “soft power” or influence within their roles. This guide aims to arm state budget officers and higher education budget analysts with the resources, tools and information necessary to use both their budget development and appropriation “power” along with this “soft power” to have a constructive dialogue with postsecondary institutions, and to better align resource allocation decisions with higher education outcomes.

Part I of this document seeks to provide a primer on the complicated world of state higher education finance, while Part II acts as a guidebook for budget analysts and policymakers wishing to better leverage state budgeting practices to meet larger state policy goals.

PART I

NAVIGATING THE LANDSCAPE OF HIGHER EDUCATION FINANCE POLICY

NOTE TO THE BUDGET ANALYST

The landscape of higher education finance is complex. It is shaped by forces beyond the state budget. National and regional labor markets, state and institutional tuition and student fee policies, federal and state financial aid programs, philanthropic activities, federal research grants, athletic programs, and auxiliary services enterprises like hospitals and bookstores all play a role in college and university finance. Budgetary decision-making in this environment can be difficult, especially since the budget office has limited time and resources to analyze the entirety of information depicting higher education revenues and expenditures. Many of the decisions involving higher education finance are outside the control of the budget office, governor and state legislature. Despite these limitations, the technical underpinnings of the state budget for higher education should be considered with both an awareness of the larger financial and policy context and an eye towards leveraging state appropriations to accomplish state and institutional goals.

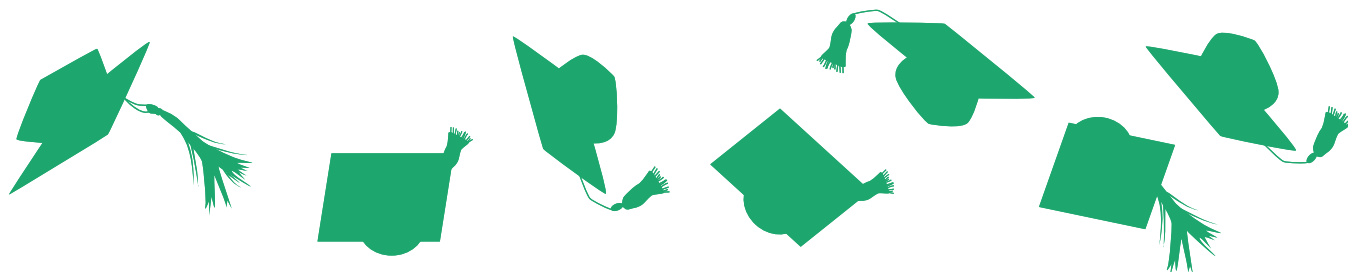
By understanding the composition of state funds for higher education, governors and lawmakers can begin to coalesce around a coherent strategy that is relatively consistent, widely distributed and understood by state government and higher education. A strategy built around the totality of state spending for higher education provides an anchoring point for meeting state needs and can serve as the basis for budgetary negotiations while limiting budget analyst discretion and facilitating good judgment.

Budget analysts have a variety of budgeting methodologies and tools at their disposal to effectuate gubernatorial and

legislative financing strategies. Further, demystifying how higher education institutions are governed, how they construct their internal institutional budgets, and what drives institutional costs helps the analyst identify trends and opportunities as well as limitations of available information, all to craft sound policy solutions. Student fee and financial aid policies, which are often overlooked by state level analysts budgeting for institutions, play a dramatic role in the behavior and financial stability of colleges and universities.

As a state higher education budget analyst, it is imperative to recognize that college and university budgets cannot be addressed in the same manner as other state agency budgets. The differences are extensive, ranging from operational issues, such as accounting and budget systems, to institutional cultural and political dynamics. An analyst who has moved from a more traditional program area (such as corrections or transportation) to a higher education budget may find this transition more difficult to adapt to than someone who begins his or her career with the higher education assignment. The more seasoned analyst might be frustrated by how the power and influence of the university system manifests itself in the budget development and/or implementation process. Consequently, it is vital that the analyst recognize both the limitations and the opportunities of the higher education budget environment and actively seek out opportunities to leverage state and institutional policies, and collaborate and communicate with not only the higher education systems but with institutions. All of these practices will help the analyst positively influence the higher education budget development, execution and policy processes.

CHAPTER 1



HOW IS HIGHER EDUCATION FUNDED?

This chapter will discuss:

- ✓ Major sources of revenue for higher education.
- ✓ How the amount and mix of revenues vary by type of higher education institution.
- ✓ How different revenue sources function.
- ✓ Higher education revenue patterns and trends, including:
 - Chronic volatility,
 - Declining state appropriations, and
 - Increasing institutional reliance on tuition revenue.

OVERVIEW OF REVENUE SOURCES

To assist governors and lawmakers in the budget process, it is important for budget analysts to know the amounts and fund sources supporting higher education. This knowledge can facilitate a dialogue with higher education officials and help leverage the bargaining power of the state.

Figure 1 shows the various public funding sources for higher education, including state and federal government support and student tuition and fees. In this figure, the thickness of the arrows is scaled to fiscal 2012 funding levels, based on an analysis by the U.S. Government Ac-

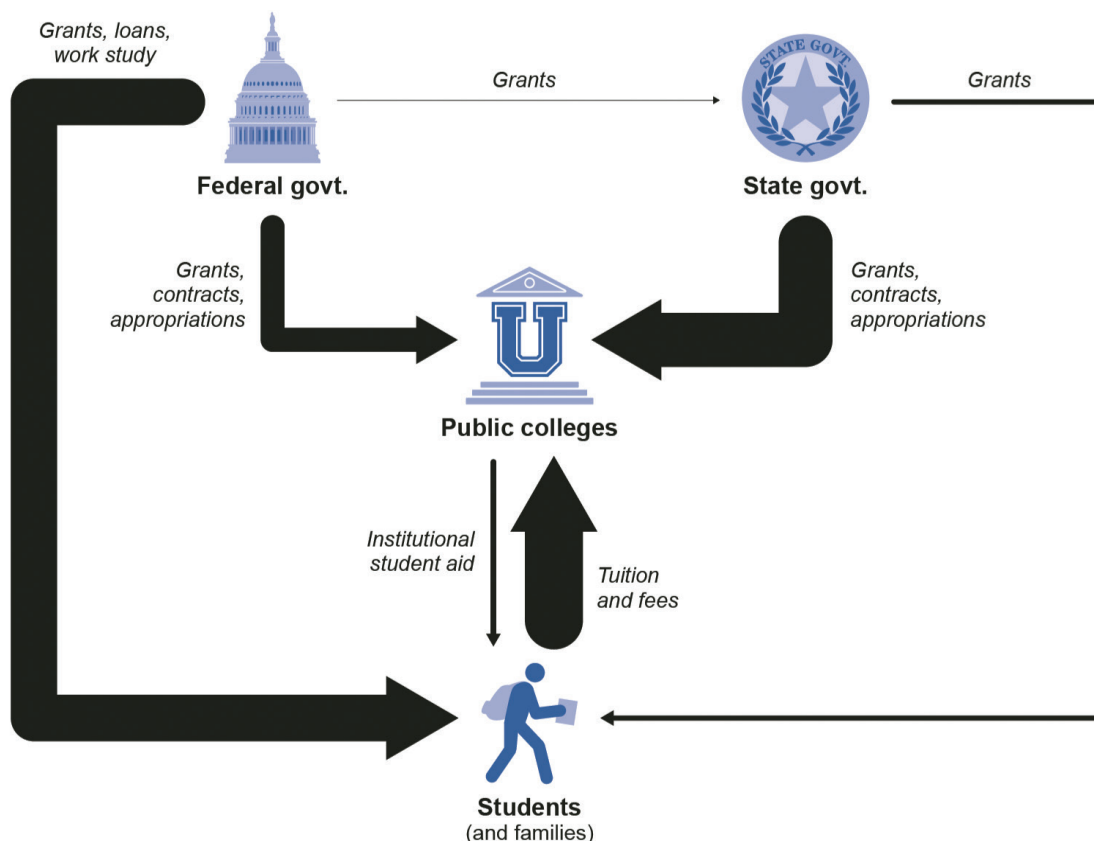
countability Office (GAO) of U.S. Department of Education data. As depicted, the two largest public fund sources of revenue for public higher education institutions are: (1) State dollars—via appropriations, direct grants and contracts and (2) Federal funds—for student financial aid in the form of grants, loans, and work study programs.

Federal funds also come to institutions via grants, contracts, and appropriations, but these are all lesser sources of revenue, even when combined. States also provide revenue to institutions via state-based student aid programs. While the scale of these programs varies significantly by state, on average they represent just a small portion of institutional revenue.

With so many revenue sources in play, the amount of funding flowing to individual institutions varies tremendously. National averages provide a general sense of how total operating revenues vary by institution type.

At public research universities, operating revenue is an average of \$38,758 per full-time enrolled (FTE) student, compared to \$18,466 at public master's institutions, \$19,558 at public bachelor's institutions, and \$12,482 at community colleges. (See Figure 2.)

FIGURE 1 Revenue Sources for Higher Education



Source: U.S. Government Accountability Office, *Higher Education: State Funding Trends and Policies on Affordability* (December 2014), available at <http://gao.gov/products/GAO-15-151>.

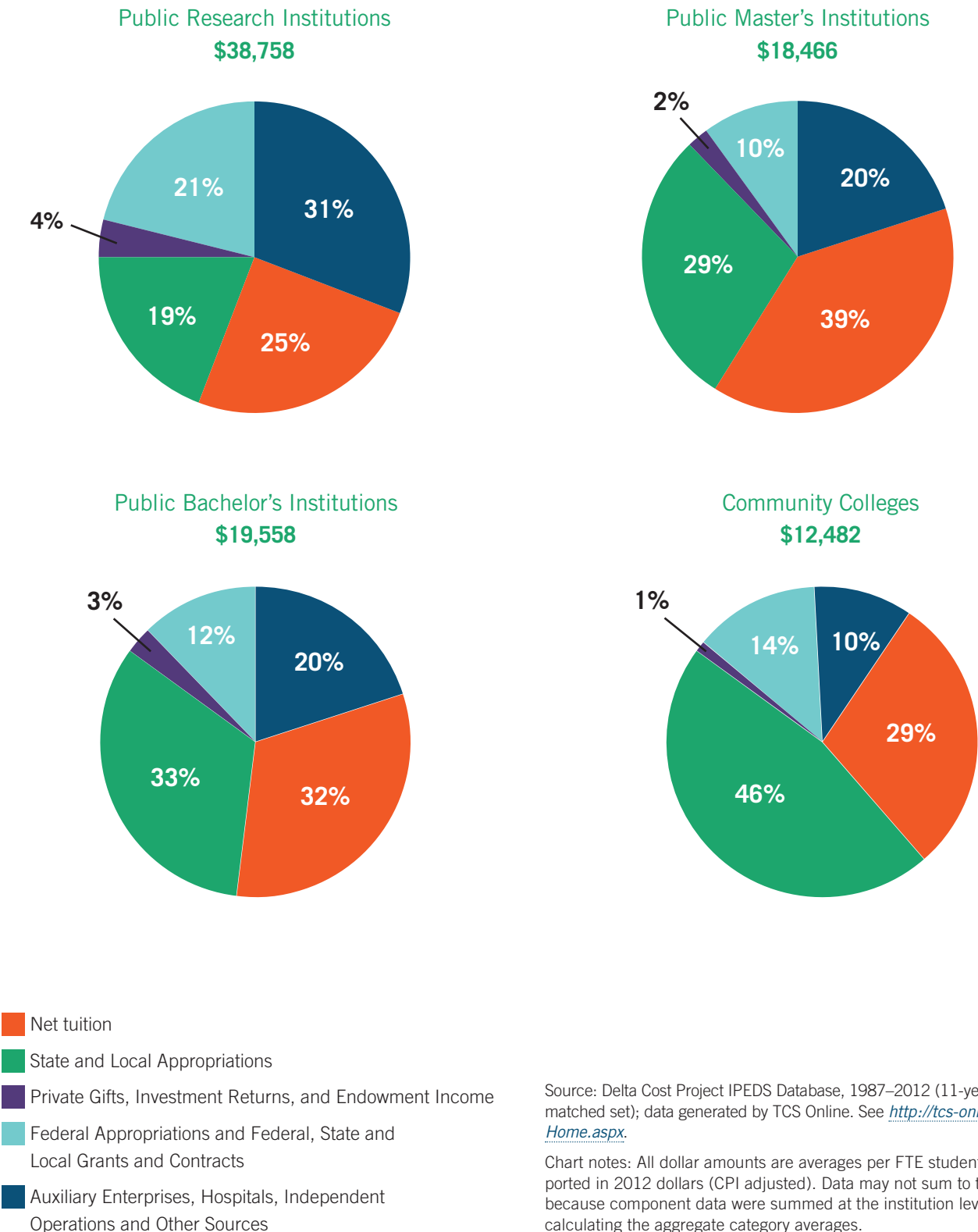
Chart notes: “State funding for colleges includes both appropriations and grants and contracts for research. Federal and state aid arrows represent aid to undergraduates at public colleges. Federal grants to states include only higher education programs related to college affordability. Land-grant appropriations and federally funded research projects are included as part of the funding from the federal government to public colleges. Benefits from tax credits and deductions for higher education are not included.”

The mix of revenues to support operations also varies substantially by institutional type. Community colleges are much more reliant on state and local appropriations (which represent 46 percent of their total operating revenue) than are research institutions (19 percent) or public master’s degree institutions (29 percent). Public research universities have much more diversified revenues, with auxiliary enterprises and grants and contracts together totaling more than half of operating revenues. In contrast, public master’s institutions derive only 30 percent of operating revenue from these combined sources,

public bachelor’s colleges receive 32 percent from those sources, and community colleges receive 24 percent.¹

¹ These institutional groupings [public research, public master’s, public bachelor’s and community college (otherwise known as “public associate’s”)] are based on the 2010 Carnegie Classification. For the most recent year of data available, at public research institutions, at least 20 doctorates were awarded (excluding professional practice degrees); master’s institutions awarded at least 50 master’s degrees (but fewer than 20 doctorates); at public bachelor’s institutions, bachelor’s degrees accounted for more than half of all undergraduate degrees awarded (and less than 50 master’s degrees were awarded); and community colleges awarded primarily associate’s degrees.

FIGURE 2 Operating Revenues at Different Types of Public Institutions



Source: Delta Cost Project IPEDS Database, 1987–2012 (11-year matched set); data generated by TCS Online. See <http://tcs-online.org/Home.aspx>.

Chart notes: All dollar amounts are averages per FTE student, reported in 2012 dollars (CPI adjusted). Data may not sum to the totals because component data were summed at the institution level prior to calculating the aggregate category averages.

A DETAILED LOOK AT REVENUE STREAMS

Budget analysts may find it useful to understand each of the major sources of revenue to institutions in their state, including the restrictions associated with each revenue source. In addition to the state's direct appropriations for higher education operating expenditures, analysts can develop a thorough understanding of tuition as a revenue source, including how financial aid subsidizes tuition. It is also important to understand capital funding for higher education, which is typically handled separately from operating revenues. Finally, a greater understanding of auxiliary enterprises, federal funding, and private revenue sources will provide a better understanding of the fiscal logic shaping institutional behavior.

State Appropriations

State funding for higher education comes primarily in three different forms: (1) general fund budget allocations for institutional operating expenses, (2) capital budget allocations for university infrastructure, and (3) financial aid allocations for students, generally in the form of need or merit-based grant programs.² (Capital and student aid allocations are discussed in greater detail below.) Oftentimes, higher education governing bodies, institutions and state lawmakers focus on state spending for general operating

² States may provide higher education funding support through additional programs, such as economic development grants.

HIGHLIGHTED RESOURCE

Integrated Postsecondary Education Data System (IPEDS)

Institutions report their revenues to the federal government using the uniform financial reporting standards of IPEDS. These reporting requirements are embedded in Title IV of the Higher Education Act, the authorizing legislation for federal financial aid; reporting is mandatory for all higher education institutions participating in federal financial aid programs.

IPEDS uses standardized categories to provide for comparisons across higher education institutions. These categories are useful descriptions of the variety of revenue sources available to institutions. You can find full revenue information for the institutions in your state at <http://nces.ed.gov/ipeds/datacenter/>.

- **Tuition Revenue:** Total revenue from tuition and fees, including student financial aid that is applied to tuition and fees.
- **State and Local Appropriations:** Revenues received through state or local legislative organizations except grants, contracts and capital appropriations.
- **Private Gifts:** Revenues received from private donors or from private contracts for specific goods or services provided by the institution and directly related to instruction, research, public service, or other institutional purposes.
- **Investment Returns:** Investment revenues from interest income, dividend income, rental income or royalty income.
- **Endowment Income:** Income from endowments and similar funds and income from trusts held by others.
- **State and Local Grants and Contracts:** Revenues from state or local government agencies for training programs or other specified activities that are either directly received or reimbursable under a contract or grant.
- **Federal Appropriations, Grants and Contracts:** The total amount of revenue coming from federal appropriations, grants, and contracts.
- **Auxiliary Enterprises:** Revenues generated or collected by auxiliary enterprises that furnish a service to students, faculty, or staff, and that charge a fee related to the cost of service. These are generally self-supporting activities such as residence halls, food services, student health services, and intercollegiate athletics.
- **Hospitals, Independent Operations, and Other Sources:** Revenue generated by hospitals operated by universities. Revenues associated with the medical school are not included. "Independent operations" includes revenues associated with operations independent of or unrelated to instruction, research or public services and generally include only revenues from major federally funded research and development centers. This category also includes miscellaneous revenues not covered elsewhere.

purposes as the only source of public funds for higher education, without accounting for capital expenditures or state financial aid for students. For budget planners, it is important to account for all three forms of public spending, and to distinguish the types and amounts of public resources flowing to higher education institutions.

Revenues from the state general fund are generally the most flexible funds available to institutions to support core teaching and research functions, making them a critical point of leverage for improving institutional performance in priority areas. While state funding has declined as a percentage of overall higher education funding, state revenues remain critical to colleges and universities, in large part because state dollars are flexible in ways that most other revenues are not.

There are some sources of state funding that may carry restrictions—for example, lottery funds are not derived from taxes or students, but may be reserved only for specific purposes such as scholarships. According to SHEEO, “nontax appropriations, mostly from state lotteries, continued to grow, reaching \$3 billion in 2014” compared to \$2.3 billion in 2009.³³

Tuition as a Revenue Source

Tuition revenues are handled differently from state to state. In some, public institutional revenues from tuition and fees are subject to appropriation by the state legislature. Seventeen states

appropriate tuition and fees to public universities, with varying degrees of control over how the funds are spent by institutions.⁴ The vast majority of states follow a model whereby individual higher education institutions are allowed to control and retain student-derived tuition and fee revenues. Some states use hybrid models in which some tuition and fees are retained by institutions while other student-derived revenues are appropriated.⁵ As discussed in a report prepared by SRI International for the Nevada Legislature, there are advantages and disadvantages of each model, “and the balance of benefits will depend upon the broader set of policies and goals embodied in any particular system of public support for higher education.”⁶

One consideration related to the control of tuition dollars concerns the interest earned on tuition and fee revenues before they are spent. In some states, the interest earned on these tuition revenue reserves is swept into the general fund. However, in other states, institutions are allowed to retain the interest earned on revenues from tuition and fees. In some cases, this issue can be viewed as a “bargaining chip” between state officials and higher education leaders when engaged in debate about higher education finance and questions of authority and accountability. This can also be said of other policies regarding institutions’ level of control over their finances, such as

³ State Higher Education Executive Officers, *State Higher Education Finance FY 2014* (2015), p. 15.

⁴ NASBO, *Budget Processes in the States* (2015), p. 71.

⁵ SRI International, *States’ Methods of Funding Higher Education: Report for the Nevada Legislature’s Committee to Study the Funding of Higher Education* (August 2012).

⁶ *Ibid.*, p. 22.

State Example



In 2011, **Oregon** enacted legislation that overhauled the state’s university system, giving the system more authority to manage its finances and operations, along with holding institutions more accountable by establishing a new performance compact whereby future state funding for the university system would be tied to outcomes. One provision in this broad legislation credited interest earned on tuition to the Oregon University System (OUS), and dedicated those funds to need-based financial aid (before the law was passed, the interest went to the state). The law also prevented the state from accessing excess tuition monies in university reserve funds in an emergency.¹

More recently, however, state lawmakers abolished OUS and the State Board of Higher Education, making each institution a “public university” with its own governing board. Each institution has tuition-setting authority, with the caveat that “enrollment fees” charged to resident undergraduates may not be increased more than five percent without prior approval from the Higher Education Coordinating Commission (HECC) or the legislature. Additionally, performance compacts (also known as “achievement compacts”) have been repealed for all educational institutions. HECC has instead adopted a new funding formula for universities, to be implemented in 2016–17, which phases in an outcomes-based component.

¹ See Oregon State Senate Bill 242 (2011 session).

whether they retain tuition fund balances and whether they are permitted to carry over unspent appropriations.

In public institutions, overall revenues from tuition and fees generally do not cover the full cost of instruction; the difference between student tuition and fees and costs is made up from institutional subsidies paid from state and local appropriations. It is worth noting, however, that because of standardized tuition structures, *some* students effectively pay more than the cost of their education, thus subsidizing the portion of educational costs borne by their fellow classmates taking courses and degree programs that are more costly and resource-intensive than others. For example, lower division liberal arts students enrolled in large research institutions may help to subsidize upper division students studying engineering. For more discussion on how costs vary by discipline and level of instruction, see Chapter 2.

Student Financial Aid

As shown above, tuition is a significant source of revenue to all types of institutions. It is important to remember, however, that much of tuition revenue is derived from government

sources via student financial aid programs. As depicted in Figure 3, the federal government is by far the largest source of student aid, with federal loans representing 34 percent of total aid dollars and federal grants representing 26 percent.

According to the College Board, for the 2013–2014 school year, 57 percent of total student aid was awarded in the form of grants from federal, state, institutional, and private fund sources. Figure 3 displays the composition of total student aid by fund source.

The bulk of federal funds for financial aid are authorized under Title IV of the *Higher Education Act*, first enacted in 1965 and last reauthorized in 2008. The largest Title IV programs include the Direct Loan Program—the umbrella for Subsidized and Unsubsidized Stafford Loans, PLUS Loans, and Consolidation Loans—and the Federal Pell Grant program which provides need-based grants that do not need to be repaid.

Pell Grants are a good indicator of the financial need of an institution's student population and are distributed primarily to community colleges (which receive 36 percent of the revenue), followed by public four year institutions (29 percent),

Tuition Setting Models

As will be discussed in Chapter 4, many higher education governing boards retain tuition and fee setting authority. States with less direct say in setting tuition rates and fees may use other funding mechanisms to incentivize institutions and governing boards to restrict tuition increases. A number of these strategies are highlighted in NASBO's spring 2013 report on *Improving Postsecondary Education Through the Budget Process*.¹

In general, there are three tuition-setting philosophies used by states and public higher education institutions, all of which link the level of tuition with the availability and use of student financial aid. These three models are (1) high tuition, high aid; (2) moderate tuition, moderate aid; and (3) low tuition, low aid.

Proponents of the “high tuition, high aid” approach tend to see this model as better able to enhance postsecondary access to low-income students, allowing for more targeted financial support for those students who need it most. Critics contend that the complicated web of federal, state, institutional, and private sources of student financial assistance has led to an unnecessarily complex pricing system whereby the gap between published sticker prices at institutions and actual net tuition prices has widened. The “high tuition, high aid” model, practiced by both public and private institutions but more common within the private sector, can be confusing for students and families, and is often accompanied by a lack of transparency.²

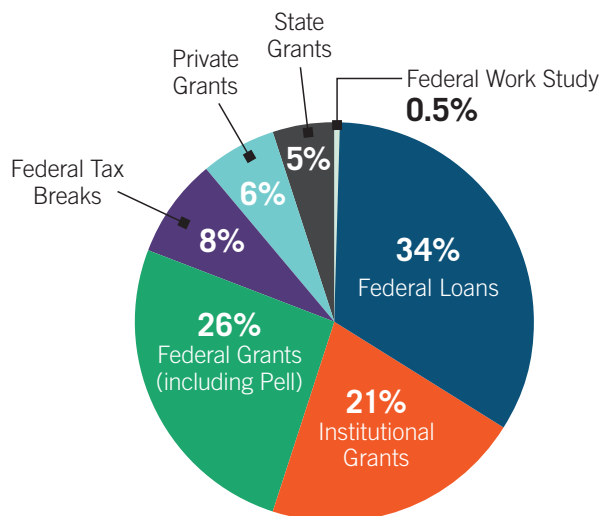
Advocates of the “low tuition, low aid” model say that approach promotes broad participation in public higher education and avoids the threat of “sticker shock” that could discourage some students from pursuing a college education. States that take a moderate approach tend to focus on finding the right balance to be competitive with other states.³

¹ NASBO, *Improving Postsecondary Education Through the Budget Process* (2013).

² For more on tuition discounting, see Delta Cost Project, *Trends in College Spending*.

³ Vincent Badolato, National Conference of State Legislatures and the Western Interstate Commission for Higher Education, “Getting What You Pay For: Tuition Policy and Practice” (November 2008), available at <http://www.wiche.edu/info/gwyppf/badolato.pdf>.

FIGURE 3 Student Aid by Fund Source, 2013–2014



Source: College Board, *Trends in Student Aid 2014* (2015).

for-profit colleges (22 percent) and private nonprofit colleges (13 percent).⁷

As tuition levels have increased in recent decades, the number of students applying for financial aid and the amount of aid awarded have both risen dramatically. From 2002–2003 to 2012–2013, the total amount of federal financial aid awarded to students rose from \$82.7 billion to \$169.7 billion, reflecting a 105 percent increase over the decade.⁸

There are numerous questions around how federal financial aid policies affect institutional and student behaviors that do not align with desired outcomes such as timely degree completion and drive up costs. Some think tanks have pointed out how federal student aid programs, such as Pell Grants, are often ineffective at sufficiently lowering the cost of college for low-income students by not providing enough incentive for institutions to provide further need-based aid.⁹ At the same

⁷ New America Foundation, *Undermining Pell Volume II: How Colleges' Pursuit of Prestige and Revenue is Hurting Low Income Students* (September 2014), p. 8, available at https://www.newamerica.org/downloads/UnderminingPellVolume2_SBurd_20140917.pdf.

⁸ National Association of Student Financial Aid Administrators (NASFAA), *National Student Aid Profile: Overview of 2014 Federal Programs* (July 15, 2014), p. 4, available at <http://www.nasfaa.org/national-profile/>.

⁹ For more discussion, see New America Foundation, *Undermining Pell Volume II: How Colleges' Pursuit of Prestige and Revenue is Hurting Low Income Students* (September 2014).

time, advocacy groups and policymakers often point out the vital importance of financial aid, particularly need-based aid, to promote equal opportunity and increase access.

States are a source of financial aid to students as well. In the 2013–2014 academic year, states awarded roughly \$11.7 billion in total student financial aid, including \$9.9 billion in grant aid and \$1.7 billion in non-grant aid. State financial aid is most commonly provided through need-based grant programs, which accounted for 75 percent of state grant money for undergraduate students in the academic year 2013–2014.¹⁰ State-based financial aid programs tend to receive relatively little attention in the higher education finance field. The Western Interstate Commission for Higher Education (WICHE) attributes this, at least in part, to the small amount of funding that comes from such programs relative to state appropriations, federal financial aid programs, and tuition and fees.¹¹ Still, state-based financial aid programs can be an important source of leverage to encourage student and institutional behaviors that align with a state's goals for higher education. See Chapter 6 in Part II for further discussion.

HIGHLIGHTED RESOURCE

In 2012, the Bill & Melinda Gates Foundation launched its *Reimagining Aid Design and Delivery* (RADD) work, which brought together 25 organizations to conduct independent research and analysis on the challenges created by the current financial aid system. Organizations examined postsecondary student financial aid systems and recommended policy solutions to improve access, affordability and student outcomes, particularly for low- and middle-income students. The reports produced under the first phase of the RADD project can be found here:

<http://www.sheeo.org/resources/publications/reimagining-aid-design-and-delivery-project-reports>

States can restructure their state financial aid and tuition policies to ensure that they are taking full advantage of federal financial aid opportunities. For example, some community college tuition levels may be set well below the maximum federal

¹⁰ National Association of State Student Grant and Aid Programs (NASSGAP), *45th Annual Survey Report on State-Sponsored Student Financial Aid* (2015), available at <http://www.nassgap.org>.

¹¹ Western Interstate Commission for Higher Education (WICHE). March 2014. *States in the Driver's Seat: Leveraging State Aid to Align Policies and Promote Access, Success, and Affordability*.

Pell grant award (\$5,775 for the 2015–16 award year). The state *may* be able to raise tuition rates in this case without students paying more in net tuition, depending on the composition of the student body and their financial aid eligibility. As another example, depending on how state financial aid policies are crafted, students and their families may or may not be able to take advantage of certain federal tax breaks.¹² States can also structure their own need-based financial aid programs so that they do not kick in until after a student’s federal financial aid eligibility is determined and accounted for. WICHE’s “Shared Responsibility Model,” discussed in Chapter 6, presents a framework for doing this.

Revenues for Capital Projects

The physical infrastructure of higher education campuses, including four-year colleges and universities and two-year community colleges, has greatly expanded over the past several decades in response to growing enrollment levels, market competition for newer and more diverse facilities, and the comingling of missions, such as teaching, research and student enrichment. According to the Congressional Research Service, some critics of post-secondary educational models posit that the building of new facilities has been unnecessary. “Amenities such as manicured lawns, state of the art dining halls, and residential and exercise facilities; intercollegiate athletic programs and arenas; and student enrichment activities collectively comprise a bundle of offerings, many of which may not be essential to the education experience, and the bundling of these products may be helping to drive up prices.”¹³

While higher education institutions finance their infrastructure through an array of sources, states provide substantial financial support to help build and maintain the infrastructure needed to educate and house students, conduct research and keep campus facilities functional. Higher education institutions are eligible to make funding requests for capital expenditures in 47 states.¹⁴ State spending for higher education capital outlay makes up a significant portion of total state capital expenditures. In fiscal 2015, for example, state capital spending for higher education amounted to \$12.0 billion, or 12 percent of total capital expenditures for that year.¹⁵

Capital spending decisions for higher education as well as other state agencies are generally budgeted and considered separately from operating expenses through a process known as the capital budget process. Because state spending for higher education capital and operating purposes tend to be siloed, higher education officials and state lawmakers often do not consider the aggregate of both forms of public spending. NASBO’s 2013 report on higher education finance pointed out: “whether state appropriations comprise 10 percent or 90 percent of an institution’s general operating budget, the question of the public identity of higher education should not be an issue. If state investments in higher education over the last hundred or two hundred years are taken into account, along with a proper accounting of the institutional assets including lands and buildings, the balance sheet quickly tips back toward the state side.”¹⁶

States finance higher education capital projects primarily by using a “pay-as-you-go” method paid for by general funds, but some states may also rely on general obligation bonds (backed by future general funds or dedicated taxes), lottery funds, and dedicated portions of specific taxes like the cigarette or coal severance tax.¹⁷

State Example



West Virginia periodically issues bonds for capital projects on the campuses of state colleges and universities. In the recent past, these bonds have been backed by dedicated revenues, usually proceeds from the state Lottery Fund. The state will only fund capital projects of an “academic” nature. Any “auxiliary” projects (stadiums, arenas, parking garages, cafeterias, dormitories, etc.) must be paid for by the institution on its own. Institutions are permitted to bond capital projects on their own if they are financially capable. They don’t do this often, but when they do, they require permission from their oversight board. When an institution bonds on its own, these bonds are sometimes backed by the state. Even when this is not the case, the bonds are a moral obligation of the state.

Historically, as illustrated in Figure 4, higher education spending from bonds has accounted for a significant share of total

¹² For more discussion, see David A. Longanecker, *Getting What You Pay For: The States and Student Financial Aid: A Mixed Bag with Mixed Results* (November 2008), available at http://www.wiche.edu/info/gwypf/dal_finaid.pdf.

¹³ The Congressional Research Service (CRS), *Overview of the Relationship between Federal Student Aid and Increases in College Prices* (2014), p. 20.

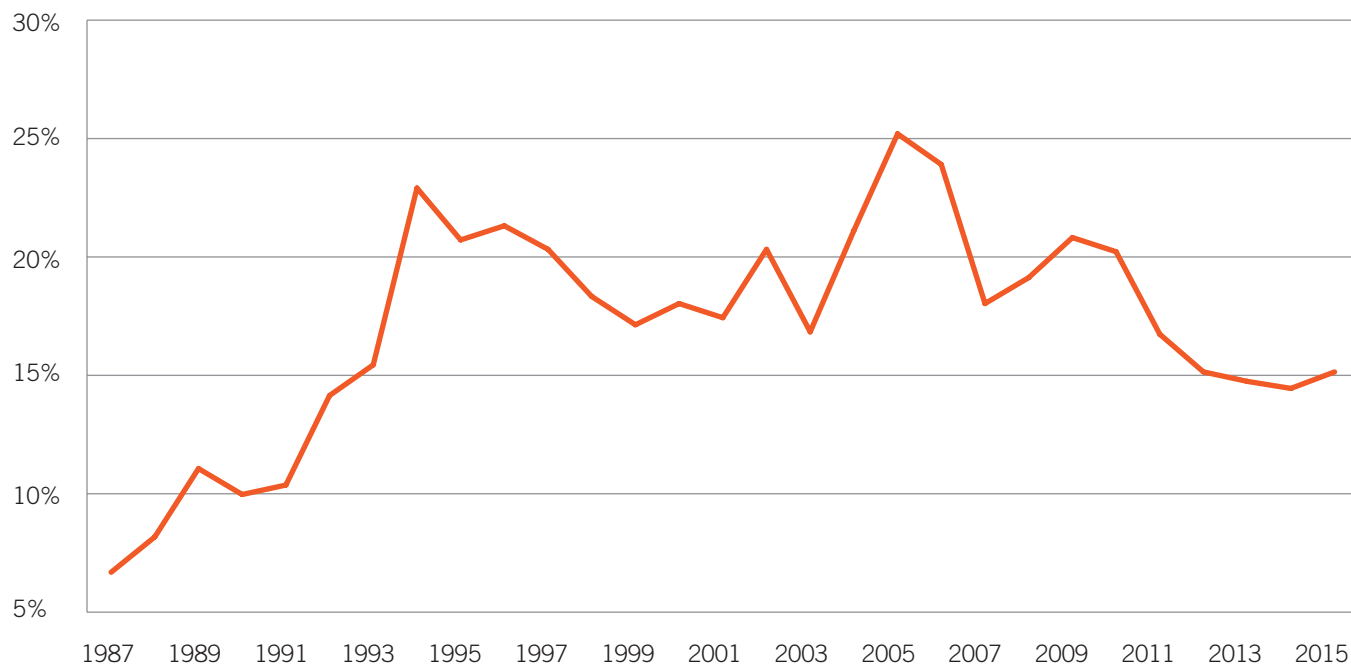
¹⁴ NASBO, *Capital Budgeting in the States* (2014), Table 17.

¹⁵ NASBO, *State Expenditure Report* (2015), Tables 47 and 48.

¹⁶ NASBO, *Improving Postsecondary Education Through the Budget Process: Challenges and Opportunities* (2013).

¹⁷ NASBO, *Capital Budgeting in the States* (2014), Table 6 and Table 6 notes.

FIGURE 4 Higher Education Spending from Bonds as a Percentage of Total State Spending from Bonds



Source: NASBO State Expenditure Report 1987–2015.

state spending from bonds. The types of revenue backing interest and principle payments on these bonds vary to include tuition revenues, state general funds, dedicated taxes and student fees. Despite the mixture of public and private funds backing bond payments, states are generally considered the ultimate backstop if revenues fail to meet obligations.

States are not the only source of capital funding for higher education. Institutions may also turn to local voters, private donors, or financing mechanisms such as borrowing against future revenue.

Auxiliary Enterprises

Colleges and universities organize revenue-producing activities for ancillary services into a separate budget category, known as ‘auxiliary enterprises.’ Examples of auxiliary enterprises are dormitories, food services and, sometimes, intercollegiate athletics. These enterprises supplement the primary mission of the institution and as such are supported through direct user fees or charges that cover the full costs of the activities.

In public institutions, revenues from auxiliary activities are typically not available to support the core instructional or re-

search activities; however, a number of institutions end up subsidizing losses or costs in auxiliary activities with non-auxiliary fund (this happens often in intercollegiate athletics, for instance). In fact in many research universities, revenues from hospitals and clinics exceed those for either sponsored research or even the instructional program. Additionally, revenues from auxiliaries may be a supplementary fund source for some types of expenses that are not otherwise funded by state or tuition funds.

Because auxiliaries are considered separate organizations from many institutions, they may not receive the same level of careful financial oversight from the institution’s governing board—despite the fact that they can pose financial and reputational risks to the institution and hence to the state. As revenue-producing activities have grown, the federal Internal Revenue Service (IRS) has become more interested in obtaining assurance that the activities are appropriate to the public and nonprofit status of the university. The IRS and Congress both are increasingly asking for audits of what they call “unrelated business income” to determine if the revenues from these activities are being used to further the charitable purposes of the institution.

Private Sources of Revenue

Private donations also play an important role in financing higher education infrastructure at some institutions, which can complicate budget negotiations, in part because matching funds are often required on behalf of the state. For example, the availability of additional private dollars can diminish the prioritization of spending for deferred maintenance or adequately maintaining pre-existing infrastructure. Private donors are generally interested in funding a new building or athletic facility, and not as willing to finance the less glamorous infrastructure needs of a new boiler or heating, ventilation and air conditioning system. Yet, as university assets are kept in operation longer, additional efforts must be made to keep those assets working after their recommended useful lives have expired. For budget officers, this entails balancing the acquisition of new assets, with or without the help of private donors, with the rising deferred maintenance costs necessary to maintain old ones.

Philanthropic sources also provide programmatic support directly to colleges for myriad support and academic programs, including student scholarships and academic chair-ships.

REVENUE PATTERNS AND TRENDS

Boom and Bust Cycle

Appropriations for higher education institutions tend to be more sensitive to the economic cycle and the structural condition of the budget compared to other areas of state government. This is evident in annual spending changes for higher education, which tend to increase more so than most other program areas during good economic times, and in times of fiscal stress, receive a disproportionate share of budget cuts. The economic cycle and structural condition of the budget will likely influence higher education spending proposals, enrollment levels and gubernatorial and legislative willingness to consider major new initiatives.

This boom and bust financing cycle has led many to characterize higher education as the balance wheel of state budgets.¹⁸ States turn to higher education to help achieve fiscal balance because higher education institutions, unlike most all other state agencies, have access to alternative revenue streams (i.e. student tuition, endowments, auxiliary enterprises, etc.), and because large portions of states' budgets remain relatively untouchable, such as basic education, debt service, federal-state partnership programs with strict main-

tenance-of-effort requirements, earmarked spending from revenues like the motor fuel tax and entitlement programs such as Medicaid. In particular, these growing mandatory spending demands have left state budgets with diminished flexibility compared to decades past.

States can achieve greater funding stability over time by understanding and accounting for these budgetary dynamics, curtailing spending increases during years of surplus, and distributing budget cuts as evenly as possible under budget shortfalls. Fiscal responsibility for states is not necessarily about increasing spending for higher education (or other areas of the budget) but about maintaining funding stability over time, allowing institutions to work towards desirable outcomes within a more predictable fiscal context.

Decline in State Support

General fund spending for higher education is declining as a portion of total general fund spending. This trend is a function of increased spending demands for budget items such as health care and an overall decrease in the proportion of discretionary dollars that states have to spend. Figure 5 shows higher education general fund spending as a share of total general fund spending declining from 15.5 percent in fiscal 1987 to 10.0 percent in fiscal 2015. In comparison, Medicaid spending rose from about 8 percent of state general funds to 19 percent over the same time period.¹⁹

Cost Shifting

As state general fund spending on higher education has declined in the last decade, states and institutions are increasingly turning to tuition revenue to cover the costs of higher education. As Figure 6 shows, in fiscal 1995, general fund spending made up a majority (58 percent) of total state expenditures related to higher education. In contrast, in fiscal 2015, the "Other State Funds" source (which for the vast majority of states, includes tuition and fees) represented the largest individual fund source (48 percent) for higher education state spending, surpassing the general fund.²⁰

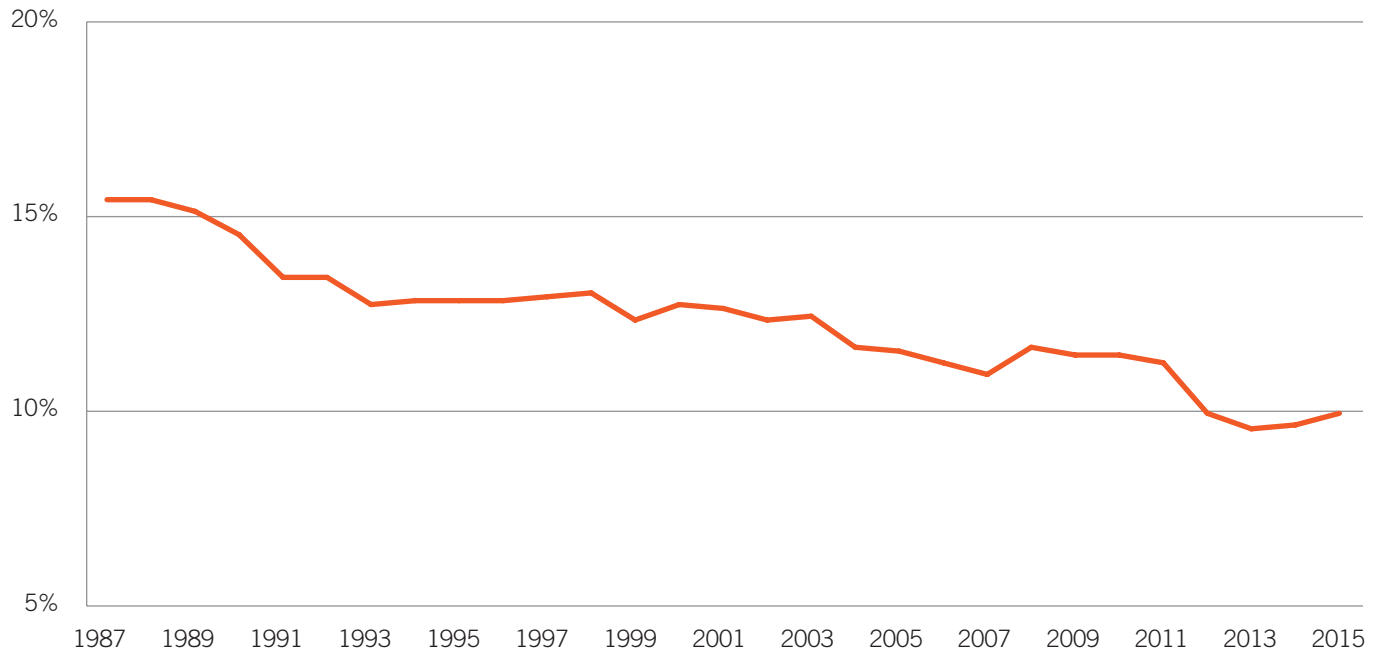
This change represents a dramatic swing in the way that states are funding higher education, and reflects a willingness to have students share a greater portion of costs. To a large extent, this shift has been driven by difficult budget years when policymakers made deeper cuts to higher education than other critical service areas. These disproport-

¹⁸ Jennifer A. Delaney and William R. Doyle, "State Spending on Higher Education: Testing the Balance Wheel over Time," *Journal of Education Finance* 36:4 (Spring 2011), 343–368.

¹⁹ NASBO, *State Expenditure Report* (1987–2015).

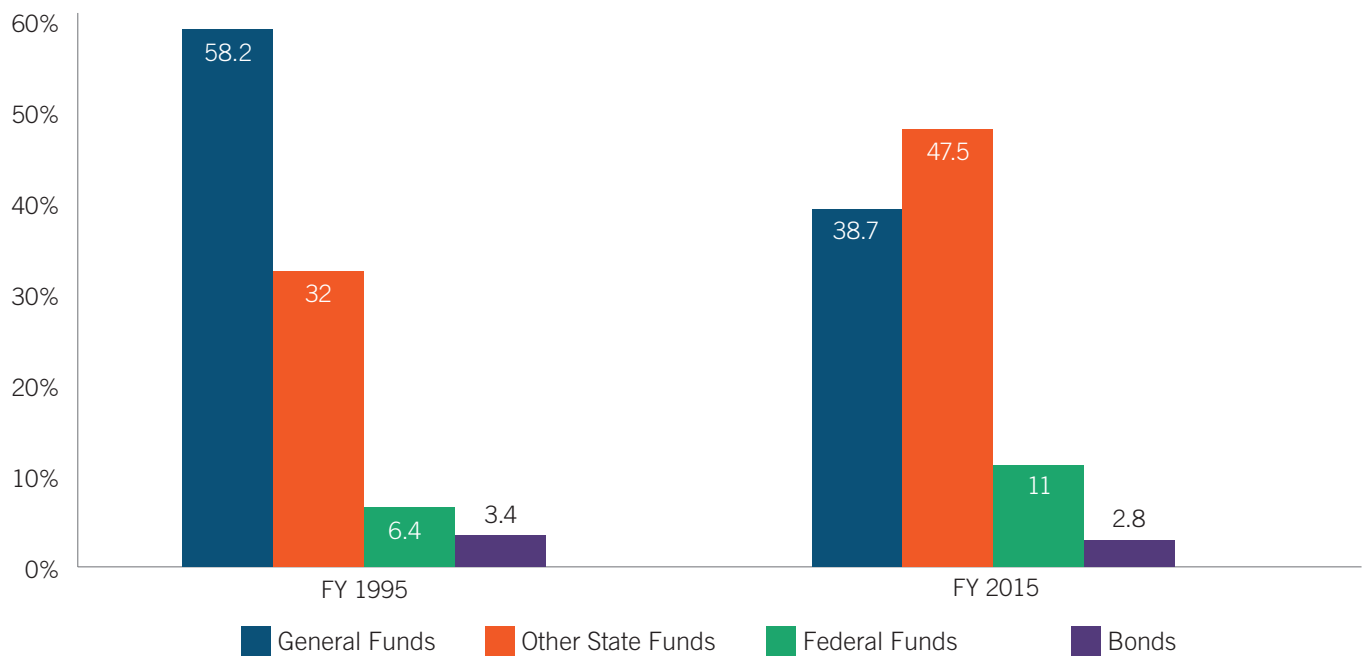
²⁰ NASBO, *State Expenditure Report* (2015).

FIGURE 5 General Fund Spending for Higher Education as a Percentage of Total General Fund Spending



Source: NASBO State Expenditure Report 1987–2015.

FIGURE 6 Higher Education State Spending by Fund Source



Source: NASBO State Expenditure Report

Data Sources on State Support for Higher Education

It should be noted that there are different data sources that measure state funding for higher education, which vary in terms of data definitions, collection methods, strengths, and limitations. While one source may be more useful for making interstate comparisons at a point in time, another source may be more reliable for examining aggregate trends over time. Sources include:

1. NASBO—*State Expenditure Report*
2. The Center for the Study of Education Policy at Illinois State University—*Grapevine*
3. SHEEO—*State Higher Education Finance* (SHEF) data
4. U.S. Census—*Annual Survey of State and Local Government Finances* and *Annual Survey of State Government Finances*
5. Nation Center on Education Statistics—*IPEDS*

For a detailed breakdown of these five key data sources, see David Tandberg and Casey Griffith, “Chapter 13: State Support of Higher Education; Data, Measures, Findings and Directions for Future Research,” *Higher Education: Handbook of Theory and Research* (2013).

tionate spending reductions for higher education take place in part because, unlike most other program areas, there are alternative revenue sources for colleges and universities (namely, student tuition and fees). State policymakers also generally have more discretion over higher education spending levels than over other large portions of the state budget, such as K–12 education and health care.

Figure 7 shows the effects of the cost-shifting trend from an institutional perspective, and over a shorter (six-year) period. In 2007, net tuition revenue represented 47 percent of education and related spending per full-time equivalent student at public master’s institutions, rising to 56 percent in 2012. Similar trends can be observed in the data for public research, bachelor’s and associate’s degree institutions.²¹

This pattern of cost-shifting has affected students in various ways. Most notably, tuition levels have been steadily rising. The average sticker price of in-state tuition and fees for full-time undergraduate students at public four-year institutions rose from \$6,450 in 2004–05 to \$9,139 in 2014–15, with figures adjusted for inflation in 2014 dollars. Looking at average net price, which takes into account total grant aid and tax benefits, tuition and fees still increased 32 percent over a decade, rising from \$2,290 in 2004–05 to \$3,030 in 2014–15.²² Additionally, students in many states are facing

increased competition from out-of-state students. For years, many public institutions have sought to admit and enroll out-of-state and international students, both of which generally pay a much higher tuition rate than in-state students.²³

The Cost versus Price of a College Education

Oftentimes when discussing higher education finance and the issue of college affordability, the terms “price” and “cost” are used interchangeably. However, to avoid confusion, it is advisable to distinguish between these two terms, what they mean, and how they are used. The “cost” of higher education implies the total amount spent while “price” reflects the portion of those costs paid by students (via tuition or fees). “Subsidy”—the amount provided by the state—is the difference between the two. In other words: $\text{Cost} = \text{Price (tuition)} + \text{Subsidy (state support)}$

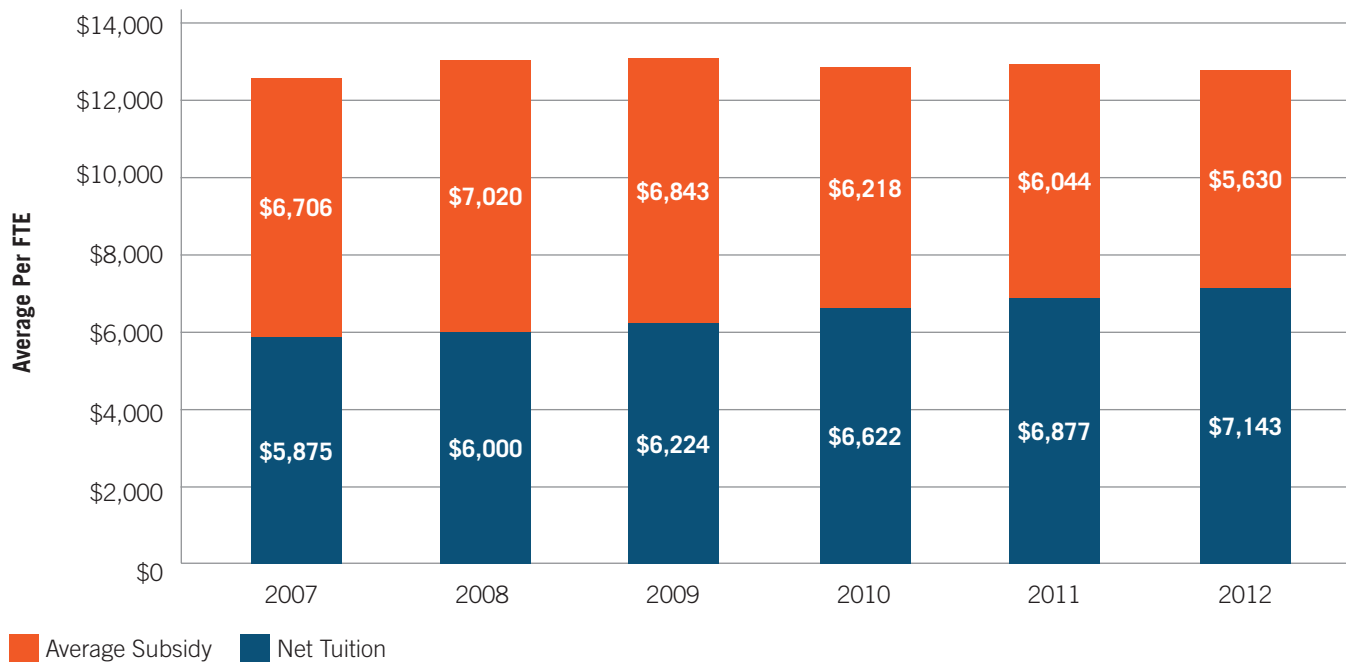
In Chapter 2, we will discuss trends in higher education spending, including the rapid rate of increase that is outpacing inflation or spending in other service areas. While states

²¹ Delta Cost Project IPEDS Database, 1987–2012 (11-year matched set).

²² College Board, *Trends in College Pricing* (July 2015).

²³ It should also be noted, however, that for some institutions, the push to enroll out-of-state students is motivated not only by a desire for students that pay higher tuition rates, but also for demographic reasons. In some states, particularly in the Northeast and Midwest, the number of high school graduates is decreasing, and to continue to fill classrooms, institutions are looking outside of the state.

FIGURE 7 Education and Related Expenditures by Net Tuition and Subsidy at Public Master's Institutions



Source: Delta Cost Project, Trends in College Spending. All figures in 2012 constant dollars.

are well aware of this trend, they are struggling to control higher education spending growth through the budget process. States can hold the line or even decrease general fund spending for higher education operations, but institutions can make up the difference through other revenue sources including, increasingly, tuition and fees paid by students.

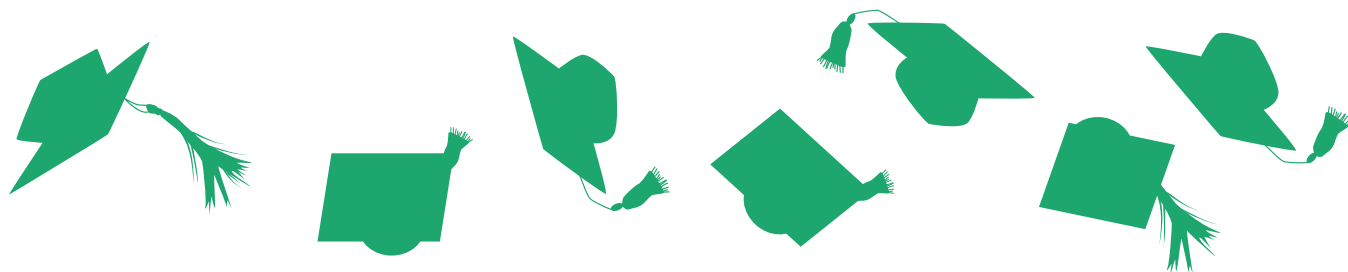
As a general pattern, institutions have reacted to declining state appropriations by shifting more of the cost burden

onto students, rather than finding ways to significantly reduce overall costs. Though widely used, cost-shifting will eventually reach its limit as a “solution” as higher education becomes increasingly unaffordable for students and families. The tide may finally be turning as market forces, government policies, and growing concerns about student debt levels have placed greater pressure on higher education institutions to curtail growth in tuition and fees.

CHAPTER 1—KEY TAKEAWAYS

- **Spending negotiations between the state and higher education officials should take place with a clear understanding of all resources involved.** Budget analysts can add value to these negotiations by communicating the sum total of operating and capital expenditures for higher education, as well as by estimating the impact of capital expenditures on future operating budgets.
- **The mix of operating revenues varies substantially by institution type.** Community colleges depend more heavily on state and local appropriations compared to public research universities.
- **Research universities have a more diversified mix of revenue sources.** However, research universities still depend on public funds, especially when government-funded student aid and capital funds are taken into account.
- **Tuition revenue does not cover the costs of instruction.** However, some students pay more in tuition than the cost of their education, meaning they subsidize other students.
- **The federal government is by far the largest source of financial aid to students.** State-based financial aid is not significant nationally, but in some states is substantial and offers opportunities for policy leverage.
- **Know your state's need- or merit-based financial aid programs.** Pay special attention to the amount of funding institutions receive from state financial aid programs separate and apart from operational appropriations. Recognize that these funds are an integral part of the financial support your state provides higher education institutions.
- **States can restructure their policies to ensure that they are taking full advantage of federal assistance.** This can apply to both institution tuition levels and state financial aid programs.
- **Capital projects are funded by a variety of sources.** Sources include state general funds, state bonds, and institutional financing mechanisms. Because capital funding is typically handled separately from operations funding, it is frequently overlooked in discussions of states' investments in higher education.
- **State appropriations for higher education are volatile.** In recessions, higher education is often hit harder than budget areas with fixed, required spending levels. This is due in part to the ability of colleges and universities to replace this lost revenue with student fee increases.
- **State appropriations for higher education have declined over time in real terms.** While nominal spending on higher education has generally increased year-over-year, appropriation levels adjusted for inflation and enrollment have declined.
- **Institutions are responding to declining state revenues by shifting costs onto students.** As a result, the price of tuition is rising and institutions are admitting more out-of-state and international students.

CHAPTER 2



HOW ARE HIGHER EDUCATION DOLLARS SPENT?

This chapter will discuss:

- ✓ How institutions spend their revenues, by major expenditure categories.
- ✓ How these expenditures vary by type of higher education institution.
- ✓ What factors drive the cost of instruction.
- ✓ How higher education spending is growing.
- ✓ Leading theories about the cause of increasing spending in higher education.

OVERVIEW OF EXPENDITURES

Chapter 1 described the major sources of revenue for higher education. This chapter describes how institutions of higher education spend their resources. As with revenues, the spending picture varies substantially by type of institution. As shown in Figure 8, average spending per FTE student at public research universities is \$38,463, compared to \$18,597 at public master's institutions, \$20,113 at public bachelor's institutions, and \$13,392 at community colleges.

The mix of expenditures also varies by type of institution. For all institutions, education and related spending is the largest category. However, public master's institutions, public bach-

elor's institutions, and community colleges spend the majority of their funds in this category (68 percent, 67 percent, and 73 percent, respectively), whereas public research universities spend about 43 percent on education and related activities.

Education and related costs include all the costs of providing instruction and academic support to students. These costs include faculty salary, faculty benefits, the administrative costs of academic departments, and student services. Capital infrastructure costs are generally not considered in the cost of instruction.

A DETAILED LOOK AT INSTRUCTIONAL COSTS

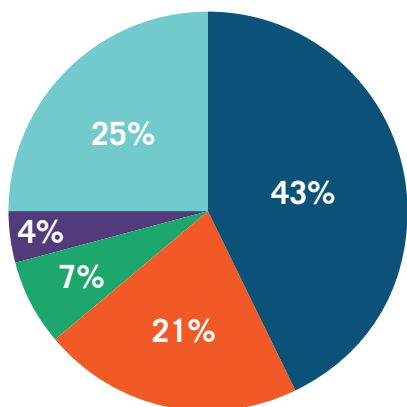
Different institutions and even departments within the same institution face substantial variation in the cost of instruction. Multiple factors influence instructional costs, as follows:

Salaries and Workload

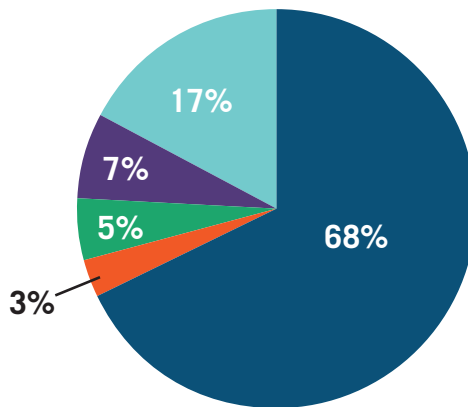
Differences in faculty compensation and workload policies explain much of the variations in spending across different types of institutions. Salary costs are highest, and faculty teaching loads lowest, in research universities, because faculty are paid to conduct research as well as to teach. Typically spending per student is highest in research institutions, relatively lower in comprehensive institutions, and

FIGURE 8 Operating Expenditures at Different Types of Public Institutions

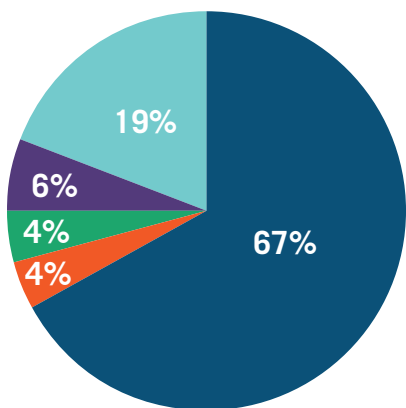
Public Research Universities
\$38,463



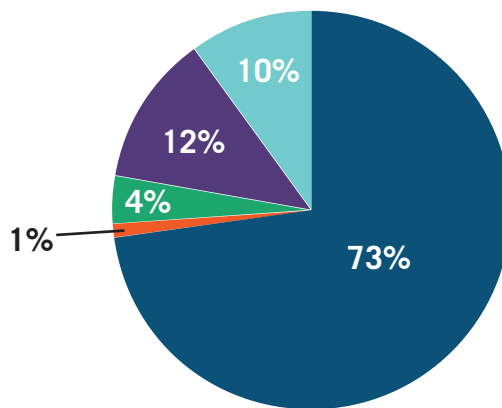
Public Master's Institutions
\$18,597



Public Bachelor's Institutions
\$20,113



Community Colleges
\$13,392



- Education and Related Spending
- Research and Related Spending
- Public Service and Related Spending
- Net Scholarships and Fellowships**
- Auxiliary Enterprises, Hospitals, Independent Operations and Other Sources

Source: Delta Cost Project IPEDS Database, 1987–2012 (11-year matched set); data generated by TCS Online. See <http://tcs-online.org/Home.aspx>.

Chart notes: All dollar amounts are averages per FTE student, reported in 2012 dollars (CPI adjusted). Data may not sum to the totals because component data were summed at the institution level prior to calculating the aggregate category averages.

** Net scholarships and fellowships represent only a small portion of spending on student aid because it is net of allowances (e.g. it is “residual” aid that is not applied to tuition or auxiliary services). Tuition discounts provide a better measure of changes in “spending” on institutional aid, though they are not considered an expenditure under accounting standards.

lower still in public community colleges. As institutions have looked to reduce instructional spending, many have resorted to increasing the ranks of part-time or irregular faculty to save on benefit costs and have greater flexibility to adapt to changes in budget and student interests. Overall, the proportion of classes taught by adjunct or part time faculty is now higher than the proportion taught by full-time tenured faculty.²⁴

Employee Benefits

Employee benefits, even more than salaries, are now the single largest source of inflationary pressure in higher education, increasing by more than five percent annually over the last decade. These costs are likely to increase even more rapidly in the future, because of growing costs for health insurance from an aging workforce, and the need to reduce unfunded liabilities in both health care and in retirement systems.

Measures of overall employee benefits expenditures for colleges and universities show that benefits as a share of all costs is higher at public institutions (between 23–24 percent) compared to private institutions (20 percent). By any measure, benefits costs are growing across all institutions and account for a rising share of compensation costs.²⁵ In

²⁴ For more information on this trend, see American Association of University Presidents (AAUP), *Employment Status of Instructional Staff Members in Higher Education* (April 2014), based on Fall Staff Survey conducted by U.S. Department of Education, National Center for Education Statistics, available at <http://www.aaup.org/sites/default/files/files/AAUP-InstrStaff2011-April2014.pdf>.

²⁵ Delta Cost Project, Issue Brief: *Labor Intensive or Labor Expensive? Changing Staffing and Compensation Patterns in Higher Education* (February 2014), available at http://www.deltacostproject.org/sites/default/files/products/DeltaCostAIR_Staffing_Brief_2_3_14.pdf

some states, the benefit share of compensation costs is now greater than 50 percent.

Although public-sector college and university benefits packages are typically more generous than those in the private sector, public institutions are less free to manage these costs, which are treated as “fixed” costs within the state budget and often are set by the state, not the institutions. Universities have managed to control some of their benefits costs by relying on part-time faculty positions, which usually do not come with benefits. The Delta Cost project estimates that the rising cost of employee benefits is costing the equivalent of four percent annually in increased student tuitions.²⁶

Levels of Instruction

Costs also vary by level of instruction, with the lowest unit costs at the lower division level, and the highest costs in graduate and professional education. The difference in costs is caused by variation in instructional salaries, class size, and curriculum. Lower division curriculum is more standardized than is the case in either upper division or graduate education, allowing for larger class sizes. Many public institutions use less expensive faculty such as teaching assistants or adjunct and part-time faculty at the lower division levels.

Studies of instructional costs by discipline and level of instruction can be hard to come by, because they require data both on credit hours and on faculty contact hours and compensation. Many states have asked for such studies in order to evaluate subsidy levels and to have a better, more analytical way of thinking about tuition and financial aid poli-

²⁶ Ibid.

HIGHLIGHTED RESOURCE

State Higher Education Executive Officers—*Four-State Cost Study*

<http://www.sheeo.org/resources/publications/four-state-cost-study>

Four states (New York, Florida, Ohio and Illinois) routinely collect detailed spending data by level of instruction, i.e. lower division, upper division, graduate level. This meta-analysis of spending per student conducted by the State Higher Education Executive Officers Association (SHEEO) uses data from these states to show the distribution of instructional costs and differences in cost per credit hour across levels of instruction. The study showed that cost per student credit hour increases with increasing instructional levels (based on data from Florida, Ohio, and Illinois). Relative to the instruction cost per student credit hour for lower-division undergraduates, upper-division credit hours cost roughly 1.5 times as much, graduate 1 (master’s student) credit hours cost 3 times as much, and graduate 2 (doctoral student) credit hours cost about 4 times as much. The study also contains detailed analysis on cost variations by discipline.

cies. The research universities typically resist such studies, arguing that it is impossible to separate the costs of research from the costs of teaching, as well as between graduate and undergraduate instruction. (See sidebar text box.)

Discipline Mix

Instructional and research costs also vary widely by discipline or program area, with the highest costs in the laboratory-based disciplines such as engineering, medicine and fine arts, and the lowest cost in the social sciences and humanities. Some of the variations in costs by discipline are determined by the requirements of specialized discipline-specific accreditation and licensing (more common in the professions). Laboratory-based disciplines such as medicine and engineering have high equipment costs, as well as higher costs from environmental and health/life-safety requirements.

OTHER COSTS

Outside of education and related expenses, institutions must cover costs in several other areas. These can be captured in the following broad categories:

Administrative or Non-Instructional Costs

This includes higher education costs related to administrators, executive level managers, enrollment officers, financial aid counselors, maintenance and groundskeepers, dormitories, campus police and fire protection, and a number of other capital and labor costs not directly related to instruction.

Non-Personnel Operating Expenses

These expenses include equipment, supplies, contract services, routine maintenance and utilities.

Capital Infrastructure

Includes higher education administrative buildings, recreation centers, teaching classrooms, libraries and other capital assets.

Deferred Maintenance

Includes major facility maintenance and repair of capital assets, generally exceeding a prescribed dollar amount set in statute.

IT Infrastructure

These costs refer to higher education expenditures for large-scale, often resource intensive information technology (IT) needs.

You can find even more detailed categories of spending through the Federal Integrated Postsecondary Education Data System (IPEDS). As with revenues, institutions must report expenditures to the federal government using the uniform financial reporting standards of IPEDS. (See the Highlighted Resource on the next page. For a breakdown of IPEDS reporting on revenues, see Highlighted Resource in Chapter 1.) Keep in mind that IPEDS financial data have limitations. Data are reported in the aggregate and do not capture departmental-level spending details nor do they show expenditures by revenue source. IPEDS data is also limited due to timing delays; survey data is already two years old by the time of publication. That said, IPEDS is still the best public source of comparable data on spending in higher education.

TRENDS OVER TIME

Institutional Costs are Rising

As described in Chapter 1, cost shifting is the primary driver behind the sizeable increases in tuition and fees seen in recent years. Still, governors and lawmakers should not lose sight of the fact that higher education costs are indeed rising over time, and that specific cost drivers are increasing the need for additional revenues far beyond what states can reasonably afford, especially given other spending pressures in areas such as Medicaid and K–12 education. Studies of spending in higher education have shown that although revenue levels can vary considerably across states and types of institutions, the patterns of spending are quite similar across disparate types of institutions.

The cost of higher education has increased on an annual basis above the rate of inflation for decades. Generally, students and their families are bearing the brunt of these increases; even if some states are increasing the dollar amount appropriated for higher education, states are picking up a smaller *share* of total higher education costs, largely because appropriation growth has not kept up with growing enrollments. For budget analysts and the wider higher education policy community, it is important to know the reasons why costs are going up, year-after-year, at a greater rate than other areas of the economy.

Primary Cost Drivers

Higher education spending pressures are primarily driven by personnel costs such as salaries, health care and retirement benefits, both for faculty and other personnel who are not directly involved in instruction, such as administrators, executive level managers, enrollment officers, financial aid counselors, campus police, groundskeepers, and more.

HIGHLIGHTED RESOURCE

Integrated Postsecondary Education Data System (IPEDS)

Institutions report their expenditures to the federal government using the uniform financial reporting standards of the federal Integrated Postsecondary Education Data System (IPEDS) surveys. IPEDS reporting requirements are embedded in Title IV of the Higher Education Act, the authorizing legislation for federal financial aid; reporting is mandatory for all higher education institutions participating in federal financial aid programs.

IPEDS uses standardized categories to provide for comparisons across higher education institutions. The categories themselves provide a snapshot of the variety of activities on which institutions spend money. You can find full expenditure information for the specific institutions in your state at <http://nces.ed.gov/ipeds/datacenter/>.

- **Instruction:** Activities directly related to instruction, including faculty salaries and benefits, office supplies, administration of academic departments, and the proportion of faculty salaries going to departmental research and public service.
- **Research:** Sponsored or organized research, including research centers and project research. These costs are budgeted separately from other institutional spending, with special revenues dedicated to these purposes.
- **Public service:** Activities established to provide non-instructional services to external groups. These costs are also budgeted separately and include conferences, reference bureaus, cooperative extension services and public broadcasting.
- **Student services:** Non-instructional, student-related activities such as admissions, registrar services, career counseling, financial aid administration, student organizations and intramural athletics.
- **Academic support:** Activities that support instruction, research, and public service, including: libraries, academic computing, museums, central academic administration (dean's offices), and central personnel for curriculum and course development.
- **Institutional support:** General administrative services, executive management, legal and fiscal operations, public relations and central operations for physical operation.
- **Scholarships and fellowships:** Institutional spending on scholarships and fellowships. This does not include federal student aid, tuition waivers or tuition discounts (which are reported as waivers).
- **Plant operation and maintenance:** Service and maintenance of the physical plant, grounds and buildings maintenance, utilities, property insurance and similar items. Note, for private institutions only, capital depreciation costs were excluded prior to 1998, making trend data not strictly comparable.
- **Auxiliary enterprises and hospitals:** User-fee activities that do not receive general support, including dormitories, bookstores and meal services.

The cost drivers of higher education operating budgets are similar to those in other state agencies, although the scale of the higher education workforce is generally much bigger than all other state agencies. When analyzing budget requests, the size of the higher education workforce is important because seemingly small and incremental increases in benefits or salary can have substantial impacts on the operating budget simply because of the scale of the institution. For example, in the state of Maryland, higher education institutions employ roughly one third of the state’s workforce, making personnel costs (including health insurance, retirement, and state collectively bargained cost-of-living adjustments and merit increases) the largest driver in the state’s higher education system.

Inflationary Pressures

Colleges and universities often argue that their spending patterns are unique from those in other state agencies, and that they therefore should have annual cost-of-living adjustments or COLAs that reflect their higher spending needs. Two specialized higher education cost indices have been developed over the years, one known as the Higher Education Price Index or HEPI, and the other the Higher Education Cost Adjustor or HECA.

Addressing Fixed Costs

Due to the rising cost of health care, an aging population, and other factors, fixed costs at public colleges and universities—namely health care and retirement benefits—are eating up most new money for higher education, leaving little if any funding for rewarding outcomes, enhancing instruction, and making investments aimed at improving student success. Understanding this reality is the first step to trying to change it. Making meaningful reforms to address these fixed costs may be legally and politically challenging in some states, particularly in those with strong collective bargaining rights. That said, conducting analysis and raising awareness of the impact of employee benefits on higher education costs within a state can add value to the conversation about the “base” budget and possible strategies to address this problem.

The use of a separate inflationary index for higher education has not always been viewed favorably. “Whatever the analytical validity of the measure, it is viewed by state budget analysts and others as a way for institutions to justify budget requests because they spend more, and not because they need more. Many state finance officials are skeptical that higher

Know Your Inflationary Indices

Higher education is somewhat unique among other state program areas in its use of separate, sector-specific price indices to adjust for inflation rather than relying on more conventional measures of inflation like the consumer price index (CPI). One such measure is known as the “higher education price index” (HEPI), which has been maintained by the Commonfund Institute since 2005. Over the past 30 years, the HEPI measure of inflation has increased at roughly 3.7 percent annually, compared to average annual increases of the CPI of 2.8 percent.¹ Another is the Higher Education Cost Adjustor (HECA), which was created and is used by the State Higher Education Executive Officers (SHEEO) Association. The rationale behind both measures is that “a price index based on the spending patterns of colleges and universities is more appropriate than an index based on a broader range of goods and services purchased by consumers.”²

Using the HEPI or HECA measures of inflation in place of CPI has the effect of making any decline in state funding for higher education over time appear larger. Andrew Gillen from Education Sector at American Institutes for Research demonstrated in a blog post what happens to SHEEO’s estimates when CPI is used to adjust for inflation rather than HECA. For example, from 1990–2012, appropriations per student fell 21 percent when adjusting for inflation as measured by the CPI, while SHEEO reports that they fell by 28 percent (when using the HECA).³ By the same token, using the HECA or HEPI tends to make increases in net tuition revenue appear smaller over time than when CPI is used.

¹ NASBO calculation based on data in Commonfund Institute 2014 HEPI, Table A, available at https://www.commonfund.org/CommonfundInstitute/HEPI/HEPI%20Documents/2014/CF_HEPI_2014.pdf.

² Center for College Affordability and Productivity, *Stop Misusing Higher Education-Specific Price Indices* (March 2011), p. 2.

³ Andrew Gillen, “Higher Ed Data Central: The Inflation-Adjusted SHEEO Chart” (March 19, 2013).

education cost increases are justifiably higher than the rise in overall inflation.”²⁷

THEORIES ON RISING COSTS

There are a number of explanations as to why higher education institutions are collectively failing to control costs to the degree of other government agencies or private businesses. Note that the theories below may all be put forward to explain the rising cost of higher education *per student*. Of course, inflation-adjusted institutional revenues and expenditures in the aggregate have increased substantially over decades simply due to growing student enrollment.

Competition and Rising Prices

In higher education, competition between institutions typically drives spending increases rather than greater efficiencies. This is because institutions compete for prestige based on funding levels, faculty reputations, spending on research, and student selectivity and not on efficiency. These funding levels and spending patterns are reinforced by prominent college ranking systems in such publications as *US News & World Report*. Competitive pressures on spending are particularly acute in the elite institutions which operate in national rather than regional markets, such as public research universities. Over the last two decades, the elite private research universities have increased spending much faster than in the public sector. This has led to real pressure on public institutions to increase spending in order to recruit and retain faculty and students. The traditions in higher education of peer review and peer benchmarking unfortunately reinforce the dynamics of competitive pressure on spending. The search for real evidence to distinguish between real funding needs—as opposed to funding desires—is made all the more difficult as a result of these pressures.

The Revenue Theory of Costs

Economist Howard Bowen describes the basic business model of public universities as one of revenue and expenditure *maximization*.²⁸ Simply put, colleges raise as much money as they can, and they spend all the money they raise. Bowen’s “revenue theory of costs” argues that spending levels in higher education are determined by revenue availability. Institutions maximize revenues by se-

curing funds from a number of sources, such as state operating and capital appropriations, federal research grants, tuition and fees, merit and need based aid scholarships, philanthropic donations, athletic franchises, out-of-state students, and through auxiliary services, like hospitals. As institutions gain revenues, expenditures (and thus costs) rise by an equal amount. Surplus funds are never returned to their source.

Theory of Cost Disease

William Baumol’s theory of “cost disease,” first put forward in the 1960s, has influenced profoundly how costs are understood in labor-intensive sectors of the economy, such as health care or education. Baumol’s theory attempts to explain why wages in labor-intensive sectors tend to rise, despite the lack of productivity gains. Baumol compares these sectors with others, such as manufacturing, in which technological advancements and process improvements have greatly increased productivity over time, leading to more output achieved with less human capital. The result is fewer workers employed in manufacturing, but the salaries of those remaining have risen to reflect increased productivity. In labor-intensive sectors like education, workers experience comparable gains in salaries, but generally do not experience the same productivity gains found in other sectors that are able to harness technology and reduce labor costs. The pattern of increasing wages without corresponding productivity gains means that the costs of those services grow more expensive and unbalanced relative to other areas of the economy.²⁹

While Baumol’s theory has helped explain cost increases in higher education, critics warn against depicting higher education as a “victim” of productivity improvements and argue that there is likely more to the story. Robert Martin, a retired economics professor, notes that Baumol’s argument does not explain why cost increases in higher education have “significantly outpaced” cost increases in the rest of the service sector, including health care. “Further,” Martin argues, “reducing teaching loads and shifting service responsibilities from faculty to staff—steps that have been taken over the years—directly reduce productivity in higher education. The cost-disease theory does not explain these, especially since there have been significant tech-

²⁷ NASBO, *Improving Postsecondary Education Through the Budget Process: Challenges and Opportunities* (Spring 2013), p. 27.

²⁸ Howard Rothmann Bowen, *The Costs of Higher Education*. (Jossey-Bass Publishers, 1980).

²⁹ For more recent work on this theory, see William J. Baumol, *The Cost Disease: Why Computers Get Cheaper and Health Care Doesn't* (2012).

HIGHLIGHTED RESOURCES

Delta Cost Project, American Institutes of Research

While the Integrated Postsecondary Education Data System (IPEDS) offers a treasure trove of information about institutional revenues and expenditures, it can be daunting for new users. The Delta Cost Project has organized IPEDS data into aggregated categories that are oriented toward policy-relevant questions. The following metrics are available for all public and nonprofit institutions that participate in IPEDS. Additionally, data for public sector institutions can be aggregated up to the state level. See *Trends in College Spending Online* at <http://tcs-online.org/Home.aspx>.

Delta Cost Project Data Categories

Revenue: Where Does the Money Come From? The primary sources of total operating revenue are shown, including: net tuition revenues; state and local appropriations; private gifts, investment returns, and endowment income; as well as other dedicated revenue sources such as federal grants and contracts, and auxiliary enterprises.

Expenditures: Where Does the Money Go? Several measures of spending are shown including: “Education and Related (E&R)” spending—spending primarily related to students and student learning (instruction, student services, and a portion of “overhead”); as well as the more traditional spending categories such as Education and General (E&G) spending and total operating expenditures, by component (such as instruction, research, academic support, etc.).

Cost/Price/Subsidy: What’s the Student Share of Costs? E&R spending is parsed into the “student share of cost” (the percentage of E&R expenses that are paid from net tuition revenues) and the “average subsidy” (the share of E&R expenses that are covered by institutional resources—primarily state funding at public institutions).

Performance: Outcomes and Spending. Performance is measured by the number of completions (including degrees, certificates, and other formal awards) produced for every 100 FTE students enrolled, as well as the total E&R costs per completion (as contrasted to costs per student enrolled).

Spending Comparisons: Prices and Enrollments vs. Spending. Comparisons between changes in tuition prices and spending per student show the relationship between price and cost shifts. Comparisons of E&R spending per student versus the number of students enrolled show the disparities in spending at different sized institutions.

Enrollment: Where Do Students Go? Full-time equivalent (FTE) student enrollments and headcount enrollment by undergraduate/graduate level, full-time/part-time status, and race/ethnicity are shown.

nological increases in service productivity since Baumol formulated this hypothesis in the 1960s.”³⁰

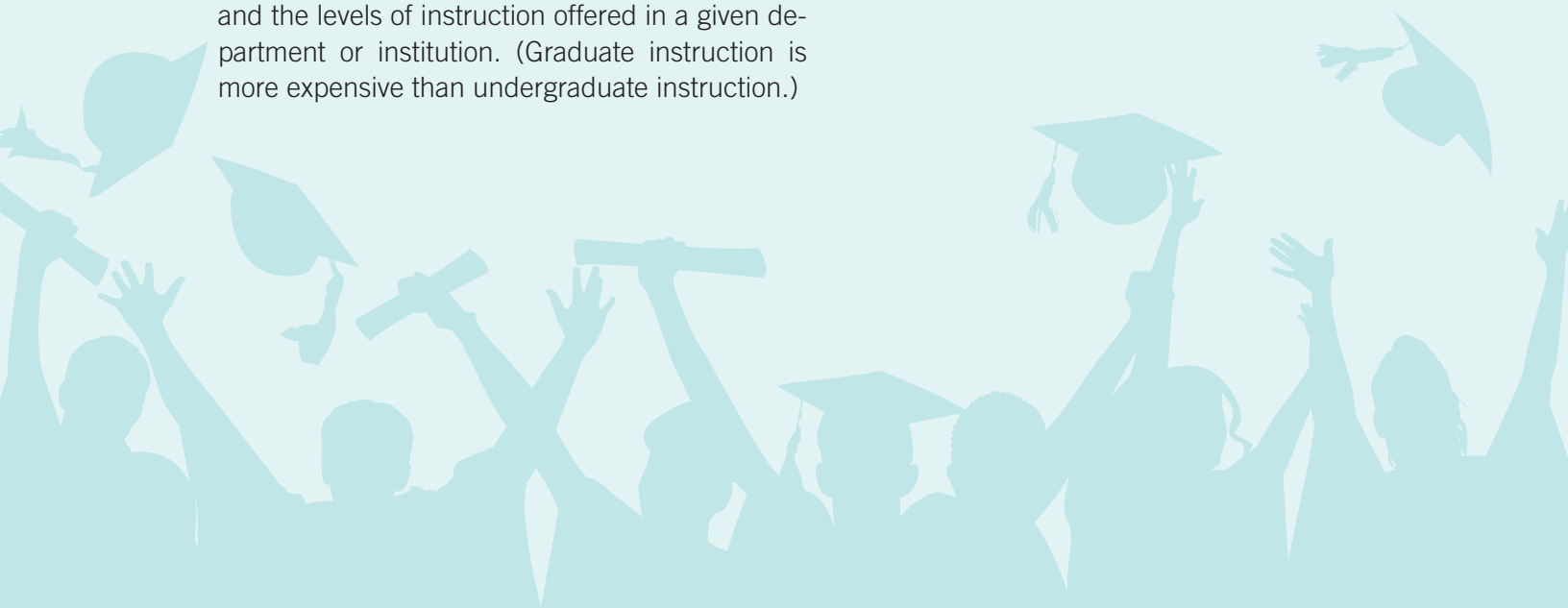
Greater familiarity with these theories may be helpful in understanding the fiscal management of higher education institutions and the factors contributing to their rising costs. However, no single explanation is likely to account for all the dynamics driving higher education costs beyond the rate of inflation or that of other goods and services. In

reality, higher education costs are being driven by a tangled web of forces, including market forces, institutional incentives, student loan policies, labor market conditions, higher education management practices, technological inertia, and federal and state legal frameworks and spending policies. In the next chapter, we turn to a discussion of how states attempt to determine how much higher education costs and the share of that cost to be covered by the state.

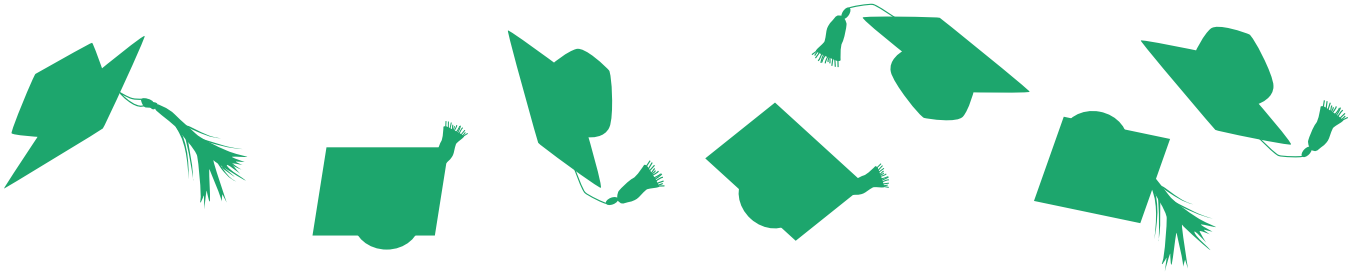
³⁰ Robert E. Martin, *The Revenue-to-Cost Spiral in Higher Education* (The John William Pope Center for Higher Education Policy, July 2009).

CHAPTER 2—KEY TAKEAWAYS

- **To develop effective cost containment strategies, states first need clearer information about expenditure items and cost drivers.** This will help policy-makers engage in dialogue with higher education officials on a more level playing field. Budget analysts can facilitate this process by asking institutions the right questions about costs, by viewing the budget development process as a collaborative one, and by shifting the focus of conversation toward expenditures and cost controls rather than tuition and revenues.
- **Institutional expenditures vary substantially. This is true both in terms of the total amount spent per FTE and the mix of funded activities.** Community colleges, public master’s and bachelor’s institutions spend the majority of their funds on education and related activities. Public research university spending is more diversified: the single largest category is still education and related spending, but they spend substantially more on research and auxiliary enterprises than other public institutions.
- **Several factors drive the cost of instruction. And these factors account for much of education and related spending—the largest category of institutional spending.** These include faculty salaries and benefits, workload, the mix of disciplines offered, and the levels of instruction offered in a given department or institution. (Graduate instruction is more expensive than undergraduate instruction.)
- **Higher education costs are growing largely because personnel costs are rising.** The pace of increase outstrips inflation and increases in other service sectors. In particular, fixed costs for health care and retirement benefits continue to increase and consume most new money directed at higher education.
- **Some theorists point to competition among institutions to explain the pace of rising costs.** Others point to the basic business model of higher education, in which expenditures are driven by the availability of revenue. Another theory describes how productivity gains and corresponding salary gains in other sectors have led to a pattern of increasing salaries in higher education, but without the corresponding increase in productivity.



CHAPTER 3



STATE-LEVEL GOVERNANCE AND BUDGETING

This chapter will discuss:

- ✓ The range of governance structures for higher education across the 50 states.
- ✓ The role of state-level coordinating entities.
- ✓ The basics of the state budget process.
- ✓ Variations in how state dollars are appropriated to higher education (via coordinating boards or directly to institutions).
- ✓ The budget development processes used in states for higher education, such as incremental budgeting, line-item budgeting, and formula budgeting.
- ✓ Newer budgeting approaches that focus more on program results, including performance budgeting or outcomes-based funding.

STATEWIDE GOVERNANCE STRUCTURES

Most states in the U.S. organize public higher education into multi-campus systems, with a single governing board overseeing several institutions. The system office is typically the point of contact for state budget officers and others doing business with the university on behalf of the state. Generally, the system office is overseen by a governing board, and headed by a president or chancellor who

reports to the board. Systems vary somewhat depending on the state, but most are charged with strategic planning, policy setting and the financial oversight of the institutions within them. Ideally statewide governing boards should seek to balance institutional interests with the long-term needs of the state.

Higher education is organized and structured differently across the fifty states. For example:

- Some states, such as California, have separate systems and governing boards for research universities and comprehensive four-year public institutions, with no campus-level boards. California and many other states have community colleges with local district-level boards as well as a statewide board, similar to K–12 school boards and state boards of education.
- North Carolina and Florida have separate systems for four-year and two-year institutions, with research universities and four-year institutions in the same system.
- Wisconsin and Hawaii have integrated statewide systems with both four- and two-year institutions under a single board.
- Texas, Tennessee, and New York have multiple systems which may include both two- and four-year institutions.

- In several states—including Indiana, Kentucky, Michigan, Ohio, Oregon and Washington—institutions are not organized into multi-campus public systems. (Indiana, Kentucky, Ohio, and Oregon do have coordinating boards.)

COORDINATING ENTITIES

Most states designate a state entity or agency with the responsibility for coordinating state-level higher education policy. About half of the coordinating agencies are also higher education system boards (as is the case in North Carolina and Wisconsin).

The coordinating agency is typically responsible for policy review and analysis on behalf of the state, but may also have programmatic responsibilities such as the administration of student financial aid programs. These agencies are frequently known as the State Higher Education Executive Officer (SHEEO) agency. Many states use the SHEEO agency as a primary point of contact between state government and institutions. The SHEEO agency maintains accountability systems for the state, conducts long-range planning and financial analysis, and often oversees how funds are spent. They often work with other state agencies to assess the transition of students from one system to another—such as the movement of students from K–12 to higher education, or tracking employment outcomes for graduates by connecting to the

state-level workforce agencies. Unlike stand-alone system governing boards or system-wide offices, SHEEOs exist to coordinate otherwise disparate higher education institutions and ensure that higher education policies are aligned with the needs of the state.

STATE BUDGET PROCESS

In some ways, state level budgeting for higher education is similar to budgeting for other state agencies. States develop and enact their annual or biennial budget for higher education using the same timeline and many of the same procedures shared by other program areas. As with other state agencies, budgeting for higher education begins with the executive budget office providing instructions or guidelines on how to submit a budget request for the upcoming fiscal year or biennium. In some states, individual institutions will directly submit a budget request, while in others a statewide coordinating or governing board will consolidate budget requests from many institutions.

Budget instructions are important because they effectively represent gubernatorial directives and can determine the types of information and level of detail that is required by higher education officials, as well as the format of the budget. Additionally, budget instructions present an opportunity to communicate fiscally responsible parameters and give higher

HIGHLIGHTED RESOURCES

National Association of System Heads (NASH)

<http://www.nashonline.org/>

NASH is composed of system governing board CEOs and serves as a forum for the exchange of views and information among its members and with other higher education organizations, with special attention to the perspectives, problems, and opportunities of heads of systems as a unique category of higher education executives.

The State Higher Education Executive Officers Association (SHEEO)

<http://www.sheeo.org>

SHEEO is a national association of chief executives of statewide governing, policy, and coordinating boards of post-secondary education. They advocate for state policy leadership, as well as serve as a liaison between states and the federal government, as a vehicle for learning from and collaborating with peers, and as a source of information and analysis on educational and public policy issues. SHEEO seeks to advance public policies and educational practices to achieve more widespread access and successful participation in higher education, more new discoveries through research, and more applications of knowledge that improve the quality of human lives. In addition to these roles, SHEEO manages a number of research and data collection projects and is a good source of information about state policy and practice including fiscal trends.

State Example



Due to various pressures both internal and external to higher education enterprises in recent years, some states have considered or adopted reforms to grant higher education institutions more flexibility to manage their own budgets. For example, the **Wisconsin** Governor's 2015–17 biennial budget proposed to convert the system into a public authority (rather than a state agency) to grant it significantly more autonomy from the state while adjusting state general fund appropriations to the University of Wisconsin System. Under the proposal, all university funds, other than state general funds, would no longer appear as appropriations, and university employee and procurement policies would no longer be subject to state oversight. Ultimately, the State Legislature did not approve the Governor's proposal for authority status but did grant the University of Wisconsin System the flexibility to create personnel systems separate from the state, conduct certain capital projects without state oversight, and invest gifts and grants outside the State Treasury.

education officials a preview as to the coming level of competition for state resources.

There are a number of variations in how states plan, budget and appropriate state funds for higher education, largely because of differences in higher education governance structures and individual states' approaches to budgeting. In some states, the legislature appropriates funds to institutions directly; in others, to a central state higher education coordinating board or agency. When state funds are appropriated to a state higher education agency to distribute, sometimes they are provided as a lump sum for the agency to determine how to distribute and in other instances they are earmarked for individual institutions.³¹

In general, higher education institutions are much more autonomous from the state compared to other agencies in terms of revenue structure, spending and governance. This suggests the state budget is not the locus of fiscal control in a way comparable to other agencies or program

³¹ SHEEO, "SHEEO Query: State funds appropriations" (2012), available at <http://www.sheeo.org/resources/links/sheeo-query-state-funds-appropriations>.

areas. For example, in the majority of states, tuition revenue spending authority lies at the institutional level,³² meaning institutions retain and expend revenues derived from students as they see fit, irrespective of gubernatorial or legislative prerogatives.

States and budget analysts have a variety of budgeting methodologies to choose from. Below are brief, high-level explanations of the approaches that states have traditionally used to determine the level of general fund appropriations for higher education and the usage of those funds. Chapter 4 will take a look at a similar set of budget decision models used at the institutional level. These budgeting methodologies are also applicable to other program areas. For more information on state budget processes and procedures (not limited to higher education), see NASBO's *Budget Processes in the States*, last updated in 2015.

Incremental Budgeting

Some states request that higher education institutions provide information to build a budget incrementally for the upcoming fiscal year or biennium. This may mean a "base" budget for the institutions or systems is determined or carried forward from the prior year, and then adjusted incrementally up or down depending on changes in operating costs like salaries and benefits, energy and utilities, inflation, as well as expected additional needs driven by enrollment increases or plans for new or expanded services. This is also sometimes referred to as "Base Plus/Minus" budgeting.

³² SHEEO, *State Tuition, Fees and Financial Assistance Policies for Public Colleges and Universities* (2013), p. 11.

State Example



In the late 1990s, **South Dakota** moved away from a funding formula for higher education and towards a base plus/minus method. This method necessitates that the Board of Regents consider funding targeted projects. The change in methodology has allowed for a greater focus on specific program expansions and higher education initiatives. Consequently, this allows both the Governor and Legislature to better understand the programs, positions and projects the funding will be used for as they are making decisions on higher education funding requests.

State Example



In 2001, the **North Dakota** legislature enacted changes that consolidated the separate line-item appropriations to public higher education institutions into one line item (operations) for the University System and the line items for the 11 institutions into two appropriations—operations and capital assets. In the same year, state lawmakers also approved legislation to require the University System to develop a strategic plan and provide an annual performance and accountability report, including financial and nonfinancial accountability measurements.¹

In 2013, the state took another step towards greater transparency and an emphasis on performance when the legislature approved the Governor's recommendation to move the higher education institutions to a cost-based funding model that provides a fixed dollar amount per completed student credit hour. The process uses only successfully completed student credit hours, as measured at the end of each biennium. Weighting factors were established to reflect the relative cost differences by level of instruction and discipline cluster, and then applied system-wide. This ensured that every course type was weighted appropriately.

¹ For more information, see North Dakota Legislative Committee Staff for the Higher Education Committee, "Higher Education Performance and Accountability Measures Report - Background Memorandum" (July 2001), available at www.legis.nd.gov/files/resource/committee-memorandum/39049.pdf.

Funding models based solely on inputs and heavily weighted towards enrollment reinforce the state's commitment to college accessibility and result in a relatively equitable distribution of funds on a per student basis across a state's public institutions. However, under this approach, the primary incentive for campuses is to increase enrollment, rather than to seek greater efficiency in operations, reduce the cost of producing degrees, and improve degree completion. Further, this type of budgeting methodology puts higher education spending on autopilot and diminishes the budget setting authority of governors, budget directors and legislatures.

Line-Item Budgeting

Line-item budgeting is common because it offers lawmakers a great deal of clarity and the direct ability to control expenditures. The accounting and reporting systems necessary to monitor line-item budgets are not overly complex or costly, leading to general accessibility. For higher education, a line-item budget can be prepared along institutional or system-wide lines depending on the needs of the state. This method of budgeting provides a separate line-item appropriation for each major expenditure category with accountability placed on the inputs (resources) and not on the outputs or results.

Despite the simplistic appeal of line-item budgeting, it can limit challenges to previous spending levels, and inhibit fund transfers and managerial flexibility. This type of budgeting does not require the comprehensive effort of developing goals and objectives, nor does it lead to accountability based on outcomes. As such, line-item budgeting tends to result in disjointed policy priorities and messaging to institutions. Similar to incremental budgeting, line-item budgeting tends to incentivize institutions to increase enrollment, rather than focus on student success. As states have moved beyond enrollment based funding models for higher education, line item budgeting has become less relevant particularly in that it does not grant institutions the flexibility they need to produce measurable outcomes.

Formula Budgeting

In some states, higher education spending levels are derived from formulas that use workload factors to determine the appropriate funding level. Workload factors can include the number and type of students enrolled, faculty to student ratios, and building space/dimensions that can easily be compared across institutions. The purpose of devising and using such workload factors in the formula budgeting process is to increase the rationality of resource allocation and the funding equity across institutions. Formula budgeting also serves to limit political forces or budgetary discretion and standardize institutional needs. States have used different methods over time to develop their formulas. Some states develop their formulas from the ground up, using statistical analyses of institutional data (such as regression modeling) or by determining the average cost of providing a particular type of service across all like institutions in the state. Other formulas are based on staffing ratios and external determinations of standard costs or workload factors based on national norms. The key to the process seems to be the isolation or identification of variables or factors that are directly related to actual program costs. States develop

formulas for both four-year and two-year institutions to account for operational differences.³³

Critics of formula budgeting note that the formula negotiation process often introduces a high degree of subjectivity, undermining the intended impartiality of funding distribution. Additionally, researchers have found that formulas “may perpetuate inequities in funding that existed before the advent of the formula, because formulas may rely on historical cost data.”³⁴

To account for some of the shortfalls of formula budgeting, some states combine an incremental budget model with funding formulas. In 2009, SHEEO found a number of states reported using a mixture of traditional and formula budgeting approaches, including Alabama, Arkansas, Kentucky, Mississippi, New Mexico, Nevada, North Dakota, Oklahoma, Texas and Virginia.³⁵ And more states are combining base budgeting approaches with a performance formula that applies to a portion of the base or any new or additional money. According to SHEEO, “formulas have tended to become more and more complex,

³³ MGT of America, *Evaluation of the NSHE Funding Formula* (2011), p. 2–6.

³⁴ Serban, “Precursors to performance funding” (New Directions for Institutional Research, 1998), p. 15–24. As stated in the Center for Higher Education Working Paper Series: CHEWP.1.2012. p. 5. Hummel. *Financing Higher Education: Approaches to Funding at Four-Year Public Institutions*.

³⁵ SHEEO, *State Budgeting for Higher Education in the United States* (June 2009), p. 10–11.

sometimes adding components for performance (student retention, higher levels of academic achievement, etc.), additional weights for various factors such as student disadvantage, and modifications to allow for cost increases, salary increases, and buffers to compensate for enrollment declines, etc.”³⁶

Program Budgeting

While most states use incremental and line-item approaches to budgeting, some are trying alternatives. These alternative budget reforms aim to integrate more information into resource allocation decisions, particularly information on program goals and performance, while also seeking to focus more attention on assessing the validity of historical budget decisions. The emergence of program budgeting as an alternative to line item budgeting reflects a desire to shift the focus of the budget process away from workload inputs and towards the expected results of government services. This approach to budget formulation and appropriations identifies programs or activities, rather than workload drivers, as the primary budget units, and presents information on program missions, goals and effectiveness. This information is intended to aid the governor and legislature in understanding the broader policy implications of their funding decisions and the expected results of services to be carried out by programs.

³⁶ Ibid.

What’s the Difference between Performance Funding and Outcomes-Based Funding?

When discussing the issue of tying state funds for higher education to performance indicators, the terms “performance funding” and “outcomes-based funding” are used interchangeably to refer to such an approach. Historically, “performance funding” was the more commonly used term. However, more recently, some experts are advocating for the use of the term “outcomes-based funding,” which they say is a clearer expression of the objective of such a model. “Institutions can ‘perform’ along numerous dimensions that have nothing to do with student success,” whereas the term “outcomes” is more specific, and associated with the “universal desire to increase the number of students graduated from the state’s colleges and universities.”¹ Along these lines, HCM Strategists’ report, *Driving Better Outcomes*, refers to early attempts at linking resource allocation to various metrics as “performance funding,” but discusses state policies currently being developed and implemented as “outcomes-based funding.”²

For consistency, NASBO will generally use the term “outcomes-based funding” throughout this document. However, when referring to state-specific efforts or resources, the term used by that state or resource will be used.

¹ Dennis Jones, National Center for Higher Education Management Systems, *Outcomes-Based Funding: The Wave of Implementation*, Prepared for Complete College America (September 9, 2013).

² Martha Snyder, HCM Strategists, *Driving Better Outcomes: Typology and Principles to Inform Outcomes-Based Funding Models* (February 2015).

State Examples



Nevada began implementing performance funding for instructional budgets during the 2013 legislative session. The “Performance Pool” is a general fund carve-out of existing funding. This carve-out was set at five percent in the first year (fiscal 2015), with incremental increases of five percentage points scheduled for each of the following fiscal years, capped at 20 percent in fiscal 2018. A working group was created to design the performance pool structure, functions, and metrics, with metrics established and differentiated by institutional tiers (university, state college, and community college). Baseline metrics are weighted to reflect the priorities of the state and the Nevada System of Higher Education. Institutions that do not receive their full performance funding by not meeting their performance targets have an opportunity to earn back the foregone funding by exceeding their performance targets in the next fiscal year. Unearned performance funds still remaining after two fiscal years will be utilized for need-based financial aid. In the inaugural year of performance funding, five out of Nevada’s seven institutions earned their full performance funding allocation, while two community colleges fell slightly short of their targets. Each biennium, the working group will review and make recommendations for changes to the performance metrics.



Arkansas also began transitioning to a partially performance-based budgeting model for its institutions a few years ago. Historically, the state has employed a base plus/minus budgeting method, but in fiscal 2011, the legislature introduced a performance-based model that (beginning in the 2013-2014 academic year) tied five percent of an institution’s state funding to performance measures. Under the model, that amount would increase each year up to a maximum of 25 percent in the 2017–2018 academic year. However, in 2013, statutory language was passed capping this performance based portion at 10 percent until such time that each institution receives at least 75 percent of their “need-based allocations.”

Performance Budgeting

State budgeting for public services is increasingly emphasizing performance, results or outcomes-based efforts. In outcomes-based funding systems, the allocation of state resources is typically based, at least in part, on evidence and performance data. Applying this type of funding model to higher education can have real benefits in terms of aligning institutional behavior and statewide goals. Some states have well-established, mature performance measurement systems in place to help inform budgetary decision-making. Meanwhile, others are just starting to implement performance-based or results-based budgeting reforms.

In general, performance budgeting at the state level can be defined as a budget approach that “presents information on program goals and performance” and “places emphasis on incorporating program performance information into the budget development and appropriations process, and allocating resources to achieve measureable results.”³⁷ In higher education, the use of a performance-based budgeting approach entails allocating public funding to institutions—at least in part—based on outcomes such as

student retention or degree production instead of, or in addition to, traditional workload or input measures like enrollment. In the context of higher education, this approach is often referred to as performance funding or outcomes-based funding.

A number of states are implementing outcomes-based models for higher education, while others are beginning the process or considering such models. As of July 2015, 32 states had some outcomes-based funding strategy in place, with five more in transition:

- Six states—Hawaii, New York, Texas, Washington, Wisconsin and Wyoming—are implementing in two-year institutions only.
- Five states—Arizona, Maine, Mississippi, Oregon³⁸ and Pennsylvania—are implementing in four-year institutions only.
- Twenty-one states—Arkansas, Colorado, Florida, Illinois, Indiana, Kansas, Louisiana, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nevada, New Mexico,

³⁷ NASBO, *Investing in Results: Using Performance Data to Inform State Budgeting* (Summer 2014), p. 4.

³⁸ As of August 2015, Oregon’s Higher Education Coordinating Commission was working to develop an outcomes-based formula for two-year institutions.

North Carolina, North Dakota, Ohio, Oklahoma, Tennessee, Utah, and Virginia—are implementing in both two-year and four-year institutions.

- Five states—Connecticut, Georgia, Iowa, South Dakota, and Vermont—are transitioning to an outcomes-based funding approach.³⁹

Although many states are using some type of outcomes-based funding, only a small share of overall higher education funds are generally tied to outcome measures. As a result, the impact of outcomes-based funding may be

significantly less than the amount of attention it has received in policy circles. Certainly, outcomes-based funding is not without its critics. Some contend that rewarding institutions for completed credit hours and degrees awarded will lead to weaker academic quality, incentivizing faculty to inflate grades and make courses easier for students to pass. Another commonly raised concern is that outcomes-based funding will encourage higher education institutions to admit fewer “at-risk” students who may not be as prepared for a postsecondary education. Part II of this guidebook offers a deeper look at state outcomes-based funding for higher education, including guidance for developing or refining an effective funding model and best practices to address many of these potential pitfalls.

³⁹ Source: National Conference of State Legislatures, “Performance-Based Funding for Higher Education” (July 31, 2015), available at <http://www.ncsl.org/research/education/performance-funding.aspx>.

History of Outcomes-Based Funding

During the latter half of the 20th century, major federal policy initiatives precipitated record-setting enrollment growth at institutions of higher education. Due in part to the Servicemen’s Readjustment Act of 1944 (the GI Bill), *Brown vs. Board of Education* in 1954, the Civil Rights Act of 1964, and the Higher Education Act of 1965, student enrollment in higher education grew from 2.3 million in 1947 to 12.2 million in 1985.¹

With increased enrollment came more state funding, and discussions about accountability of colleges and universities increased proportionally. Governors and state legislators debated who should make financial decisions concerning levels of state support and tuition rates rather than how to target resources to shape specific policies or how to evaluate investments.

Concurrently, governors, state legislators, and budget officers developed an interest in moving away from the traditional approach of using enrollment driven funding models for higher education and instead explored ways to better predict institutional performance and increase degree attainment in addition to access. State leaders began looking for incentive systems that could link campus funding levels to institutional performance outcomes.

In the 1980s, many states began requiring universities and community colleges to provide the state budget office with performance information. Although there was no formal linking of results to state funding levels, several states considered performance data along with enrollment data when making budget recommendations to the legislature and/or allocating funds. Later, budget decision-makers began to explore the use of performance measures in formulas for higher education funding, including student retention and graduation rates, course completion, operational efficiency measures, faculty productivity, job placement rates, campus diversity, and student learning. Not surprisingly, approaches varied from state to state, with some using a formula to calculate funding levels for higher education institutions, some using no formula, and other states developing hybrid models (typically using a base plus approach where the plus is calculated by a formula). All funding models, however, remained primarily driven by student enrollment.²

¹ U.S. Department of Education, “Fall Enrollment in Colleges and Universities,” *Digest of Education Statistics* (1999).

² Center for American Progress, Issue Brief: “Performance-Based Funding of Higher Education: A Detailed Look at Best Practices in Six States” (August 7, 2012).

Current Trends in Outcomes-Based Funding

A new “wave” of outcomes-based funding for higher education has been sweeping across the United States in recent years. From 2011 through 2015, the number of states implementing, experimenting with, or actively considering outcomes-based funding models rose considerably.

Limited state resources and stiff competition for state funds have contributed to a growing desire to increase accountability and promote greater efficiency in how resources are allocated. Additionally, there is a growing perception at the national level that greater postsecondary educational attainment is needed in the U.S. to boost economic growth and stay globally competitive. To tackle the postsecondary attainment challenge and ensure a skilled workforce, the federal government, states, charitable foundations and advocacy organizations have established and started working towards various college attainment goals. In 2009, the White House set a national goal that by 2020, 60 percent of adults ages 25–34 will hold an associate’s or bachelor’s degree. The Lumina Foundation, a private foundation focused on increasing U.S. higher education attainment, is also aiming to reach a 60 percent degree attainment benchmark nationally by the year 2025. And states across the country have worked with organizations like Complete College America to set statewide education attainment targets, based on state-specific future workforce demands, as well as projected and identified achievement gaps.¹

While attainment goals vary across states and institutions, there remains widespread consensus that society and individuals benefit from increased educational attainment.² According to data analyzed by the National Center for Higher Education Management Systems (NCHEMS) and the Center for Law and Social Policy, achieving a 60 percent credential attainment rate at the national level by 2025 could result in an additional \$800 billion in revenue—including \$600 billion in personal income and the remainder divided between state and federal government revenues.³

Within this context, many states have begun to explore outcomes-based funding to encourage institutions to move beyond a focus on access alone and emphasize completion.

¹ For more information, see http://www.completecollege.org/alliance_of_states/.

² For more discussion of the private and public benefits of higher education, see Sandy Baum, Jennifer Ma and Kathleen Payea, *Education Pays: The Benefits of Higher Education for Individuals and Society*, College Board Advocacy and Policy Center (2010).

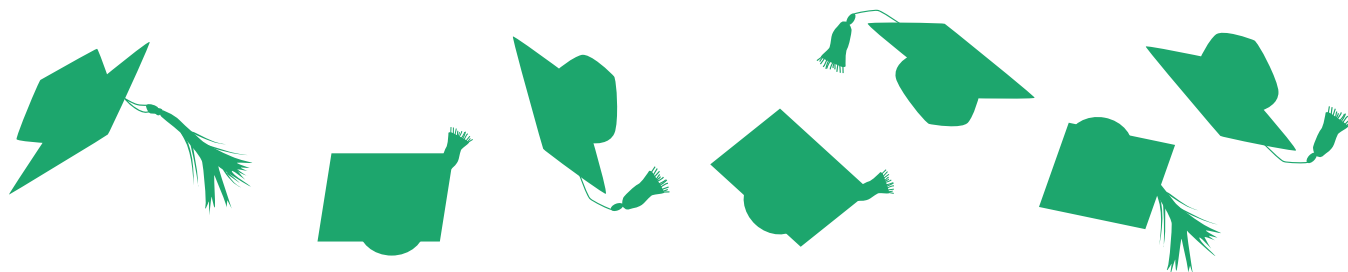
³ Matt Crellin, Patrick Kelly and Heath Prince, “Increasing College Attainment in the United States: Variations in Returns to States and Their Residents,” *Change Magazine* (July–August 2012).

CHAPTER 3—KEY TAKEAWAYS

- **States organize higher education differently.** However, most states organize public higher education into multi-campus systems, with a single governing board overseeing several institutions. Most states also have state-level coordinating bodies that oversee policy, planning, and data for higher education.
- **Appropriation methods vary by state.** Some states appropriate funds directly to higher education institutions, while others appropriate funds to a central coordinating body. In most states, institutions control revenues derived from tuition.
- **Autonomy of higher education institutions also varies.** In general, higher education institutions are more autonomous than other state-funded entities, offering the state budget office less ability to control expenditures and activities.
- **A majority of states use input-oriented budgeting methods.** Most states build their higher education budgets through an incremental or line-item approach. Some states have also developed formulas based on workload factors and analyses of average historical costs. These approaches focus on inputs, giving little weight to outputs or outcomes.
- **Emphasis on completion calls for new budget models.** The policy emphasis on college attainment goals in recent years has led more than 30 states to adopt or begin development of an outcomes-based funding model for higher education.
- **Understanding the underlying components of higher education funding formulas is critical.** Examine whether the formulas accurately reflect institutional costs and how formula variables can inhibit change and/or drive institutional behavior. For formulas with an outcomes-based component, it is important to understand where this component is applicable (the base or new monies only), the purpose of the outcomes-based funding model and the amount in relation to the rest of state higher education spending.
- **Small share of state funding for higher education based on outcomes.** While an increasing number of states are implementing an outcomes-based funding formula, in the vast majority of cases the share of funding allocated based on outcomes or performance measures remains relatively small.



CHAPTER 4



INSTITUTION-LEVEL GOVERNANCE AND BUDGETING

This chapter will discuss:

- ✓ The history of institutional independence in higher education.
- ✓ The fiduciary role of institutional governing boards, including tuition setting authority in many states.
- ✓ College and university methods of budget development.
- ✓ Common institutional accounting methods and their limitations.
- ✓ The role of states, accreditors, and credit rating agencies in monitoring the fiscal health of institutions.

TRADITION OF INDEPENDENCE

Public higher educational institutions enjoy substantially more fiscal and regulatory independence from the state than is typical of other public entities, due partly to historical and cultural factors such as the tradition of faculty shared governance and partly to the legal and policy factors inherent in the notion of “academic freedom.”⁴⁰ These

⁴⁰ These were outlined in Justice Felix Frankfurter’s 1957 Supreme Court decision: “...It is the business of a university to provide that atmosphere which is most conducive to speculation, experiment and creation. It is an atmosphere in which there prevail ‘the four essential freedoms’ of a university—to determine for itself on academic grounds who may teach, what may be taught, how it shall be taught, and who may be admitted to study.” *Sweezy v. New Hampshire*, 354 U.S. 234 (1957).

circumstances have led to a governance structure in U.S. higher education that is unique in the world—a federated system of public, nonprofit and for-profit institutions, with institutional boards of directors, and with states rather than the federal government providing the most direct government regulation of the sector.

Many argue that this governance structure contributes to the strength and global competitiveness of the U.S. higher education sector. As state appropriations for higher education have declined as a proportion of institutions’ total revenues, some have argued that higher education institutions deserve even greater independence from state oversight. But this governance structure also has its critics. A recent national Commission on Higher Education Board Governance characterized it as “cumbersome and inwardly focused,” noting that “roles and responsibilities among multiple actors are contested, and information for decision making is poor.” The Commission was particularly critical of the poor quality of fiscal information available to governing boards of institutions, which prevents them from examining long-term issues of sustainability and value—exactly the same issues of concern to most state budget officers.

The traditions of shared governance and academic freedom do not insulate higher education institutions from being held accountable for their use of funds. Universities

State Example



The **North Carolina** General Assembly has enacted several pieces of legislation over the years to grant more budget and management flexibility to the University of North Carolina System. The system's base budget is established by purpose (Instruction, Student Financial Aid, etc.) and line item (personnel, grants and aid, etc.). The UNC Board of Governors has granted all institutions in the system the authority to expend General Fund appropriations in a manner determined by the Chancellor to "maintain and advance the programs and services of the institution." So while the budget is established at a purpose and line item level, this budget flexibility essentially allows each institution to transfer funds between and among those purposes and line items without approval from the state's budget office. Each institution with this authority is also authorized to leave unspent and carry forward up to 2.5 percent of appropriations at the end of each fiscal year, which can be used for one-time purposes such as repair and renovation projects. However, certain budget changes, such as transfers of appropriation between institutions or tuition increases/decreases, are subject to approval by the Office of State Budget and Management (OSBM). All UNC institutions must also transmit expenditure and revenue information to the Office of the State Controller on a monthly basis.

are public charities and as such are legally required to demonstrate how they serve public purposes. All public and independent higher education institutions are chartered to serve a nonprofit or charitable function whether the college or university has constitutional independence from the state, is a state agency, a public/private benefit corporation, or an agency of local government. The degree of direct control by the state over institutional decisions—including the use of resources—differs depending on the legal status of the institution, but in all cases the state has a significant investment in the institution, an obligation to ensure appropriate use of state funds, and thus a considerable influence over institutional policies and practices.

All public institutions are overseen by governing boards—often called boards of trustees or regents, or sometimes visitors, overseers, or directors—who have fiduciary re-

sponsibility for their institution's effectiveness. These boards are chartered by law to oversee the assets of the institution which they hold in trust on behalf of the public. Governing boards are the ultimate fiduciary for colleges and universities. In higher education, governing boards play more of a policy role than an administrative one. They set the framework within which fiscal decisions are made and are ultimately legally accountable for the preservation of the value of the assets of the institution.

THE MULTIPLE ROLES OF GOVERNING BOARDS

Chapter 3 discussed the structure of state-level higher education governance and the role of statewide governing boards. At the institutional level, all public and nonprofit colleges and universities are governed by institutional boards, which by law have the fiduciary authority for oversight of the institutions. A fiduciary is an entity which has special responsibilities in connection with the administration, investment, and distribution of property, in this case, the charitable assets of the organization. Members of the board (called trustees, or regents, or sometimes visitors or overseers) are usually appointed by the state governor, although some states and many community colleges have elected boards. Some boards are created in the state constitution and enjoy "constitutional autonomy" while others are created in statute.

All boards are also governed by statutory and common law that spells out duties and responsibilities for boards of charitable organizations. These include the "duty of care" which generally requires officers and directors to carry out their responsibilities in good faith and with that degree of diligence, care, and skill which ordinarily prudent persons would exercise under similar circumstances and in like positions. Additionally, the "duty of loyalty" requires directors to faithfully pursue the interests of the corporation and its nonprofit purposes rather than their own interests or the interests of another person or organization. As a practical matter, this means that boards are obligated to make decisions based on a balanced view of the institution's interests, both in the long and short term. Reasonable people can disagree about how these should be calibrated, but they typically include a balance of:

- Protecting the assets of the institution, both tangible and intangible (including property, buildings, faculty and staff, reputation);
- Maintaining fiscal integrity (such as proper fund balances, enforcing accounting standards, balancing budgets);

- Meeting public or charitable priorities for the institution (including providing student access, ensuring student success, and producing academic and technical degrees of economic and workforce value to the state);
- Contributing to civic knowledge; and
- Serving the long-term needs of the state and the public for higher education (including protecting assets for future generations).

In addition to state statutes that spell out additional responsibilities for governing boards, these boards must also meet the institutional accreditation requirements of regional accreditors; these standards vary slightly across the different regions. In general, accreditation requirements are concerned with protecting faculty shared governance and ensuring the board focuses on policy and fiscal responsibilities rather than operational management, which is to be left to the president and the faculty. Additionally, accreditation requirements are concerned with safeguarding governing boards from undue influence by political, religious or corporate groups, or by a minority of members of the board.

Higher education governing boards generally have the legal authority to set tuition rates to meet their own institutional goals, objectives and budgetary needs. In 27 states, the tuition-setting authority for four-year institutions lies with state systems or boards of higher education. Single campus boards have this authority in 22 states, and multi-campus boards hold the authority in 16 states. The state board of education has tuition setting authority in one state, while direct legislative control over tuition levels only occurs in two states.⁴¹

Thus, while the state legislature and governor set appropriation levels for higher education, in most states, higher education systems or individual institutions generally have authority to set tuition and fees (though some states may impose limits on this authority through policies such as a tuition freeze). It can be advantageous for state officials to be familiar with historical tuition and fee trends, and understand how institutions have generally responded to state funding level or tuition policy changes in the past to help anticipate how colleges and universities may respond to future or pending state budget decisions.

⁴¹ Education Commission for the States, *Tuition-Setting Authority for Public Colleges and Universities* (October 2012).

INSTITUTIONAL BUDGETING METHODS

Just as state governments employ a variety of methodologies to develop their budgets, so do colleges and universities. Many of these models will look familiar, as they were discussed from the state-level perspective in Chapter 3. While it is not critical that budgeting models used by institutions match those used at the state level, substantial mismatch will contribute to mixed messaging, particularly at the institutional level, about what types of inputs (enrollments, formulaic factors) or outputs (graduates, time-to-degree) are valued and rewarded financially.

Incremental Budgeting

This model begins with a “base” budget that is adjusted incrementally up or down depending on changes in operating costs. As in state government, this approach remains very common in the higher education sector: 60 percent of institutions responding to a 2011 Inside Higher Ed survey reported using incremental budgeting.⁴² The methodology is known for its ease of use and requires fewer resources to administer. However, on its own, incremental budgeting at the institutional level—just as at the state level—tends to make limited use of data on performance and effectiveness in resource allocation decisions. Also, incremental budgeting is harder to integrate with institutional strategic planning processes since the vast majority of expenses are already assumed and are generally not subject to justification.

Formula Budgeting

Formula driven budgets rely on cost analyses of specific factors, such as student enrollment and staffing ratios. Twenty-six percent of higher education institutions report using this budget model, which is more prevalent in institutions in states that also use a formula-driven process at the state level. While relatively easy to implement, this model can be less responsive to institutional priorities unless it is frequently monitored and updated.

Performance Funding

Performance or outcome funding links funding decisions at the programmatic level with strategic priorities and performance goals. This approach is more resource-intensive to administer and is accompanied by a host of political, cul-

⁴² Inside Higher Ed, 2011 Survey of College and University Business Officers (2011). Survey is based on responses received from more than 600 campus and system chief business or financial officers (including 305 public institutions). All of the data in this chapter related to the prevalence of various budget models in higher education institutions is derived from this source.

tural and technical challenges. Twenty percent of institutions report using some type of performance funding, often in combination with other approaches. (For more discussion of performance or outcomes-based funding at the state level, see Chapter 3.)

Zero-based Budgeting

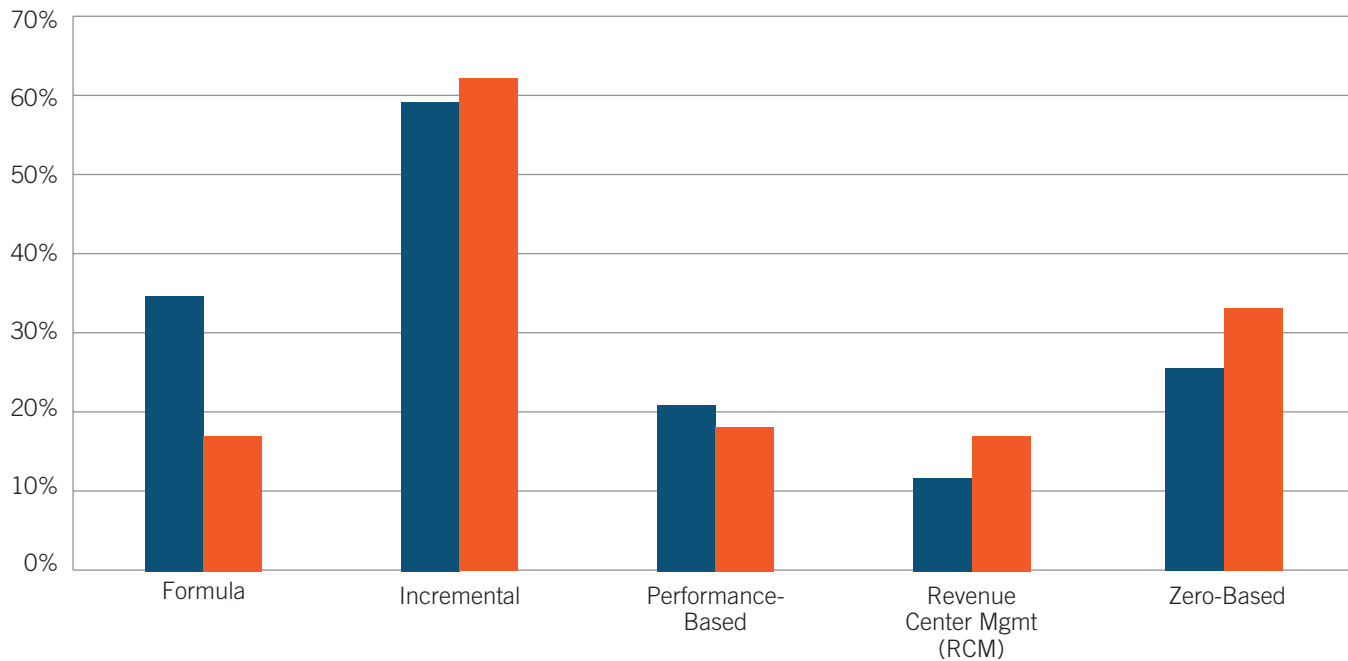
This model calls for rebuilding an institution’s budget from scratch—known as a zero base—during each budget cycle. Doing so requires justification for each and every budget component. In practice, this model is typically modified to begin with a higher base (such as 80 percent of the previous cycle’s budget) and/or occurs on a rotating schedule so that only certain portions of the budget are subject to zero-based budget analysis in a given year. However, even a modified version of this methodology can be time-consuming and resource-intensive. 30 percent of institutions reported using zero-based budgeting; notably, no public doctoral institutions indicated that they use this approach, whereas roughly 38 percent of community colleges reported using it.

“Responsibility Center” Management or Budgeting

This approach is unique to higher education. This model was first developed and adopted by the University of Pennsylvania in 1974 in response to the challenges associated with more traditional budget and management structures in higher education. Under most college and university governance models—which have a highly decentralized governance structure contrasted with centralized fiscal management—there is a disconnect between programmatic decision-making and financial accountability. This contributes to a lack of incentives for the differing programs and functions of a university to focus on reducing expenses or increasing revenues.

The responsibility center model attempts to overcome this challenge by allowing different programs or functions of the university—sometimes referred to as “revenue centers” or “responsibility centers”—to manage their own direct revenues and expenses. This approach can help improve transparency by better tracking how much revenue discrete functions of a university either generate or expend, and accountability by aligning decision-making with financial responsibility. De-

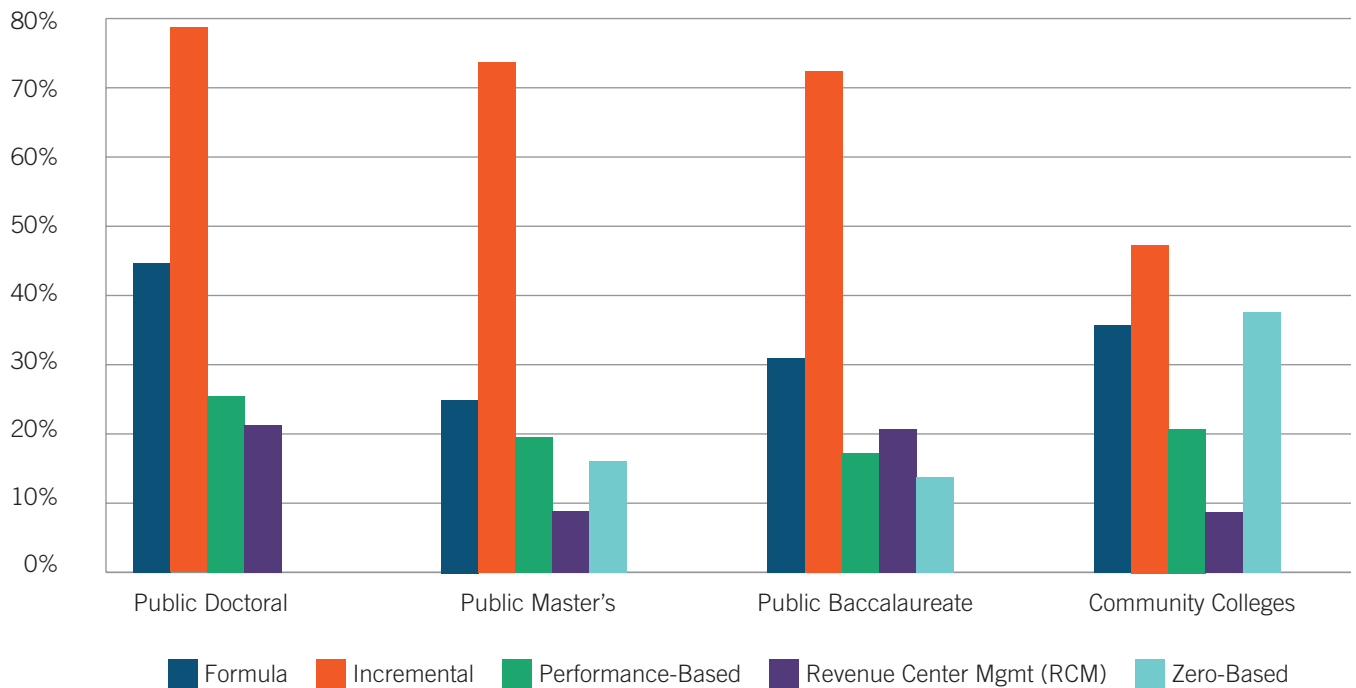
FIGURE 9 Budget Models Used at Public and Private Institutions of Higher Education



Source: Inside Higher Ed, *2011 Survey of College and University Business Officers* (2011)

■ All Public ■ All Private

FIGURE 10 Budget Models Used in Public Higher Education, by Type of Institution



Source: Inside Higher Ed, *2011 Survey of College and University Business Officers* (2011)

centralized control can have unintended consequences and should always be accompanied with appropriate checks and oversight to make sure that the financial incentives of “revenue centers” align with the strategic goals of the institution.

As of 2011, 14 percent of institutions reported using responsibility center budgeting. As state support for higher education has declined, interest in this approach has grown, at least in part because it gives academicians greater incentive to focus on generating revenues (through increased enrollment, retention, external funding, etc.) and improving efficiency.

There is a general trend of colleges shifting away from formula and incremental models and towards performance-based, zero-based, and responsibility center budgeting, though this is more the case at private institutions than publics.

College and university business officers are generally dissatisfied with the effectiveness of the budget models used at their institutions, both overall and when used for specific purposes such as managing resources during difficult times and setting priorities. At public institutions, only 37 percent of business officers rate the “overall effectiveness” of the budget model used

at their institution as 6 or 7 on a scale of 1–7 (with 1=not effective and 7=very effective). Business officers tend to rate the budget model’s effectiveness at “managing resources during good times” significantly higher than during “difficult times.”⁴³

UNIVERSITY ACCOUNTING SYSTEMS & FINANCIAL DATA

GASB Financial Standards and Annual Financial Statements

Public colleges and universities are subject to the Government Accounting Standards Board (GASB), the same agency that regulates the accounting standards of other state agencies.⁴⁴ These financial standards require uniform reporting of institutional financial statements on an annual basis. The financial statements are designed to show an institution’s fi-

⁴³ Ibid.

⁴⁴ There are a few public universities with large teaching hospitals that report using the FASB (Financial Accounting Standards Board) standards, the same standards that are used for independent institutions. The standards are substantially similar, although depreciation is treated a little differently.

HIGHLIGHTED RESOURCE

National Association of College and University Business Officers (NACUBO)

<http://www.nacubo.org/>

NACUBO is a membership organization representing the chief business and financial officers of public and private colleges and universities. The association hosts professional development programs, including an annual meeting on planning and budgeting for higher education, and produces research and educational resources aimed at advancing the economic sustainability and business processes of higher education institutions. Among many other publications, NACUBO conducts annual studies on tuition discounting and student financial services, and, in collaboration with Commonfund, produces an annual survey on endowments, which can be helpful benchmarking tools. In 2015, NACUBO began work on an Economic Models Project aimed at equipping members with tools to improve their institutions' business models and make them more sustainable.

financial health or position through a presentation of information about income, year-end fund balances, assets and liabilities. The statement must be based on audited information that is reviewed by the institution's governing board.

Changes in GASB reporting requirements over the years mean that these statements are most useful for evaluating whether a university's financial position is improving or is deteriorating over time. Changes in the last decade now require that all institutional debts or other long-term liabilities must be accounted for. As such, these statements are a good source of information on institutions' unfunded liabilities including obligations for future payments to retiree health care and to pensions.

Limits of Fund Accounting

Colleges and universities use fund accounting—a system that is organized and operated based on fund source or type. Since fund accounting segregates resources to ensure funds are not co-mingled inappropriately or illegally, the accompanying financial statements are not the best way to see how funds are used within the institutions. For instance, an institution might have positive balance sheets in their sponsored research activities (from federal contracts and grants) or in hospitals, but these restricted

revenues may not for instance be used to pay for faculty salaries or student financial aid. Fund accounting financial statements also do not show what revenue sources pay for what activities—for example, it will be difficult to ascertain which functions are funded from student tuition revenues, versus from state general funds, or from private gifts.

It can be very challenging for budget officers to get meaningful information about institutional spending. Few institutions report spending information alongside important contextual factors, such as changes over time or comparable benchmarks from other institutions. Nor do institutions routinely translate aggregate spending data into performance metrics such as cost per student, or cost per degree. Unfortunately, the higher education sector has yet to develop agreed-upon protocols for presenting such data. Several national efforts, such as the Congressional Commission on the Cost of Higher Education in the late 1990s, and a follow-up effort led by the National Association of College and University Business Officers (NACUBO), aimed to develop voluntary metrics for institutions to use to report costs. Yet, these attempts came to naught for various reasons, chief among them the problem of isolating instructional and research costs, and untangling undergraduate costs from graduate expenses.

Ideally, higher education financial data reports should adhere to the “CASH Test,” meaning they provide or allow for the following:

- C—COMPARISON. Any financial statistic should be accompanied by some comparative data to give it context. For instance, spending should be presented in both dollars and as a percentage of expenditures, or compared to spending in another institution.
- A—AVERAGES. To avoid masking patterns, data reports should emphasize averages rather than single numbers.
- S—STANDARDS or GOALS. All numbers should be framed against standards or goals for spending for that category. Most institutions do not have goals for spending.
- H—HISTORIC. All spending data should be shown in a time series, so that one can detect patterns and how spending has evolved over time.⁴⁵

⁴⁵ Developed by Kent Chabotar, a private college president and expert on higher education costs, and author of *Strategic Finance: Planning and Budgeting for Boards, Chief Executives and Finance Officers* (Association of Governing Boards of Universities and Colleges, 2006).

Indirect Cost Rates

When discussing institution-level finances, another issue worth mentioning involves indirect cost rates. Indirect costs are those overhead and administrative costs not able to be identified with a specific project, activity, or objective, but that are incurred for the joint benefit of multiple projects and/or activities. An indirect cost rate is a budgeting tool used to determine these indirect costs as a share of the direct cost base of a project or program. Some states have noted that the indirect cost rate used by higher education institutions for government grants is often too high. Not only can this lead to conflict between the institution and the government agency making the grant, and potentially make the institution less likely to receive federal grants; it can also create conflict between the university administration (which tends to prefer a higher rate) and faculty (who tends to prefer a lower rate). For this reason, indirect cost rates used by institutions should be regularly audited.

State Example



In 1997, **Ohio** passed Senate Bill 6 which calls on the Ohio Board of Regents to increase the financial accountability of state colleges and universities by using a standard set of measures to monitor the fiscal health of campuses. The Board of Regents computes a series of ratios, including a *viability ratio*, *primary reserve ratio*, and *net income ratio*. These ratios compute into composite scores that provide the Regents with an easy to use tool to assess the fiscal health of institutions. Institutions with fiscal scores below a certain threshold are placed on a “watch status” which requires the institution to adopt a financial recovery plan to remediate the status within a three-year period. During this time, the college or university is also required to collaborate with the Chancellor, Auditor of the State and Director of Budget and Management to resolve its fiscal issues.

FINANCIAL ACCOUNTABILITY AND MONITORING

It is widely understood that states and governing boards are increasingly focused on monitoring the performance of higher education institutions using various measures of student success. However, for various reasons, there is also growing attention and desire on the part of states to monitor the fiscal health and responsibility of colleges and universities. As discussed earlier in this Guidebook, IPEDS data can be used to assess and benchmark institutions’ finances, but timing delays limit the usefulness of this data for timely fiscal oversight. Some states, such as Ohio (see state example below), have established their own financial accountability measures to assist their efforts to monitor the fiscal health of institutions.

Credit rating agencies, such as Moody’s, maintain financial indicators for institutions that are in the bond market, and can be another good resource. While the most troubled institutions may not be in the bond market, a governing board could specially request and pay for a study to be conducted on the institution in question.

Regional institution accreditors also play an important role in evaluating and monitoring the financial health and responsibility of accredited and candidate institutions. They can be helpful resources for states trying to get a better handle on the fiscal condition of state colleges and universities and learn what “red flags” to look for. For example, the Higher Learning Commission (HLC), which accredits degree-granting postsecondary institutions in 19 states, explains that it uses financial data submitted by institutions to generate a Composite Financial Index (CFI).⁴⁶ For public institutions, HLC uses financial ratios recommended in *Strategic Financial Analysis for Higher Education: Identifying, Measuring & Reporting Financial Risk*.⁴⁷ The U.S. Department of Education recognizes the following regional accrediting organizations for degree-granting institutions, shown above.

⁴⁶ For more information, visit Higher Learning Commission, “Financial Indicator Process,” at <https://www.hlcommission.org/Monitoring/financial-indicator-process.html>.

⁴⁷ KPMG LLP; Prager, Sealy & Co., LLC; Attain LLC, *Strategic Financial Analysis for Higher Education: Identifying, Measuring & Reporting Financial Risks (Seventh Edition)* (2010).

| Accrediting Organization | Scope of Accreditation |
|---|---|
| Middle States Commission on Higher Education (MSCHE) www.msche.org | Delaware, the District of Columbia, Maryland, New Jersey, New York, Pennsylvania, Puerto Rico, and the U.S. Virgin Islands |
| New England Association of Schools and Colleges Commission on Institutions of Higher Education (NEASC-CIHE) http://cihe.neasc.org | Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont |
| North Central Association of Colleges and Schools, the Higher Learning Commission (HLC) http://www.hlcommission.org/ | Arizona, Arkansas, Colorado, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, New Mexico, North Dakota, Ohio, Oklahoma, South Dakota, West Virginia, Wisconsin, and Wyoming |
| Northwest Commission on Colleges and Universities http://www.nwccu.org/ | Alaska, Idaho, Montana, Nevada, Oregon, Utah, and Washington |
| Southern Association of Colleges and Schools (SAC-SCOC) Commission on Colleges www.sacscoc.org | Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia |
| Western Association of Schools and Colleges, Accrediting Commission for Community and Junior Colleges www.accjc.org WASC, Senior College and University Commission (WSCUC) www.wascsenior.org | California, Hawaii, the United States territories of Guam and American Samoa, the Republic of Palau, the Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, and the Republic of the Marshall Islands |

Source: U.S. Department of Education. For more information on scope of accreditation of these regional agencies as well as national accrediting agencies, see: http://www2.ed.gov/admins/finaid/accred/accreditation_pg6.html

CHAPTER 4—KEY TAKEAWAYS

- **Higher education enjoys many freedoms.** Higher education institutions have substantially more fiscal and regulatory independence from the state than is typical of other public entities due partly to the traditions of faculty shared governance and academic freedom. States, however, have a legitimate interest in the performance of institutions to ensure appropriate use of state funds.
- **Governing boards play a critical role.** Higher education institutions have governing boards with specified legal and fiduciary duties. In most states, higher education boards have the authority to set tuition.
- **Take note of how your state differentiates between tuition and fees.** Know which entity or entities have the legal authority to set tuition rates and what authority higher education institutions have to set student fee levels. Public institutions in some states may have a limited ability to set tuition rates but have complete control over the fees they charge students. This scenario may lead institutions to increase their reliance on fees.
- **Become familiar with historical tuition rate trends.** In the past, have higher education institutions responded to tuition freezes or capped appropriations by increasing various fees charged to students? Understanding how tuition and fees were increased (or decreased) under past budget scenarios will help you better anticipate how higher education institutions may respond to future or pending state budget decisions.
- **Incremental budgeting still favored by institutions.** Most public colleges and universities use an incremental method of budget development. Campus-level business officers are generally dissatisfied with their institution's approach to budget development, particularly for helping to make decisions in difficult budget years.
- **Accounting data limited in its usefulness.** Institutions must follow certain common accounting practices, but frequently the data they report lack the kind of contextual information that state budget analysts need to understand how institutional spending is changing and how it compares to other institutions.
- **States can establish financial accountability metrics to monitor institutions' fiscal health.** Regional accrediting organizations and credit rating agencies, which also play an important role in monitoring the financial responsibility of institutions, can also be a useful resource for understanding how to set metrics and apply them.



PART II

A PATH FORWARD—STRATEGIC STATE BUDGETING FOR HIGHER EDUCATION

NOTE TO THE BUDGET ANALYST

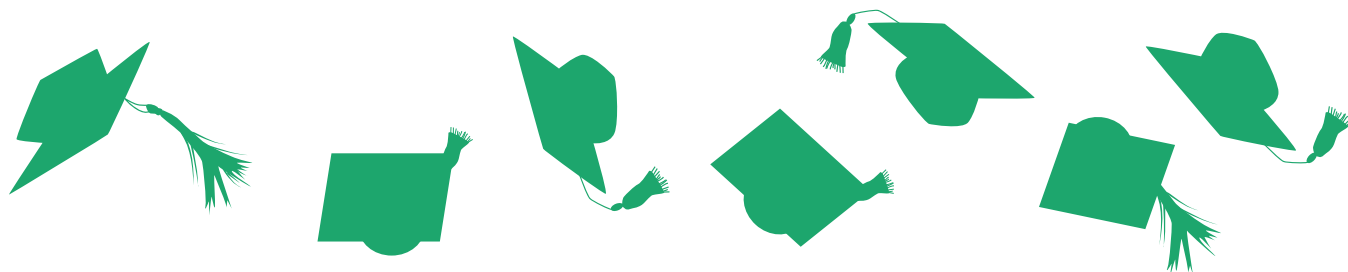
As a budget officer or analyst with oversight over state appropriations for higher education, your job is challenging. The organizational structures of universities and community colleges are complicated, their funding sources are diverse, their policies are complex, and their governance structure is driven by a combination of academic customs dating back hundreds of years and an ever-evolving state and national policy and political landscape. Watching every decision being considered by budget officials is a long list of concerned stakeholders (and critics), including students and their parents, governments, boards, faculty and administrators, accreditation agencies, and the media. The level of intensity increases exponentially when a state is led by someone seeking to be the next “education governor” or during a fiscal downturn when governors and legislators must balance state budgets.

Challenging as the job is, it also offers substantial opportunities to influence positive change. Whether preparing budget recommendations for the upcoming fiscal year or executing budgets on a daily basis, you are responsible for making decisions that can profoundly affect your state’s economy and the lives of its citizenry for years. The budget analyst is also uniquely positioned to have influence outside the parameters of the state budget. You may find that many people are interested in your point of view and in trying to shape it, including legislators and their staff members, state agency administrators, university officials, and other stakeholders and advocates. By engaging with these individuals in a thoughtful way, over time you can develop indirect influence, or “soft power” in the higher education policy community in your state. You can make the most of this unique position and opportunity by learning as much as possible about your subject matter, by being accessible, and by asking for more information or help when you need it.

Part I of this guidebook aimed to provide foundational information for state budget officers and analysts, both to help them do their jobs effectively and to participate in broader conversations about higher education funding and policymaking. Among other topics, Part I examined: how institutions get and spend their money; the various budget approaches used by states to fund higher education; the role of university governance structures; and how colleges and universities budget internally. With a firm grasp of these core concepts, budget analysts and officers can better envision what changes could lead to a more effective and efficient public higher education system, and also how the state budget office can help facilitate such changes.

While Part I of this guidebook was about navigating the current landscape, Part II is about charting a new path forward. The chapters that follow provide strategies for more effective higher education budgeting and identify policy areas where you can influence change indirectly. More specifically, Part II will discuss the importance of goal setting, including different types of goals; strategies to help align expenditures with goals; and a discussion of how to identify policy levers to improve higher education outcomes.

CHAPTER 5



KNOW WHERE YOU'RE GOING *SETTING GOALS FOR HIGHER EDUCATION*

This chapter will discuss:

- ✓ The different types of goals that states are setting for higher education.
- ✓ Principles to consider in establishing goals and measuring progress.

Facing increased demand for higher education and ongoing fiscal constraints following years of recession, states are under more pressure than ever to spend their higher education dollars wisely. Much has been said and written about the importance of setting goals to guide higher education policy and fiscal decisions.

TYPES OF GOALS

While higher education goals are critically important, it is equally if not more important to understand that goals can originate from many sources and can take many shapes. In approximately 26 states, sustained efforts to convene stakeholders have led to widely accepted or official state goals for higher education (see “State Examples”).

While this approach is ideal for broad buy-in, it is not the only way to achieve greater coherence in higher education policy and fiscal decisions. (And unfortunately, even formal

statewide goals are no guarantee that subsequent policy decisions will be aligned to those goals; sustained effort, leadership, and political will are also required.) Governors, legislatures, or even legislative caucuses can set goals for higher education. Higher education systems or institutions may also set goals. Finally, some combination of these parties may agree on goals and commit to them informally or formally.

Goals can address a wide array of outcomes:

- **Access goals** articulate whom the state or system wishes to serve, whether in numbers, as a percentage of the population at large, among graduating high school seniors, or by underrepresented racial/ethnic populations.
- **Affordability goals** are related to access, but articulate more specifically how a student’s financial situation is related to college access. Sometimes affordability goals are articulated as an ideal share of costs between the state and the student.
- **Completion goals** articulate the number or proportion of students who complete college with a certificate or degree, or who transfer from a two-year to four-year institution, or who achieve other milestones on the path to achieving a baccalaureate degree, such as completing 30 units of coursework. They may also represent the state’s aim to close completion gaps between students of different races

or economic backgrounds. (See sidebar for a discussion of benchmarks used to measure completion rates.)

- **Attainment goals** articulate the ideal proportion of the population that should be college educated (e.g., 60% of adults with meaningful post-secondary credentials or degrees). These goals may be set at the state or regional level.
- **Cost and efficiency goals** articulate a desired outcome divided by a desired cost to attain that outcome. Such goals could include cost-per-degree or time-to-degree.
- **Economic development goals** articulate how well the state's higher education system responds to workforce and research needs, for example by providing certain degree programs or credentials or by fostering innovation.

GOAL-SETTING CONSIDERATIONS

If there are no readily available goals in your state or they are too narrow (such as historic goals that focus exclusively on access), you can initiate goal-setting for your Governor's administration, for your budget office, or even for your specific organizational unit within the budget office. In some circumstances, such goals can be made public; if not, they can still serve as a tool for bringing coherence to discussions and fiscal decisions originating from the state budget office. Such internal consistency is valuable in its own right and can also provide a good first step toward getting buy-in from other individuals and entities.

State Examples



Tennessee's "Drive to 55" campaign reflects the state's adoption of the Complete College Tennessee Act in 2010, which aims to have 55 percent of the Tennessee population holding associate's degrees or higher by 2025. (See <http://driveto55.org/>)



Texas's Higher Education Coordinating Board set a new goal in its 15-year strategic plan that 60 percent of state residents between the ages of 25 and 34 hold a postsecondary degree or certificate by 2030. The "60x30TX" strategic plan also contains other broad statewide goals, including that by 2030, all graduates from Texas public higher education institutions will have completed programs with "identified marketable skills." (See <http://www.theccb.state.tx.us/>)

HIGHLIGHTED RESOURCE

National Center for Higher Education Management Systems Information Center

<http://www.higheredinfo.org/>

This interactive website provides several useful performance measures organized by state that can help inform the goal-setting process, including: data on student attainment, access, affordability, and completion; information on higher education efficiency, effectiveness and finance; and state workforce data and economic conditions. State-level finance information on this site can be organized in a number of ways, including a "state profile" that shows various measures of revenues and support, how a given state compares to national averages, and highs and lows in each category. This site is an easily available source for state and regional data on employment trends and workforce data.

Because goals are developed in different ways, by different parties, and for different policy, political, and practical purposes, they vary greatly in the degree to which they are actually attainable. It can be very challenging to evaluate how realistic a given goal is, and how much improvement in a particular metric can reasonably be expected over a given time period. Institutions are understandably wary of goals set too high—especially if they know or suspect that the goals will ultimately be used as part of a performance based funding system—while state officials may be inclined to set aggressive goals in order to convey high expectations and try to maximize performance.

Goals for higher education also need to take into consideration differing missions and roles across higher education systems. Public research institutions, master's institutions, and community colleges will contribute to state higher education goals in very different ways. Nonetheless, it is important that states think clearly about what it expects from each system, and how the performance of each will add up to achieve a set of overarching state goals. As the labor market evolves and state education needs change over time, it is also important to periodically reassess the mix of higher education institutions in the state and the state's corresponding expectations of these institutions.

Four-Year Degrees but Six-Year Completion Rates?

Currently, the benchmarks used to measure degree completion commonly look at how many associate's degree students finish within three years and how many bachelor's degree candidates finish within six years, even though these degrees are designed to be completed in two years and four years, respectively. Some organizations are pushing for this to change, arguing that such metrics presume an acceptance of the status quo that so many students fail to graduate on time. However, others point out that there are a number of valid reasons why many students take five or six years to complete their degree, such as health or family issues, switching majors, pursuing credit-intensive fields of study, attending school part-time, and so on. Both sides of this argument are worth considering. Regardless, states setting completion goals may consider incorporating incentives that recognize and reward institutions that take steps to promote more timely degree completion.

HIGHLIGHTED RESOURCES

The Lumina Foundation's Strategy Labs are an open platform for leaders and influencers in all 50 states to come together to share research, data and professional experiences to advance Goal 2025—which seeks to increase the proportion of Americans with high-quality degrees, certificates and other credentials to 60 percent by the year 2025. The Strategy Labs enable Lumina Foundation to connect and collaborate with state and system-level policymakers and higher education leaders to advance the State Policy Agenda and to focus on increased educational attainment. (For more information on Goal 2025 and the State Policy Agenda, visit: <http://strategylabs.luminafoundation.org/goal-2025/>).

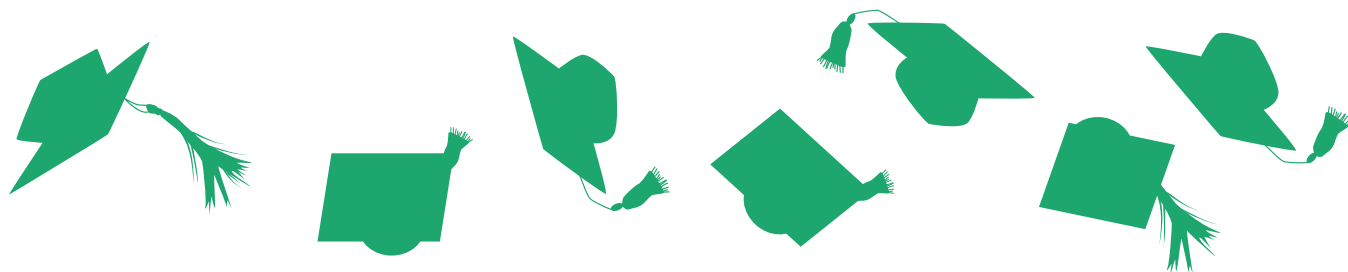
Complete College America has a single mission—to work with states to significantly increase the number of Americans with quality career certificates or college degrees and to close attainment gaps for traditionally underrepresented populations. For more information about Complete College America, visit: <http://completecollege.org/>.

CHAPTER 5—KEY TAKEAWAYS

- **Look for higher education goals in your state.** If your state does not have formal statewide goals, consider other potential sources. Has your state’s higher education system articulated its own goals? Or look for other statements of desired performance, such as historic commitments. There may be ways to adopt or adapt existing goals, targets, or expressions of desired performance. Doing so can lend credibility and coherence to subsequent policy and fiscal decisions.
- **If needed, help develop new or additional goals—at whatever level is feasible.** If there are no readily available goals in your state or they are too narrow (such as historic goals that focus exclusively on access), you can initiate goal-setting for your Governor’s administration, for your budget office, or even for your specific organizational unit within the budget office. In some circumstances, such goals can be made public; if not, they can still serve as a tool for bringing coherence to discussions and fiscal decisions originating from the state budget office. Such internal consistency is valuable in its own right and can also provide a good first step toward getting buy-in from other individuals and entities.
- **Exercise caution.** If you are working with existing goals, understand the context in which they were created and the evidence or assumptions on which they are based. The more you know about the purpose and development of the goals, the more you will be able to use them appropriately. For example, highly aspirational goals created for symbolic reasons are not appropriate for assigning fiscal penalties if institutions fail to meet them. If you are part of a team that is developing new goals for internal or external purposes, be honest about your own limitations. Seek assistance from credible outside organizations such as Complete College America or The Lumina Foundation’s Strategy Labs (see highlighted resources) as well as from stakeholders whose buy-in you will need down the road. You can also reach out to other states that have been through the goal-setting process for guidance. Be clear and reasonable about what goals are to be used for, and not used for.



CHAPTER 6



WHERE THE REAL WORK BEGINS *STRATEGIES FOR ALIGNING EXPENDITURES TO GOALS*

This chapter will discuss:

- ✓ The challenges associated with making changes to a state's base funding for higher education.
- ✓ How states can better target higher education investments to align with goals.
- ✓ How states can incorporate desired outcomes or performance levels into funding mechanisms.
- ✓ How states can make more effective capital investments and encourage institutions to do the same.
- ✓ Strategies for the budget analyst to find opportunities and encourage greater alignment between expenditures and goals.
- ✓ How states can influence student and institutional behavior through state-based student aid programs.
- ✓ Strategies for the budget analyst: How to find opportunities and encourage greater alignment between expenditures and goals.

Identifying goals for higher education can set the stage for more coherent policy and fiscal decision making. While it is far preferable to have official state goals, and about 50 percent of states do, it is still possible to make progress without them. In this chapter we use the term “goals” broadly. Depending on your state context, it may refer to formal state goals, system

goals, or goals set by your Administration, Legislature, or even budget office. Even if your state is far from having official goals with broad buy-in, it is important that your work be grounded in clear goals. A budget office that is guided by a clear vision and an intent to systematically align expenditures to goals will be more effective and more credible than it otherwise would.

Nonetheless, goal-setting is just a first step. As complicated and difficult as it can be to achieve consensus on goals, it is even harder to start making fiscal changes to align with those goals, as virtually any fiscal change will create “winners” and “losers,” especially when fiscal resources are limited. Unfortunately, budget offices cannot be immune to the political consequences of their actions. As you work on identifying opportunities for greater alignment of appropriations to goals, chances are good that it will be easier to identify the “right thing to do” than to actually do it. Indeed, in most of the states that have set educational attainment goals, these goals are not yet truly driving finance and policy.

As described in this chapter, there are numerous strategies for aligning state higher education expenditures to goals. Of course, not all strategies will be equally relevant or feasible in every state. The budget analyst's job is to be aware of a range of strategies and be alert for windows of opportunity as they arise.

Part I of this guidebook outlined various types of state expenditures for higher education including general operating funds,

capital expenditures, and student financial aid programs. The diagram below displays how these state funds fit in with other key elements of higher education finance policy.

This chapter describes strategies for aligning funding to goals in each of these expenditure areas. Developing a strategic state budget for higher education requires coordination and alignment of these different funding streams so that they are mutually reinforcing—or at a minimum, don’t send competing or mixed messages to higher education institutions.

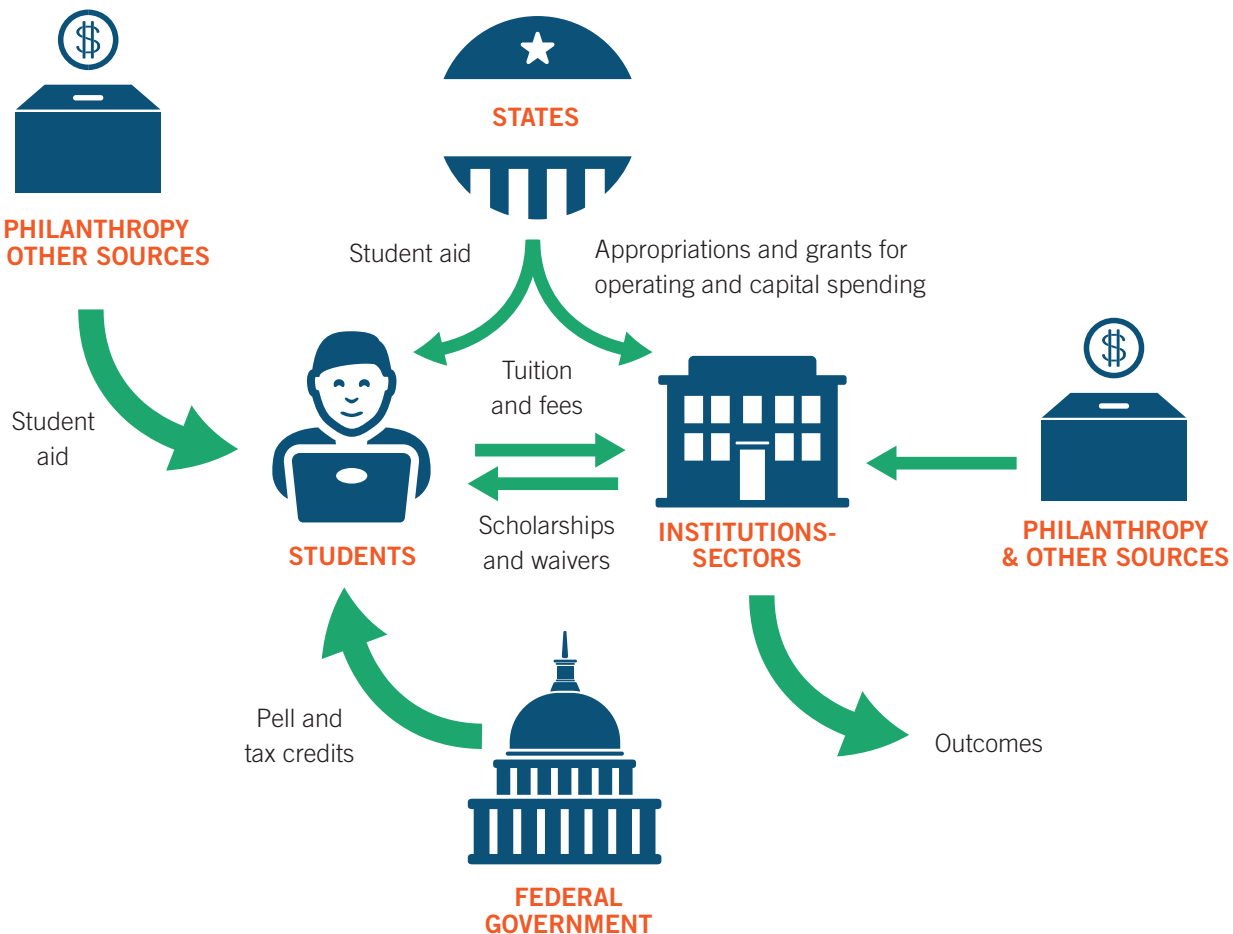
THE BASE

The portion of appropriations for maintaining current capacity can be described as “the base.” The base is the most substantial portion of the higher education budget and also the most difficult to change and intentionally align to goals. As described in Part I of this guidebook, mandatory cost drivers like

pensions, salary agreements, benefits (including health care), and utilities can inflate base budgets substantially without any program or outcome improvement. The base represents a historical accumulation of decisions, formulas, and assumptions, many of which have gone unchallenged since they were first established. The passive nature of these budget “decisions,” coupled with seemingly unstoppable cost drivers, makes it easy to accept the base budget as a fixed object.

Still, whether intentional or not, the base appropriation is an expression of the state’s commitment to funding public higher education. Furthermore, the relationship between the base state appropriation and the portion of it that is derived from students is an expression of who should pay for higher education, and how much. Though it doesn’t happen very often, states should thoroughly consider the question: What share of higher education costs should be borne by the state versus the student? Though some states have tackled this

FIGURE 11 Key Elements of Higher Education Finance Policy



Source: National Center of Higher Education Management Systems (NCHEMS)

question head-on, most have drifted into their current state/student split.

Analyzing Historical Trends

As described in Chapter 1, higher education costs generally have increased over time, state support has declined, and a greater proportion of higher education costs have been shifted onto students. You can study and understand how these national trends are playing out in your own state, and particularly the impact these changes are having on students. Having a firm grasp on historical trends will make you more aware of the potential effects of the budget decisions you make today, and may help you tackle at least a few of the seemingly fixed aspects of the base appropriation.

Understanding Cost Drivers

Additionally, it is helpful to learn as much as possible about the cost drivers underlying the base. Budget analysts can do this by asking good questions of higher education finance officers. Gathering the following technical and managerial information will give the analyst a better understanding of current costs and future cost pressures and allow clearer communication between state level analysts and university-based financial officers:

- Total labor costs (wages plus benefits) per student;
- The ratio of faculty to students;
- The number and salary of contract or part-time faculty vs. tenure-track faculty;
- The number and salary of administrative staff vs. educators;
- How the number of full-time faculty and administrators has changed relative to enrollment over time;
- The number and salary of governing board members and executive level managers vs. educators;
- The amount spent on equipment, supplies, contract services, utilities and other non-personnel operating expenses;
- Energy cost and consumption per square foot;
- Tuition and operating appropriations per student.

Analyzing these kinds of expenses can help hold institutions more accountable to their stated missions, to students and taxpayers.

Using Funding Exclusions

Despite the difficulty of making lasting changes to the base, there are strategies that budget officers can employ to do so. One strategy is funding exclusions, meaning the establishment of specified activities the state is *not* willing to pay

for, which are therefore removed from “the base.” Under the status quo, higher education institutions, both public and independent, are generally rewarded financially for expanding their missions. Expansion of course and program offerings can lead to more enrolled students, and therefore more revenue potential. (Of course, much of tuition revenue is really coming from government sources in the form of financial aid, including grants and loans to students.) In the quest for more tuition revenue, many public colleges and universities have also increasingly focused on recruiting out-of-state and international students who in most states pay significantly higher tuition rates, which may also be perceived as a form of mission creep. States wishing to counteract these incentives can use funding exclusions to help discourage such practices and promote behaviors more aligned with the public mission of these institutions. For instance, a state may exclude certain courses, programs or students from being eligible for subsidy if they fall outside the public mission of the institution.

TARGETED INVESTMENTS AND REQUIREMENTS

In addition to examining and refining the base, another strategy to consider is creating a fund for targeted investments that explicitly align with state goals for higher education. Whereas the base is concerned with maintaining existing higher education capacity (ideally as efficiently and effectively as possible), money in this “investment” bucket would aim to build the additional capacity necessary to meet said goals. As states strive to meet certain goals for educational attainment, they will need to strategically target resources where they will make the largest difference.

For example, during the goal-setting process, a state may have identified a certain skillset deemed valuable in moving the state’s economy forward. The state can direct money in this investment fund towards programs that can equip students with this skillset. As another example, a state may aim to serve a specific target population for whom postsecondary educational attainment and economic prospects are low, and choose to invest in degree, certificate or licensure programs that are well-positioned to educate this population, perhaps through alternative delivery methods. Or the state could choose to target investments in otherwise underserved or economically depressed regions. In particular, it is important to recognize as part of this discussion that states will not be able to meet their goals by focusing on traditional students entering college directly from high school. Rather, they will need to also expand

State Example



Maryland, in an effort to meet its state-wide goal that 55% of adult Marylanders will hold an associate or bachelor's degree by 2025, established the "One Step Away" competitive institutional grant program. One Step Away provides funds to public and nonprofit higher education institutions to "identify, contact, reenroll, and graduate near-completer students," who have earned a significant number of college credits but never completed their degree. Visit <http://www.mhec.state.md.us/grants/CCM/OneStepAway.asp> for more information.

A number of other states have embarked on efforts similar to Maryland aimed at targeting adults with some college credit but no degree in an attempt to bolster college completion. A Signature Report from the National Student Clearinghouse Research Center, *Some College, No Degree: A National View of Students with Some College Enrollment, but No Completion* (July 28, 2014), explores this issue further and also contains state-by-state data. See <http://nscresearchcenter.org/signaturereport7/>.

postsecondary attainment among adults and other nontraditional students, who may require alternative recruitment, retention, and delivery strategies.

All of these strategies require creativity, but more importantly, require thorough consideration of existing programs, how the new investment or requirement will affect existing programs, and what kind of implementation challenges to expect. This kind of knowledge can be hard to obtain while sitting in a central budget office. State-level budget analysts can make every effort to communicate with and learn from financial officers at the system level, who not only hold valuable information about programs and future plans, but also likely have good ideas about how to increase efficiency. (For more discussion on targeted investments as they relate capital expenditures, see the "Capital Finance" section later in this chapter.)

State Example



Michigan provides an example of how states can also make investments more targeted by attaching conditions to new funding. The state requires universities to participate in the Michigan Transfer Wizard as a condition for receiving new performance funding. The Transfer Wizard allows students to sort classes at every public institution, by both the original and destination institutions and see if they transfer, how they transfer, and how many credits will transfer. This allows students who start at a community college and intend to transfer to a four-year college or university a way to plan out a maximally efficient schedule, reducing the likelihood that a class paid for and taken at one institution would need to be retaken at the destination institution. This eliminates "wasted" tuition dollars and reduces the chance that a student gets discouraged from transferring or completing.

Get to know University CFOs

College and university CFOs likely share many of the frustrations of state budget officers and analysts, and they have the potential to be valuable partners. According to a survey conducted by the National Association of College and University Business Officers (NACUBO) in 2013, 42 percent of respondents highlighted a “culture that resists change” as one of their largest sources of frustration in their jobs.¹ This finding implies that higher education business officers are open to exploring efforts to improve institutional financial management and business practices.

Developing strong communication with system or campus fiscal officers can be achieved by **sharing as much information as possible** regarding goals of the Governor; revenue growth and expansion availability; expectations of budget reductions; or special legislation that might be on the horizon that could impact the university system or an individual campus. Accordingly, the university CFO may want to share information regarding future campus plans or long-term plans for new programs, or changes in enrollment resulting from declining degrees in a particular area of study. If both parties can have a better appreciation of the goals of each, conflict and frustration can be avoided. While much of this discussion will surface during budget preparation, it is important to **exchange information early** to build trust, ensure that both parties have the ability to accurately represent potential future outcomes, and seek collaborative ways to work to resolve issues. Such resolutions can mean a much smoother relationship as budget execution occurs.

University CFOs are confronted with issues not unlike those of a city or county manager in that they have fiscal responsibility for entities that maintain not just academic curriculum but also the physical infrastructure of the campus, including roadways, residence halls, HVAC systems, recreational complexes, athletic facilities, parking lots, and food service operations, all of which serve the student body and academic environment. While many of these operations are “self-supporting” with revenues generated from user fees, CFOs may use as much leverage as possible to find ways to augment or subsidize these programs from appropriated funds. In times of a struggling economy when tax revenues are declining or leveling off, budget analysts are pressed to find ways to reduce or minimize state appropriations allocated to all agencies, including universities. Try to **learn about the challenges of the CFO** and become as familiar as possible with the internal challenges of the college, university, or system. This knowledge can be vital to the analyst as discussions begin regarding limited resources available for continuation of expansion in the higher education environment. It is particularly important to **understand the various revenue sources available to a university CFO** and the corresponding restrictions and limitations applicable to each source. Good communications between an analyst and his or her counterparts on campus can lead to creative budget solutions to mutual problems.

¹ National Association of College and University Business Officers, *2013 National Profile of Higher Education Chief Business Officers*, available for purchase online at www.nacubo.org.

FUNDING OUTCOMES AND PERFORMANCE

Another set of strategies for achieving greater alignment of state goals and expenditures is to tie a portion of institutional funding to specified outcomes or performance measures. Such strategies can help align institutional incentives with statewide goals. This approach has gained popularity and attention in recent years, though in many different forms. Chapter 3 in Part I of this guidebook describes the current landscape of outcomes-based funding in the U.S.; this section provides key considerations for

states that are developing or refining a performance- or outcomes-based funding strategy.

There are myriad options for integrating specific outcomes into funding decisions, and states must find the approach that will work best given existing policies and political conditions. One general approach is for states to shift away from line-item spending controls and towards holding institutions accountable for results. For example, if institutions receive funding for salaries strictly based on the number of FTE employees and employee type, rather than as a lump sum, they have no in-

State Example



In 2014, **California** appropriated \$50 million in one-time resources for the Governor's Awards for Innovation in Higher Education program. This competitive program awarded a monetary prize to colleges and multi-institution partnerships that changed existing policies, practices, or systems in ways that significantly increase the number of baccalaureate degrees awarded, allow students to complete baccalaureate degrees within four years, and/or recognize prior learning that occurs in other educational institutions or elsewhere. Awards were based on the overall significance of an institution's (or partnership's) changes and whether those changes aligned to the Governor's goals, which included: reducing costs (to both students and institutions), being scalable, and involving a broad range of institutions (including K–12 schools, community colleges, and the state's four-year institutions).

These kinds of state activities are a shift away from input-driven budgeting and towards a greater emphasis on outcomes. Such policies can also set the stage for a more robust performance-funding model at a future point.

centive to eliminate unnecessary faculty or administrative positions. Giving institutions greater decision-making authority for how they manage and spend their resources can be combined with greater accountability and transparency for institutions' outcomes on access, affordability and student success.

Outcomes-Based Funding Formulas

A more direct approach is to build institutional performance measures into allocation formulas for all institutions. The measures selected should align closely to state goals. For example, if the goal is to increase the number of degrees, then states can develop a funding formula that rewards institutions for each student that completes a degree, or reaches a milestone on the path toward completion, such as a specified number of credits earned. If the goal is to produce more teachers, nurses or engineers, then using metrics and a formula weighted accordingly is the best practice.

States' current outcomes-based funding strategies vary in how they are structured, but generally represent only a small frac-

tion of total higher education spending. State plans also vary by the metrics they use and the adjustments allowed to account for institutional differences due to size, demographics, and mission. Working with a national organization that has broad knowledge of existing strategies can be helpful for states developing or refining an outcomes-based funding model.

For instance, the National Center for Higher Education Management Systems (NCHEMS) has provided technical assistance to a number of states during the outcomes-based funding design and implementation process. Often, such efforts are led by the state higher education agency or system governing board, and are also sometimes initiated by legislation. In many cases, budget officers and

State Example



Colorado passed legislation in 2014 mandating the development of an outcomes-based funding model for higher education. The bill signed into law outlined an aggressive timeline for implementation. The project began in July 2014, and over the next several months entailed a comprehensive outreach process, cost driver analysis, and formula modeling. The fiscal 2016 budget request to the legislature, submitted in November 2014, included a draft of the potential factors, performance metrics, and weights. The plan was finalized in January 2015, and the budget request was updated accordingly, with implementation planned for the beginning of fiscal 2016. Colorado designed the formula with two guiding objectives: 1) treat institutions differently based on mission and cost structures and 2) reward performance based on outcomes. Implementing the formula and gaining buy-in from institutions was made easier by the fact that the governor recommended a 10 percent one-time increase in state funding for higher education. The formula is not set up as an entitlement program, but rather an allocation model for funds available. Colorado found that having a clear set of goals, outside expertise, and a strongly inclusive process was critical to the success of the project. The ambitious timeframe set forth in the legislation also helped move the project forward.

For more information, see <http://higher.ed.colorado.gov/Publications/General/1319/>.

State Example



In 2012, the **Missouri** Coordinating Board for Higher Education adopted a performance-funding model that has been used to allocate new institutional funding totaling \$80 million since the model's inception. While Missouri's model does not reallocate existing base funding, it does require that at least 90 percent of new funding be based on achievement of specific performance metrics and that no more than 10 percent of the new funding be used to address inequitable state funding per student. Performance funding increases are added to institutions' core budgets the following year and maintaining the funds earned through the performance funding model is not dependent upon future institutional performance.

Missouri institutions report on five performance indicators that measure the following: student success and progress, increased degree attainment, quality of student learning, financial responsibility and efficiency, and success in institution-specific areas. A sixth performance measure related to job placement is to be used in any year in which the state unemployment rate did not increase from the prior year.

For more information, see <http://dhe.mo.gov/documents/PerformanceFundingReport.pdf>

State Example



Ohio and **Tennessee** both allocate significant levels of higher education funding based on outcomes tied to statewide goals, and their funding models share a number of similarities. Ohio distributes 100 percent of its State Share of Instruction (SSI) based on outcome measures, while Tennessee ties 85 percent of state funding for higher education to outcomes. Both states factor in degree completion as a key metric in their funding formulas, and also reward institutions for serving at-risk or disadvantaged student populations. Ohio and Tennessee each used a phased-in approach for implementing their outcomes-based funding models. To help build some stability into the model, both states also use a three-year rolling average for course and degree completions to determine fund allocations for institutions.

For more information on Ohio's funding model, see <https://www.ohiohighered.org/press/new-performance-based-model-higher-education-ohio>.

For more information on Tennessee's outcomes-based funding formula, see <http://thec.ppr.tn.gov/THECSIS/CompleteCollegeTN/Default.aspx>.

analysts do not play a large role in developing the funding model. NCHEMS recommends, however, that the budget office be closely involved in the negotiations and discussions to design the model, and that they get involved early on in the process.

A number of associations and think tanks in the state higher education policy sphere have developed sets of best practices, recommendations and guiding principles for states that are developing (or refining) performance or outcomes-based funding models. These can be a good place to start for states that are considering developing an outcomes-based funding model, or for assessing ways to improve their current model. See text box for a list of the most commonly cited best practices and considerations for implementing an outcomes-based funding formula.

Evaluating Outcomes-Based Funding Models

How effective have outcomes-based funding models proven to be at achieving their ultimate goal—that is, improving student outcomes? For systems that are relatively early in their implementation, it may be difficult to collect and analyze data showing a significant improvement in longer-term outcomes. However, states can do pattern analysis and look for indicators that measure progress in the shorter-term. Also, observing whether and to what extent the model is affecting institutional behavior to focus more on student outcomes can be a positive signal of the model's effectiveness.

The Ford Foundation recently sponsored a study to explore how Tennessee's outcomes-based funding model has affected higher education institutions' behavior. While the study has yet to be released, preliminary findings indicate that the state's outcomes-based model is working as de-

Guiding Principles for State Outcomes-Based Funding Models

- 1. Align the funding formula with statewide goals.** Ideally, these goals should be agreed upon by key policymakers, higher education institutions, the public and other stakeholders before designing and implementing the formula. Often, state educational attainment goals are linked to economic and workforce needs in the state, and some fields may be prioritized based on these needs.
- 2. Be clear whether funding driven by performance measures will be new money or base level funding.** Additionally, determine and clarify how the performance budgeting system will be used during periods of expansion and during periods of budget reductions.
- 3. Make the outcomes-based funding pool large enough to create a real incentive for institutions to focus on desired results.** Some analyses suggest setting aside a minimum of 5–25 percent of state higher education funding to be allocated based on performance.
- 4. Tailor the funding formula to different institution types to foster mission differentiation.** Understand the unique missions and student populations of universities and community colleges and use different formulas or weight the various metrics differently to reflect this diversity.
- 5. Engage key stakeholders, particularly higher education institutions, early in the design process.** A lack of institutional buy-in can lead the model to fail and/or political leaders to abandon the system.
- 6. Phase in the outcomes-based funding model to ease transition.** This may be accomplished by starting with a smaller set-aside and gradually working up to a larger share of funds. Some states initially set up the performance reporting model and have an initial “learning year” during which funding is not actually impacted but institutions can observe how their performance would affect funding levels if the formula was in place. This can mitigate uncertainty for institutions as they plan their budgets in preparation for the formula to take effect.
- 7. Keep the funding formula simple by limiting the number of outcomes.** A funding formula with too many measures can bog down the system, making it less transparent and more difficult to focus leaders’ attention.
- 8. Use measures that are transparent, unambiguous, and hard to manipulate.** For example, the *number* of graduates is an unambiguous measure and difficult to “game,” in contrast to *graduation rates* that are “fraught with ambiguities” and can incent institutions to simply admit and graduate fewer, but better-prepared students.¹
- 9. Include incentives that recognize progress.** Increased degree production should be an important focus of any outcomes-based funding formula, but states can also reward institutions for other signs of progress and student success, such as retention, credit attainment, and student transfers. Rewarding progress and not solely completion can be especially important in the early stages of implementation, particularly for community colleges.
- 10. Include provisions that reward institutions for serving and graduating at-risk populations.** Well-structured formulas can prevent institutions from “cherry-picking” higher performing students who are more likely to succeed, for example by including incentives for colleges to serve high-need students. Without such provisions, an outcomes-based funding model that rewards success could incentivize institutions to not admit less prepared students.
- 11. Include efficiency and effectiveness measures in the formula.** This will encourage colleges to realign their budgets to maximize strategic incentives.
- 12. Take steps to protect academic quality.** States should guard against the potential unintended consequence of encouraging institutions to graduate as many students as possible without regard for the quality of the education these students receive. Faculty-led procedures such as learning assessments and portfolio evaluations can be used to monitor whether students are obtaining the knowledge and skills necessary to be successful.²
- 13. Incorporate stop-loss provisions to ensure that institutions do not endure cuts large enough to affect their financial stability.** Stop-loss provisions set limits on how much funding an institution can lose each year based on its performance. These should not be confused with “hold-harmless” provisions, which prevent institutions from any decrease in funding. Generally, experts recommend against “hold-harmless” provisions (except for during a transitional, phase-in period), as they can limit the effectiveness of an outcomes-based funding formula at advancing statewide goals.
- 14. Monitor the system regularly and make adjustments as needed.** An outcomes-based funding model should be rigorously monitored and evaluated to determine where adjustments can make improvements, as well as to make sure the formula keeps up with changing state priorities.

¹ Dennis Jones, National Center for Higher Education Management Systems, *Outcomes-Based Funding: The Wave of Implementation*, Prepared for Complete College America (September 9, 2013).

² National Governors Association, *Beyond Completion: Getting Answers to the Questions Governors Ask to Improve Postsecondary Outcomes* (2013).

signed by sharpening institutions' focus on student success and college completion. In 2015, Research for Action (RFA), a Philadelphia-based non-profit research organization, also began conducting two studies sponsored by the Gates Foundation and Lumina Foundation, on how higher education institutions in Ohio, Tennessee, and Indiana are responding to outcomes-based funding reforms. As certain state outcomes-based funding models are becoming more established, more focus on evaluation can be expected.

STRATEGIC CAPITAL FINANCE

In addition to providing support for institutional operating expenses, states provide significant financial support for public higher education capital projects. It is helpful for higher education budget analysts to be well versed in both types of expenditures, even if they are not assigned to both. Too often, discussions of the state's investment in higher education exclude capital expenditures, distorting the overall picture of state support. When properly accounted for, states' investments in higher education facilities and land make it clear that public institutions are indeed publicly funded, and should be accountable to the state and its citizens. Having an understanding of the history and scale of these investments in your state may prove helpful in broad discussions about state support and accountability.

Compared to programmatic spending, capital spending is more difficult to align to specified goals for higher education. Still, state higher education goals may provide some guidance regarding broad priorities (such as priority regions or types of institutions), so they are worth consulting when possible. Budget analysts who have specific responsibilities for higher education capital spending should additionally be familiar with state-level strategies for more effective capital planning and budgeting.

States can monitor and project capital needs, and regularly collect information on the amount of deferred maintenance for its higher education institutions.⁴⁸ The amount of deferred maintenance divided by the replacement value of facilities is referred to as the "Facilities Condition Index," and represents the depleted value of the physical plant for higher education. Experts suggest that states monitor this index and attempt to hold it below 5 percent.⁴⁹ States can

⁴⁸ Derrick A. Manns and Stephen G. Katsinas, "Capital Budgeting Practices in Public Higher Education," *Facilities Manager* (January/February 2006), <http://www.appa.org/files/PDFs/Capital%20Budgeting%20Practices.pdf>.

⁴⁹ H. Kaiser, *A foundation to uphold: A study of facilities conditions at U.S. colleges and universities*, (Alexandria, Virginia: APPA, 1996).

State Example



Tennessee is currently exploring how to overhaul its capital funding strategy for higher education to better align with state goals. At the request of Governor Haslam, the Task Force on Higher Education Infrastructure and Capacity was formed to develop recommendations for a long-term strategy for funding higher education capital and facility needs. The 12-member Task Force is comprised of representatives from the Governor's office, Tennessee Higher Education Commission, the state's two system governing boards, campus leaders, subject matter experts and other state officials such as the Commissioner of Finance. In addition to reforming the process for prioritizing projects and rethinking how to address current and future deferred maintenance needs, the Task Force is developing new ideas for how higher education capacity can be expanded to help meet statewide goals as part of the "Drive to 55" initiative. This may include expanding the scope of the capital budget beyond "bricks and mortar" to also incorporate investments that expand programmatic capacity in critical areas to help meet educational attainment goals.

also encourage institutions to monitor and plan for facilities upkeep. Regular, detailed facilities audits can provide reliable information for the state's monitoring activities and can help institutions plan better as well.

States also can clarify roles and responsibilities, making it clear to all stakeholders who is accountable for monitoring facility needs, setting priorities, and funding those priorities. For example, before accepting a large private donation for a new building, a college should have planned for its ongoing operations and upkeep; the same holds true for state-funded facilities. Failure to plan and budget on the operational side only leads to the degradation of the capital asset. Further, states may choose to fund only those facilities meeting certain parameters, buildings that include a substantial private donation or match, facility upgrades necessary to ensure life and safety, or upgraded instructional classroom facilities. By setting parameters and priorities upfront for the funding and

State Example



In **Oregon**, projects are funded on a case-by-case basis by the state legislature using some general parameters. For example, for community colleges, no more than \$8 million in general obligation bond funds are allowed per project and each college may have no more than one active project at a time. A significant consideration for project approval is the availability of donor, grant, or other non-state funds to support the project. One of the state's general obligation bond programs requires that colleges and universities provide a 50 percent cash match, a requirement that was originally designed to limit state debt costs but which now puts universities with large donor bases or community colleges able to pass local tax levies at a competitive advantage for getting state capital support.

The state is taking steps toward more effective and strategic budgeting for capital investments. For example, former Oregon Governor Kitzhaber asked higher education institutions to prioritize capital projects that will advance the state's 40/40/20 Statewide Educational Attainment goal (which states that by 2025, 40 percent of Oregonians will have a bachelor's degree or higher, 40 percent an associate degree or certificate, and 20 percent will have a high school diploma).

building of capital facilities, all parties will be operating from the same set of expectations.

Additionally, states can do more to reserve funds for capital needs, both at the state and institutional levels. Experts recommend that institutions devote between 1.5 and 3 percent of their operating budgets to facility repair and renewal.⁵⁰ Most institutions devote substantially less. States themselves can reserve general funds for deferred maintenance, repair, and renewal of higher education facilities, and to direct budget surpluses to those needs when possible. Alternatively, states can require institutions to dem-

onstrate that they set aside a particular amount of funds as a percentage of replacement value to go towards renewal. This not only helps to address deferred maintenance needs, but also provides a disincentive for institutions to request new buildings that may not be essential.

STUDENT AID AND TUITION POLICY

As discussed in Chapter 1, states frequently play important roles in setting tuition and fee policies and funding financial aid programs. States can develop a cohesive strategy to effectively align tuition and student aid policies with state and institutional objectives to raise sufficient student-derived revenues while also promoting college affordability and access. It is critically important for budget analysts to understand how all state investments and policies interact together to affect the behavior of institutions and students, rather than relying on program-by-program or line-item analysis. In the area of financial aid, it can be challenging to understand how state-funded financial aid, tuition-setting policies (which may be under the purview of states or institutions), and other aid sources (federal, private) interact and shape affordability and access. This is no easy task, as it varies considerably from state to state. But once analysts have an understanding of the aid and tuition landscape in their particular state, they can begin to consider options for greater alignment of fiscal policy with state goals for higher education.

Influencing Student Behavior

Whether the stream of state financial aid in your state is large or small, it is important to consider who is served by those dollars and how those funds are likely to affect behavior. Low-income students are most likely to be affected by financial aid, whereas wealthier students are more likely to attend and succeed at college regardless of the financial aid they receive. States, particularly those striving to meet educational attainment goals and encourage more students to complete college, may choose to focus their resources on those students whose chances of enrolling and succeeding in college will be most improved by the aid. This is a guiding principle of state financial aid programs promoted by The Brookings Institution and others.⁵¹

When considering financial aid and tuition policies, budget analysts can look for additional opportunities to encour-

⁵⁰ Derrick A. Manns and Stephen G. Katsinas, "Capital Budgeting Practices in Public Higher Education," *Facilities Manager* (January/February 2006).

⁵¹ Brookings Institution State Grant Aid Study Group, *Beyond Need and Merit: Strengthening State Grant Programs* (Washington, DC: Brookings Institution, 2012).

age students to stay enrolled, reach specific milestones, or complete their credential or degree. Program designs can provide incentives for students to take and pass more credits during each term of their postsecondary experience so that they make faster progress toward a degree or credential. States can make renewal of financial aid contingent on completing a specified number of units the previous year, or can adjust award amounts so that students taking more units receive more aid or students enrolling in summer terms are also eligible for aid. Such policies benefit the student and the state: students who complete college in a timely manner accumulate less debt and start earning sooner. States, meanwhile, will maximize the effect of their financial aid investments. To ensure that students receive as much institutional support as possible to meet their completion goals, states can take other actions, described next.

Influencing Institutional Behavior

According to the Western Interstate Commission for Higher Education (WICHE), in 2012–13, institutions provided more than four times the amount of student aid provided by states. Institutional aid programs play a major role in influencing who goes to college and how much they pay. In some states, there may be opportunities to leverage institutional programs and achieve greater alignment with the state’s goals for higher education.

One approach being tried in some states and public institutions is a deliberate shift away from designating a portion of student tuition revenue to fund financial aid and towards state-run, taxpayer-funded aid programs.⁵² Not only can this shift away from tuition set-asides align with a state’s goals to enhance financial transparency for students and families, but replacing institutional aid programs with state-run student aid enables states to more effectively target dollars to students based on statewide goals. For example, to boost a state’s access and attainment goals, it can target need-based aid at low-income state residents who would otherwise be less likely to attend college. In the event that limited state resources, political obstacles or other hurdles prevent a state from being able to create its own well-funded need-based assistance program, states can still use other funding mechanisms to encourage institutions to accept and focus resources on higher-need students. States can also engage in strategic discussions

⁵² NASBO, *Improving Postsecondary Education Through the Budget Process: Challenges and Opportunities* (Spring 2013).

State Example



In **Iowa**, public universities began using tuition set-asides to fund financial aid in the 1980s. In October 2012, the state’s board of regents eliminated their practice of earmarking 20 percent of tuition revenue from in-state students for financial aid programs, which will bring down the sticker price of attending the state’s public universities by \$1,000 per year. The board hopes to replace this financial aid funding source with a new statewide need-based grant program, which will require nearly \$40 million in additional state appropriations.¹

¹ Kevin Kiley, “Other People’s Money,” *Inside Higher Education* (November 5, 2012).

about whether to target student aid for particular fields of study that align with state workforce needs.

Additionally, states can place basic conditions on institutions whose students receive financial aid. When state financial aid is spent on students who do not complete college, institutions face no fiscal penalties. While institutions obviously cannot bear the entire responsibility for students not completing college, their policies and practices can have a profound influence on the likelihood that students will succeed. For instance, when institutions make needed courses available in sufficient quantities, monitor students’ progress, and provide effective advising, they facilitate timely completion.

To encourage institutional behavior that fosters college completion, states can embed requirements into institutional eligibility criteria for state student aid programs. For instance, states can develop incentives or requirements that institutions offer the courses students need to complete their degrees on the timeline envisioned by their aid programs. This establishes an incentive for institutions to maximize the efficiency of course offerings and helps avoid the problem of aid recipients draining down their available financial aid while waiting for needed classes. States can also reward institutions for other policies and achievements aligned to state goals, such as having strong graduation rates, low student loan default rates, or low cost-per-degree ratios or make meeting

these standards a condition of higher education institutions being eligible to accept state financial aid dollars.

States may also be able to influence how institutional aid dollars are spent. Frequently institutional aid is not targeted toward the neediest students, even in public schools.⁵³ To ensure policy alignment at the state and institutional levels, states could require institutions participating in state-funded aid programs to devote a portion of institutional aid to the same high-priority populations the state has identified, or ensure that aid is allocated first to meet the full financial needs of low income students, without requiring them to incur loan debt. Of course, the ability of the state to impose such criteria and requirements will depend on the size of the state-funded financial aid stream and the extent to which a given institution relies on those revenues. Additionally, states can use their financial aid programs to require institutions to provide specified data elements or participate in evaluation activities that will help

State Example



In 2010, **California** imposed minimum graduate rate and maximum student loan cohort default rate requirements on institutions receiving state financial aid dollars. As a result, some private institutions (generally for-profit schools) were prohibited from participating in the state grant program due to poor student outcomes. Setting minimum borrower thresholds for the student loan default rates allowed colleges with a relatively small numbers of borrowers to essentially be exempted from that provision.

HIGHLIGHTED RESOURCE

The Western Interstate Commission on Higher Education (WICHE) published a proposal in March 2014 on aligning state higher education finance policies with state education goals, with a special emphasis on financial aid programs. The paper, entitled *States in the Driver's Seat: Leveraging State Aid to Align Policies and Promote Access, Success, and Affordability*, considers how tuition and financial aid affect not only student access and participation, but also student success outcomes such as persistence and degree completion. Moreover, it advances a series of policy options for states to consider in redesigning their financial aid programs.

For example, the paper suggests that states can adopt a “Shared Responsibility Model” (SRM), currently used in Minnesota, to award grant aid using a methodology that accounts for how much several partners—the student, parents, federal government, state government, and institution—will contribute to the student’s total cost of attendance (not counting direct state subsidies to institutions). This framework is designed to help states allocate limited resources based on state educational attainment goals. The SRM framework also helps to ensure that the state is taking full advantage of federal financial aid opportunities, by making state student aid the “last dollar in” towards meeting the cost of attendance.¹ A number of additional policy proposals are put forward in the paper, including steps to promote student and institutional behaviors that are aligned with public goals, as well as to integrate state policies with federal and institutional policies.

Read full report at: http://www.wiche.edu/info/publications/States_in_the_Drivers_Seat.pdf.

¹ This concept of a “last-dollar” scholarship is also central to the design of the Tennessee Promise and the Tulsa Achieves programs, both which offer guaranteed free tuition to community or technical colleges for all graduating high school students. See Paul Fain, “Free Community College: It Works,” *Inside Higher Ed* (March 5, 2015), available at <https://www.insidehighered.com/news/2015/03/05/tulsa-community-colleges-free-tuition-program-has-paid-while-inspiring-others>.

⁵³ See for example: Quirk, “The Best Class Money Can Buy,” *The Atlantic* (November 2005) and Baum & Payea, *Trends in Student Aid 2014* (College Board, 2014).

State Example



New York has a longstanding program, Aid to Certain Independent Colleges and Universities, more commonly referred to as “Bundy Aid” after McGeorge Bundy who chaired New York Governor Nelson Rockefeller’s Select Committee on the Future of Private and Independent Higher Education in 1967. Under the program, aid is distributed to each participating institution based on the number of earned degrees conferred the previous year. In its report transmitted in 1968, the Select Committee explained how basing the entitlement amount on earned degrees rather than on enrollment rewarded institutional productivity and created an incentive to focus on improving student retention—highlighting how states have long sought funding strategies to influence higher education outcomes.

Visit <http://www.highered.nysed.gov/oris/bundy/> for more information.

the state assess the impact of its investments. In short, if your state’s investment in financial aid is large enough, you can be creative and identify how that investment can be leveraged to further the state’s goals.

Aid to Private Institutions

Keep in mind that if students can receive aid while attending private institutions, there are opportunities to impact that system too. States, particularly ones with a strong independent institution presence, may find strategic benefits to providing financial aid to students attending private in-

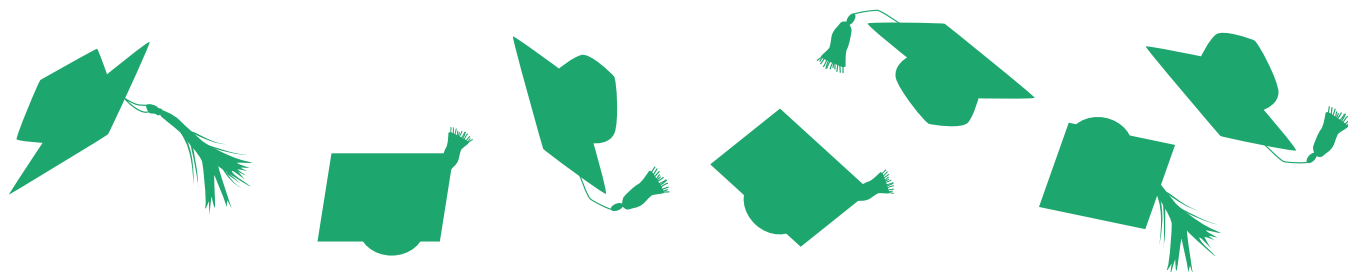
stitutions, or even direct institutional support through state appropriations. If, for example, private institutions are successfully serving high-priority students and conferring high quality degrees efficiently, the state may get more “bang for the buck” by diverting some of its higher education resources directly to private institutions. Depending on how such programs are structured, doing so may give states some leverage to influence nonprofit institutional goals and behaviors, such as incentivizing them to serve more high-priority students, better align their curricula to serve transfer students, or increase completion rates.

CHAPTER 6—KEY TAKEAWAYS

Your opportunities to achieve greater alignment of expenditures to goals will depend highly on your state context. Nonetheless, budget analysts and officers can be in the habit of looking for opportunities to achieve greater alignment. Below are some strategies to get you started.

- **Bring together disparate conversations.** Frequently, different expenditure areas in higher education—i.e. general operating funds, student aid, and capital funds—are analyzed at different times and often by different people, making it difficult for the budget office to understand the big picture of higher education finance. Budget analysts working in these areas should be in regular conversation with one another, and should understand the state goals and how expenditures in their assignment area contribute (or don't) toward achieving those goals.
- **Identify which current higher education expenditures could be better targeted to align with goals.** As a first step, budget offices can analyze various higher education projects, programs and initiatives for their alignment to state goals, and their apparent contributions to achieving those goals. Merely having a list of items that appear to contribute, or don't, can provide some direction for future decisions. Additionally such an exercise will make clear what is not known about the effectiveness of current efforts, which may lead to further investigation and action.
- **Develop a list of high-priority new investments.** Even if your state or Administration is not ready to act now, it is good to have a sense of what you would spend extra money on. Think about ways to structure new investments with an emphasis on desired outcomes. Consider what can be accomplished with one-time dollars versus an ongoing appropriation.
- **Identify options for furthering outcomes-based funding in your state.** Understand the current status of outcomes-based funding in your state. If there is an existing model, who developed it? Who is tracking its impact? Are there ways to improve it and political windows of opportunity to do so? If your state does not currently have any type of outcomes-based funding, analyze whether there might be opportunities on the horizon for making some kind of funding change based on performance. Your state may not be ready for a full-blown outcomes-based funding system, but there are other ways to appropriate dollars and provide fiscal incentives that encourage institutions to act in ways that align with the state's goals.
- **Develop good working relationships with chief financial officers at institutions.** Public college and university budget officers can be valuable partners for state budget analysts. Not only do they have access to useful spending and revenue data at the institutional level; they can also help identify opportunities for efficiency gains and improvement in effectiveness. At the same time, don't limit yourself to the information provided by institutional financial officers. Take time to visit campuses, talk to campus-level administrators and faculty, and engage with students—these stakeholders can provide equally valuable information.
- **Remember to include capital finance when discussing your state's investment in higher education.** Take steps to learn about your state's investments in land and facilities for higher education, even if this is not a part of your specific budget assignment. Having a true picture of the state's investment will aid you in discussions about the total state subsidies for public higher education and the accompanying need for public accountability.
- **Understand how your state financial aid program interacts with other policies and sources of aid.** Understand how state, federal, and institutional aid function together in your state to influence institutional and student behavior. This is a complex task, so seek out financial aid experts in your state who understand the whole picture, rather than relying solely on managers of individual programs for information. Analyze who benefits from the existing mix of aid programs in your state and whether current recipients are the highest priority given your state's goals. Scrutinize existing state aid programs to see if there are opportunities to incentivize certain student or institutional behaviors that align with goals. Additionally, consider the role of private institutions and whether state financial aid dollars can be also leveraged at those institutions.

CHAPTER 7



BEYOND THE STATE BUDGET ACT

IDENTIFYING POLICY LEVERAGE POINTS

This chapter will discuss:

- ✓ How states can encourage institutional changes that make it easier for students to progress toward a degree and complete college in a timely manner.
- ✓ How states can support institutional initiatives to strengthen remedial education, a common bottleneck for many students.
- ✓ How states can improve the transfer process from two-year to four-year institutions.
- ✓ How states can remove barriers to dual enrollment.
- ✓ How states can make changes to the K–12 education system to improve students' readiness for college success.
- ✓ How states can encourage institutional changes that cut costs and increase efficiency.
- ✓ Strategies for the budget analyst: How to identify policies or programs that align with the state's goals for higher education and support those activities.

A budget analyst or officer will have the most influence in shaping the state's direct appropriations for higher education. Still, this is not the only area of influence available to you. By thoroughly understanding the broader higher education policy landscape in your state, you may uncover additional

ways to have influence and move your state closer to its goals for higher education. This section points to several policy areas that are potential points of leverage for reaching higher education goals like increased completion rates, shorter time-to-degree, and greater efficiency.

PAVING EFFICIENT PATHWAYS THROUGH HIGHER EDUCATION

For many students, the pathway through higher education is a meandering one. Students may attend several institutions, may delay choosing a major, or may switch majors several times. While some amount of exploration is part of the learning experience, too much meandering can lead to an excessive accumulation of units that are not applicable to the degree the student will ultimately earn. The price tag for such trial and error can add up, not just for states, but for students and families too, as students' entry into the workforce is delayed resulting in lost wages and debt accumulation. In response, many states and institutions are finding innovative ways to guide students and pave clearer pathways through higher education, paying particular attention to the points where students often get stuck or lost, such as developmental education or transfer from a two-year to a four-year institution.

In general, institutions or regions are engaged in building stronger educational pathways, but the state can encourage them by creating fiscal incentives for institutions to participate in or launch such activities. One model, championed by Complete College America and being implemented in some states, is known as “Guided Pathways to Success.” (See Highlighted Resource.) The model is a “comprehensive, integrated restructuring of higher education delivery” designed to help students better navigate their postsecondary education program to increase the likelihood of them graduating, and doing so on time.

REMOVING REMEDIAL EDUCATION ROADBLOCKS

A major bottleneck for many students is developmental education (sometimes referred to as remedial education or basic skills.) Most broad-access institutions and state universities have developmental education courses for students who test below the college level in reading, writing, or math. Developmental courses and course sequences are structured very

differently across institutions, and assessments for placing students into developmental education are frequently chosen at the campus level and inconsistent across institutions. Developmental education instruction is traditionally handled by institutional faculty, but many systems and states are now paying closer attention and seeking systemwide or statewide policy solutions. For example, some systems are encouraging the development of shorter remedial sequences and “modular” curricula that can be tailored to a student’s individual needs. Such reform ideas may require equally creative thinking at the state level to develop appropriate funding mechanisms. For example, if your state funds developmental education courses on the basis of enrollment per semester, then modular approaches might be difficult to implement on the campus level. By becoming familiar with leading innovations in developmental education, the budget analyst can think about whether and how current funding mechanisms support such efforts. If campuses can demonstrate success with unconventional methods that don’t fit the normal funding struc-

HIGHLIGHTED RESOURCES

Complete College America’s *Guided Pathways to Success* model includes the following key components:

- **Meta Majors:** Undeclared students initially select a broad cluster of majors—such as Liberal Arts or STEM—and later narrow into a more specific area of study. This helps students make relevant lower-division course decisions and make more efficient progress toward their degree.
- **Academic Maps with Default Pathways:** Students choose a program with an established course sequence of 15 units per semester, rather than individual courses. Any changes to this sequence are approved by an advisor. Besides helping students make efficient progress toward a degree, this practice can help institutions better anticipate and plan their course offerings.
- **Tracking Academic Progress and Supportive Advising:** Key milestone courses in a student’s pathway are used to track student progress and indicate the student’s prospects for success in their chosen field of study. This data also helps institutions and academic advisers target their services where they are most needed.
- **Reforming Math Requirements:** For many students, traditional mathematics requirements are a major hurdle to college success. Institutions can offer non-STEM students high-quality coursework that more closely aligns with their career goals, such as courses on statistics and quantitative literacy.

For full information see <http://completercollege.org/the-game-changers/> and <http://completercollege.org/wp-content/uploads/2014/11/4-Year-Myth.pdf>.

Jobs for the Future (JFF) has also produced a comprehensive report and tool to help states examine their higher education policy environments and how they can prioritize policy changes to support community colleges’ efforts to implement and scale up structured pathways and related reforms. The report, entitled *Policy Meets Pathways: A State Policy Agenda for Transformational Change*, is available at <http://www.jff.org/publications/policy-meets-pathways-state-policy-agenda-transformational-change>.

ture, states can find workarounds or seek permanent policy changes that enable these programs to be funded properly.

IMPROVING TRANSFER

Another common area for improvement is transfer and articulation between two-year and four-year institutions. States depend on the transfer function to varying degrees. In states like California that heavily rely on two-year institutions to provide most undergraduates with lower-division education, the success of the transfer mechanism is crucial. Yet often curricula between two-year and four-year institutions are misaligned and there is a confusing landscape of one-to-one articulation agreements between institutions, rather than a clear and transparent curricular pathway that students can easily follow and that allows them to prepare for more than one four-year institution.

States can take steps to guarantee transfer from public two-year to four-year institutions, so that students can efficiently complete their lower-division coursework and predictably transfer to any public four-year university. States can also enact credit-hour limits that cap the number of additional credits the receiving four-year institution can require of transfer students. Established systems for awarding credit through assessment of prior learning help transfer students avoid taking duplicative courses or earn credit for learning they have acquired on the job or in open online courses. Such policies can be difficult to enact at the state level because they are traditionally the domain of faculty at the campus level. However, there is a legitimate state interest in having a functional and efficient transfer mechanism to ensure that state appropriations for higher education and financial aid funds are spent effectively.

ELIMINATING BARRIERS TO DUAL ENROLLMENT

Dual enrollment (also known as concurrent enrollment) programs permit eligible students to take postsecondary courses while still in high school, for which they can earn college and/or high school credit. According to the Education Commission of the States (ECS), 47 states and the District of Columbia have statewide policies in place to govern dual enrollment programs. States can examine these policies to identify and remove potential barriers to participation in these programs that affect students, school districts, and postsecondary institutions. For example, a state can choose to fully fund both the K–12 school district and postsecondary institution for a dually enrolled student. An ECS analysis identifies 13 state-level policy components that may increase participation and success of dual

enrollment programs.⁵⁴ ECS has also created and regularly updates a 50-state database on dual enrollment policy.

IMPROVING COLLEGE AND CAREER READINESS

Student success in higher education is highly dependent on the student's experience in elementary and secondary school. Between the K–12 grades and higher education, there has long been a mismatch of expectations for students, assessments, and curricular emphasis. As the college-going population has expanded over the past several decades, it has become even more important for public K–12 schools to be aligned to higher education and provide a strong foundation for success in college. Good policy in this area can decrease college remediation costs and increase the efficient use of higher education dollars.

Currently there is much activity in this policy area at the national and state levels. Many states have adopted Common Core standards for reading and math and aligned assessments. Common Core standards were designed to align with the skill level that colleges and universities expect of incoming freshman. Moreover, the new aligned assessments are intended to provide more accurate signaling to students about whether they are on track or need more preparation to become college-ready. In states that have not adopted the Common Core standards (or have decided to repeal their adoption), there is a renewed recognition that alignment between K–12 and higher education is essential. These states are generally taking other, more state-specific approaches to achieving the same ends. Ultimately this greater focus on alignment has the potential to shorten students' overall time to degree and make the higher education system more efficient.

Higher education budget analysts should know whether their state is a Common Core state, and if so, what opportunities the Common Core transition presents for achieving greater alignment of K–12 and higher education policies and practices. For example, if higher education and K–12 institutions can arrive at a common definition of college readiness based on the Common Core aligned assessments given in high school, then the junior and senior years of high school can be used much more effectively to address remedial needs early. Colleges and universities may even be able to cut back on placement testing, instead relying on students' high school assessment scores

⁵⁴ Education Commission of the States, *Increasing Student Access and Success in Dual Enrollment Programs: 13 Model State-Level Policy Components* (February 2014), available at <http://www.ecs.org/clearinghouse/01/10/91/11091.pdf>.

and their grades in Common Core aligned classes. These changes won't happen overnight, in part because higher education faculty want time to determine the validity of the Common Core assessments for determining student readiness. But again, the potential for savings in college remediation costs are substantial, making this an important policy area for higher education budget analysts to know about and try to influence, in coordination with their K–12 counterparts in the budget office.

Regardless of Common Core status, statewide K–12 policy can promote college readiness in other ways. High school graduation requirements are one policy lever for increasing readiness. For instance, requiring four years of high school math can keep students' math skills fresh and decrease the need for math remediation in college. The state's accountability system for K–12 public schools can also be an effective lever, by including measures of students' college readiness.

To improve college readiness at the high school level, states can also strengthen the data pipeline between K–12 and higher education. A longitudinal database that links student records can help K–12 educators understand how well they are preparing students for college and make corresponding refinements to their educational program. At the same time, institutions of higher education can benefit by having detailed information on students' academic achievement in high school, including areas where more skill-building is needed.

INSTITUTIONAL POLICIES THAT CUT COSTS AND INCREASE EFFICIENCY

While state budget officers can help to establish financial incentives to spur efficiency, it is the institutions themselves that must cut costs and find the best ways to do so without undermining academic quality. Faced with pressure and criticism about rising costs, many higher education systems and individual institutions have initiated new policies and practices to cut costs and increase efficiency. Some of these efforts are occurring within educational programs, often with institutions seeking new instructional models that can serve higher numbers of students while preserving an effective learning environment. Other changes are occurring in administrative offices, with less direct impact on students.

Online Education

One of the most exciting (albeit controversial) areas being explored in higher education is the use of technology

HIGHLIGHTED RESOURCE

The **Education Commission of the States (ECS)** produced a 50-state policy analysis, *Blueprint for College Readiness*, which reviews a menu of 10 critical policies that have been linked to promoting college readiness. These policy areas—spanning from high school to higher education, and including the all-important “bridge” between both sectors—are worth studying in your state as potential areas for future investments or leveraging. The full report is available at: <http://www.ecs.org/docs/ECSBlueprint.pdf>.

ECS also provides an “extensive clearinghouse of information on state education policy,” including 50-state legislative databases, analysis, research summaries and special reports on a vast number of topics. ECS “was created by states, for states,” and is available to answer questions through its information hotline. Visit www.ecs.org for more information.

to change the traditional model of classroom instruction. Many institutions are experimenting with open online courses that use a variety of technologies to serve large numbers of students while attempting to maintain academic quality. These efforts have evolved into much more sophisticated approaches than the old model of distance education which involved either the traditional correspondence course or videotaping lectures and making them available online or on television. Innovative educators are building entire courses specifically for consumption over the Internet, and developing tools to actively check students' learning as a course progresses and intervene when difficulties are uncovered. Some educators are using technology to put students in conversation with one another for group learning, discussion, and even grading each other's work. Some online courses are able to provide more tailored instruction because they can assess students' needs and deliver specific content modules to strengthen areas of weakness.

Online education shows promise for serving more students at one time and improving access geographically. At the same time, higher education institutions are rightfully concerned about the quality of students' learning experiences and about maintaining equitable access to the face-to-face

college experience, which many people consider superior to an online experience. As institutions continue to address these concerns, it is likely that online education, and especially hybrid models that combine online and face-to-face elements, will continue to grow. Budget analysts can add an important layer of scrutiny to efforts to expand online offerings. Because new technologies can be expensive to implement, it is important that online education have clear efficiency goals and not merely take the traditional delivery model and “transplant” it to an online environment.

Competency-Based Education

A number of K–12 school districts and postsecondary institutions are adopting competency-based learning or competency-based education (CBE) programs. Whereas traditional educational programs award credit based on time spent in a classroom, CBE programs award credit based on actual demonstration of skills learned. For K–12 education, CBE is viewed as a way to personalize learning and allow students to advance at their own pace. For postsecondary education, this CBE is seen largely as a way to recognize the skills and training that students (particularly those who already have a significant amount of job experience) may have acquired outside of the classroom.

The Competency-Based Education Network, funded by the Lumina Foundation, consists of numerous higher education institutions and is designed to share knowledge and develop evidence-based approaches for the competency-based education delivery model.⁵⁵

Data Analytics

Aside from online courses, institutions are using technology in other ways to improve efficiency and effectiveness. For instance, some colleges and universities are using predictive analytics to mine large student databases and identify at-risk students early for additional advising or tutoring. Some institutions are also using new software to better predict what courses students will need, and when, so that course offerings match demand and student progress is not delayed unnecessarily.

Administrative Efficiency

Institutions are also using a host of other strategies that don’t necessarily involve technology innovations to make administrative functions more efficient and cut costs. These can involve consolidated services, shared services, or other creative

⁵⁵ Visit <http://www.cbenetwork.org/> for more information.

Western Governors University: A Unique Model for Online, Competency-Based Education

Founded and supported by 19 governors, Western Governors University (WGU) is a nonprofit, regionally accredited, entirely online higher education institution headquartered in Salt Lake City, Utah. The idea behind WGU began at a 1995 meeting of the Western Governors Association, as governors came together to discuss strategies to respond to rapid population growth with limited public resources for education. The solution they came up with was WGU, which would leverage distance learning technologies to expand access to higher education for underserved students and respond to workforce needs in a cost-effective manner. The founders decided that WGU would use demonstrated competencies instead of seat time to measure student progress and outcomes. The Western Interstate Commission on Higher Education (WICHE) and the National Center for Higher Education Management Systems (NCHEMS) helped the governors design this university, which began accepting students in 1999. WGU’s Board of Trustees consists of educators, industry representatives, and state governors.

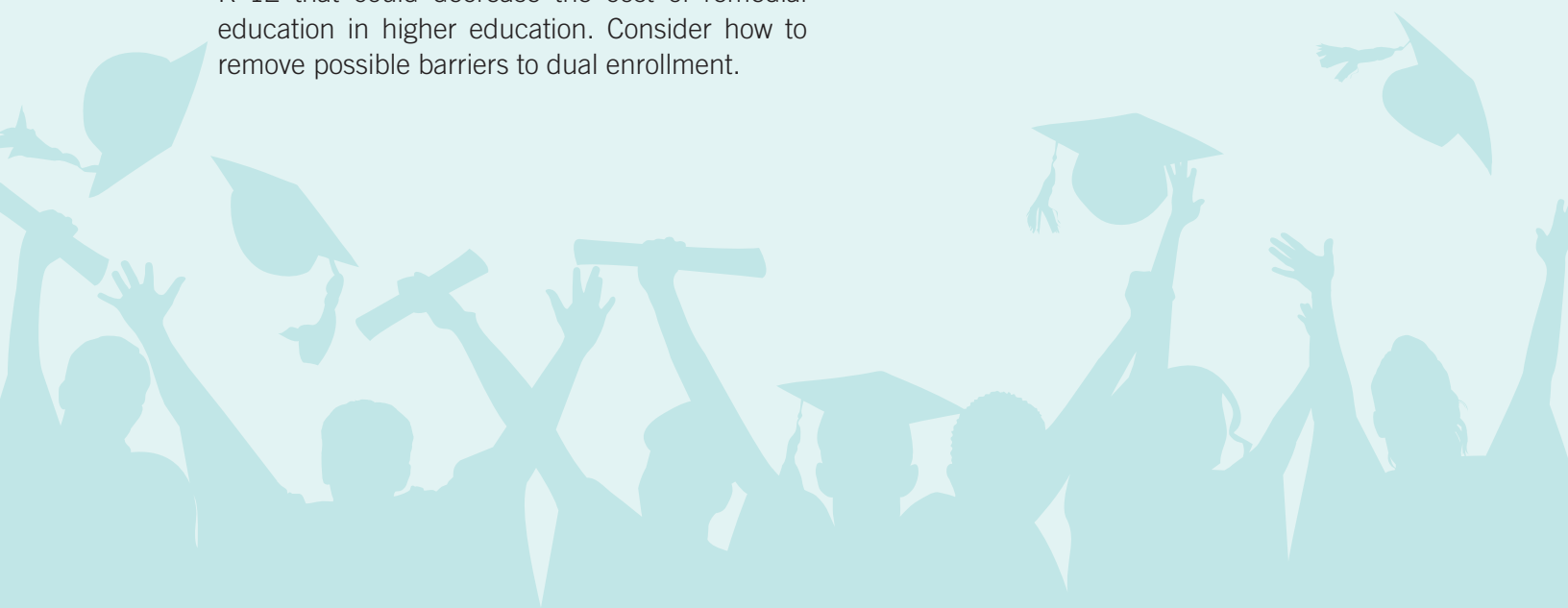
WGU offers bachelor’s and master’s degree programs in education, information technology, business, and nursing. Its teacher preparation program was ranked #1 in the country by the National Council of Teacher Quality. Average tuition at WGU is \$6,000 per year, before accounting for financial aid. Several states—Indiana, Washington, Texas, Missouri, Tennessee and Nevada—have created WGU satellite schools that are state-affiliated. Indiana was the first state to establish a WGU satellite, making students attending the institution eligible to receive Indiana state financial aid and allowing Indiana community college students to transfer credits to WGU Indiana through a state articulation agreement. Others soon followed to use WGU to increase higher education capacity in their states.

For more information, see <http://www.wgu.edu/>.

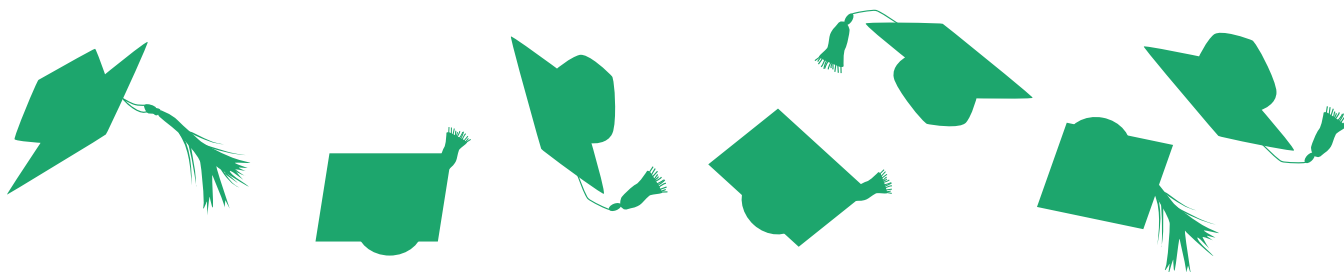
approaches that aim to maximize every dollar spent at the campus level. These kinds of solutions are often very specific to the campus, department, or office in question, and as such, are best identified by people who work at the system and campus levels. As discussed previously (in Chapter 6), state budget analysts are advised to build relationships with university CFOs and to visit campuses and talk to a variety of administrators, faculty, and students. These activities can help you gain insight on where efficiencies can best be realized and help as you think about appropriate state-level financial incentives that encourage universities to take action.

CHAPTER 7—KEY TAKEAWAYS

- **Study the higher education policy landscape in your state, looking for alignment with your states' goals.** Learn about common obstacles that prevent students from completing college in a timely fashion and what methods are being tried to address those obstacles. Can the practices be scaled to a statewide level? Are any of them areas for potential future investments? Learn how transfer and articulation works in your state, and where there are areas for improvement. Learn about developmental education in your public colleges and universities and gather information about its success rate. If there are significant efforts to reform developmental education, learn whether there are any policy or funding obstacles that need to be addressed. Find out if students in public institutions are accumulating excessively high unit counts and if so, whether the state has any points of leverage to encourage students and institutions to limit excess units.
- **Consider how K–12 policy and expenditures can be best aligned to the state's higher education goals.** Build relationships with your K–12 counterparts in the budget office. Take time to learn from them and others about policies that impact college readiness and the transition from high school to college. Think about strategic investments in K–12 that could decrease the cost of remedial education in higher education. Consider how to remove possible barriers to dual enrollment.
- **Identify ways to encourage institutions to be more efficient.** Build relationships with university CFOs and others who can help identify the best programmatic opportunities for greater efficiency and to understand what financial incentives will spur change at the institutional level. Consider whether “seed money” from the state would be helpful for encouraging institutions to innovate or paying for one-time technology costs that will improve efficiency down the road.



APPENDIX



RESOURCES FOR STATE BUDGET OFFICES

Below is a set of resources designed to provide state budget office staff with additional information about many of the subjects in this guidebook. These resources have been sorted broadly, by topic area, to help you navigate the wealth of available information. Within each category, resources are listed in alphabetical order by the name of the organization hosting the resource. Note that several of these resources are also featured in the body of the report as “Highlighted Resources.”

GENERAL HIGHER EDUCATION FINANCE

College Board—*Trends in College Pricing*

<https://trends.collegeboard.org/college-pricing>

This annual report, based on a survey of institutions, provides data on institutional revenue sources over time (including tuition and fees, state and local appropriations, income from endowments and private donations, research grants, and other sources). Public appropriations are calculated on a per full-time equivalent (FTE) basis and adjusted over time for inflation.

Delta Cost Project—*Trends in College Spending (TCS)* (Highlighted Resource on page 23)

<http://www.tcs-online.org/Home.aspx>

Based on IPEDS data, this source reports on institutional revenues by major source of funds and institutional expenditures by category. Data are available by institution, for all public and nonprofit private Title IV institutions or by sector. Information is presented on a per FTE basis, with default adjustments for CPI-U, but options to adjust for HEPI (Higher education price index) or HECA (Higher education cost adjustor).

Illinois State University Center for the Study of Higher Education—*Grapevine Survey*

<http://education.illinoisstate.edu/grapevine/>

Grapevine has published annual data compilations on state general fund tax appropriations for institutions and state higher education agencies since 1960, and is therefore a good source of longitudinal data. Since 2010, the *Grapevine* survey has been conducted jointly with SHEEO’s annual *State Higher Education Finance (SHEF)* survey.

National Center for Education Statistics—*Integrated Postsecondary Education Data System (Highlighted Resource on page 5 and 20)*

<http://nces.ed.gov/ipeds/>

IPEDS is the Integrated Postsecondary Education Data System, a system of interrelated surveys conducted annually by the U.S. Department's National Center for Education Statistics (NCES). IPEDS gathers information from every college, university, and technical and vocational institution that participates in the federal student financial aid programs. Federal law requires that institutions participating in federal student aid programs report data on enrollments, program completions, graduation rates, faculty and staff, finances, institutional prices, and student financial aid.

State Higher Education Executive Officers Association (SHEEO)—*State Higher Education Finance Annual Report*

<http://www.sheeo.org/policy-issues/finance-and-productivity>

SHEEO produces an annual report on *State Higher Education Finance* (SHEF), primarily a collection of data on state and local revenue sources for higher education and how these revenues are spent. This report tracks “State and Local Support” from tax appropriations and dedicated revenue sources (such as lottery receipts) that support higher education. SHEEO uses a variety of mechanisms to help make the data comparable across states.

STATE-LEVEL BUDGETING AND FINANCE

Colorado Department of Higher Education—*Instruction Manual for Higher Education Facilities, Program Planning and Budgeting*

http://www.cu.edu/sites/default/files/FY2014-15_DHE_Budget_Manual.pdf

This is an instruction manual for Colorado's higher education capital budget. It provides an in-depth example of the level of planning, requirements, and considerations that go into building a higher education capital budget.

MGT of America, Inc.—*Evaluation of the NSHE Funding Formula*

http://system.nevada.edu/tasks/sites/Nshe/assets/File/Publications/NSHE_Funding_Formula_Report_May_2011.pdf

and

SRI International—*States' Methods of Funding Higher Education*

<http://www.sri.com/sites/default/files/brochures/revise-sri-report-states-methods-of-funding-higher-education.pdf>

Both MGT and SRI authored reports for the state of Nevada (including the Nevada System of Higher Education in 2011 and the Nevada Legislature in 2012) describing other states' methods for funding higher education, including an examination of the use of funding formulas and enrollment-based funding, performance-based funding, and the budgetary treatment of student-derived revenues (tuition and fees).

NASBO—*Budget Processes in the States*

<http://www.nasbo.org/publications-data/budget-processes-in-the-states>

This report, updated periodically, compiles state-by-state data collected from state budget offices on a wide range of state budget topics, such as gubernatorial budget authority, legal balanced budget requirements, budget practices and procedures, budget office functions, and expenditure monitoring strategies and mechanisms. Specific to higher education, the most recent edition of the report, published in 2015, includes data on whether states appropriate tuition and fees to public universities, as well as how allotment controls are used to monitor and control higher education expenditures.

NASBO—*Capital Budgeting in the States*

<http://www.nasbo.org/capital-budgeting-in-the-states>

This report was last updated by NASBO in 2014. A comprehensive resource, it delivers state-by-state comparative information on the ways budget officers develop and implement capital spending plans for all 50 states and the District of Columbia. Table 6 specifically contains state information on funding sources not in the capital budget that are used to finance higher education capital projects.

NASBO—Improving Postsecondary Education Through the Budget Process: Challenges and Opportunities

<http://www.nasbo.org/higher-education-report-2013>

This report, supported by a grant from the Bill & Melinda Gates Foundation, presents both the current landscape of state higher education finance and opportunities for improving it—from the perspective of state budget officers. The report examines a series of challenges associated with the current higher education funding landscape and efforts at the state, system and institutional levels to fund results/performance, restrict tuition increases, expand access, improve information and increase cost-efficiency. It also recommends a set of opportunities for collaboration between state and higher education officials to improve postsecondary education and reduce costs.

NASBO—State Expenditure Report

<http://www.nasbo.org/publications-data/state-expenditure-report>

This report contains annual data on state spending from all funds for higher education purposes, including general funds, other state funds, federal funds and bonds. State capital expenditures for higher education are also reported annually in Chapter 8. It is important to note that the majority of states, in reporting state spending on higher education to NASBO, include tuition and fees in their figures. This source of revenue falls under the “other state funds” category in the report.

SHEEO—State Budgeting for Higher Education in the United States

http://www.sheeo.org/sites/default/files/publications/Budgeting_For_Higher_Ed.pdf

This report, published in June 2009, is a compilation of survey data collected from 43 state higher education agencies or statewide systems. This survey of budgeting practices focused on three areas of the higher education budget process: the operating budget request, operating budget negotiations, and operating budget allocations. The survey also asked states to provide general information about the structure of their state budget process and governance model for higher education.

Urban Institute—Financing Public Higher Education: Variation across States

<http://www.urban.org/research/publication/financing-public-higher-education-variation-across-states>

This report, released in November 2015, examines public college tuition, state funding and enrollment trends across states. The report also looks instructional expenditures and student grant aid to help explain the multiple factors that contribute to variation in college affordability across states.

STUDENT TUITION, FEES AND FINANCIAL AID

College Board—Trends in Student Aid

<https://trends.collegeboard.org/student-aid>

College Board produces annual reports on college pricing and student aid. The annual *Trends in Student Aid* documents grant aid from federal and state governments, colleges and universities, employers, and other private sources, as well as loans, tax benefits, and Federal Work-Study Assistance. It examines changes in funding levels over time, includes the distribution of aid across students with different incomes and attending different types of institutions, and tracks the debt students incur.

Education Commission of the States (ECS)—State Financial Aid Redesign

<http://statefinancialaidredesign.org/>

This ongoing project focuses on aligning state financial aid programs and policies with college completion goals. A 50-state policy database provides comprehensive information on the 100 largest state-funded financial aid programs. Also as part of this project, ECS developed a set of guiding principles for state financial aid redesign and offered technical assistance to state policy leaders and staff.

Education Commission of the States (ECS)—Tuition-Setting Authority for Public Colleges and Universities

<http://www.ecs.org/clearinghouse/01/04/71/10471.pdf>

This brief examines which entities in states have tuition-setting authority (legislature, state board of education, system, or institution), broken down by four-year institutions and community/technical colleges. The policy citations are for general, in-state tuition and do not examine authority to set non-resident student tuition.

National Association of Student Financial Aid Administrators (NASFAA)

<http://www.nasfaa.org/>

NASFAA is the professional membership organization for student financial aid administrators. The organization advocates for public policies that promote student access and success, as well as provides a forum for knowledge-sharing on student financial aid issues. NASFAA produces an annual profile on national student aid, which provides detailed information about federal financial aid programs and is based on data collected from the U.S. Department of Education and the College Board. The site includes links to state-specific student aid websites for all 50 states, as well as a detailed list of financial aid data resources.

National Association of State Student Grant and Aid Programs (NASSGAP)

<http://www.nassgap.org/viewrepository.aspx?categoryID=3>

NASSGAP annually conducts a survey of state student aid programs. Specifically, their reports provide data on state-funded spending for student financial aid, broken down by need-based grants, non-need-based grants, and non-grant aid (such as loans, loan assumptions, conditional grants, work-study and tuition waivers). The data are also broken down by aid recipient degree type (undergraduates versus graduate students), as well as by institution type (public, non-profit, proprietary) and student residence (in-state vs. out-of-state). Spending is presented both in the aggregate by state and on a per-full-time-student basis.

SHEEO—Survey of State Tuition, Fees and Financial Assistance Policies

<http://www.sheeo.org/resources/publications/state-tuition-fees-and-financial-assistance-policies>

This survey project originally began at SHEEO in 1988. Each edition aims to provide an update on state policies and issues related to tuition, fees, and financial assistance. The survey was updated in 1993 and was further expanded in 1996, 1999, 2006 and 2011 in partnership with WICHE. The latest edition was published in 2013.

U.S. Department of Education, the National Center for Education Statistics (NCES)

<http://nces.ed.gov/surveys/npsas/>

The National Postsecondary Student Aid Study (NPSAS) is a representative sample survey of undergraduate and graduate students in institutions eligible to participate in federal financial aid programs. The study, conducted every three to four years since 1987, measures how students and their families pay for postsecondary education, with particular emphasis on federal student aid provided through Title IV of the Higher Education Act of 1965 and subsequent amendments.

Washington State Student Achievement Council—National Tuition and Fee Report

<http://www.wsac.wa.gov/sites/default/files/2013-14.TuitionFeeReport.FINAL.pdf>

This annual report compares tuition and required fees across public sector institutions, separated between flagship institutions, comprehensive institutions, and community colleges, by state.

Western Interstate Commission on Higher Education—States in the Driver's Seat (Highlighted Resource on Page 59)

http://www.wiche.edu/info/publications/States_in_the_Drivers_Seat.pdf

This paper recommends a framework to align state higher education finance policies with state goals, with a special emphasis on financial aid programs. The proposal considers how tuition and financial aid affect not only student access and participation, but also student success outcomes such as persistence and degree completion. Moreover, it advances a series of policy options for states to consider in redesigning their financial aid programs.

INFLATIONARY INDICES

Center for College Affordability and Productivity—Stop Misusing Higher Education-Specific Price Indices

http://centerforcollegeaffordability.org/uploads/Stop_Misusing_Price_Indices.pdf

This policy paper explains how the HEPI and HECA are derived, how they tend to be used, and when their use is appropriate or inappropriate from the perspective of the researchers.

Commonfund Institute

<https://www.commonfund.org/CommonfundInstitute/HEPI/Pages/default.aspx>

Provides an overview of the Higher Education Price Index (HEPI), maintained by Commonfund, and how it is calculated based on a regression formula.

UNDERSTANDING, ANALYZING AND ADDRESSING UNIVERSITY COST MODELS

American Enterprise Institute—“Stretching the Higher Education Dollar: Addressing the Declining Productivity of Higher Education Using Cost-Effectiveness Analysis”

https://www.aei.org/wp-content/uploads/2013/04/addressing-the-declining-productivity-of-higher-education-using-costeffectiveness-analysis_083908491684.pdf

This report takes an empirical look at the cost-effectiveness of popular higher education policies and programs and argues that policymakers and institutional leaders have far more control over productivity than assumed.

The Bill & Melinda Gates Foundation—Post-Secondary Education Success—“Cost Structure of Post-Secondary Education: Guide to Making Activity-Based Costing Meaningful and Practical”

<http://www.pilbaragroup.com/Portals/0/Cost%20Structure%20of%20Post-Secondary%20Education%20-%20Practical%20Guide.pdf>

This paper seeks to provide post-secondary education leaders and administrators with a framework and practical guide to categorizing institutions’ costs in a way that informs better decision making.

Davis Educational Foundation—“An Inquiry into the Rising Cost of Higher Education: Summary of Responses from Seventy College and University Presidents”

http://www.nebhe.org/info/pdf/events/conference/october2013/Davis-Foundation-Report_An-Inquiry-into-the-Rising-Cost-of-Higher-Education.pdf

This survey of 70 colleges summarizes why institutional leaders believe costs are rising for both colleges and students.

Delta Cost Project—“Technology and the Broken Higher Education Cost Model”

<http://www.deltacostproject.org/sites/default/files/products/ERM1251.pdf>

This research paper by Delta Cost Project researchers discusses the escalating costs in higher education and the unsustainable nature of the current higher education cost model.

Delta Cost Project and Association of Governing Boards of Universities and Colleges—“Improving Cost Effectiveness: Leadership Challenges for Higher Education”

<http://agb.org/sites/default/files/legacy/u3/ImprovingCostEffectiveness.pdf>

This report discusses how improving access, attainment, and cost-effectiveness requires simultaneous attention to the agenda, the metrics for enforcing it, and the strategies to link together internal and external interests.

The John William Pope Center for Higher Education Policy—“The Revenue-to-Cost Spiral in Higher Education”

<http://www.popecenter.org/acrobat/revenue-to-cost-spiral.pdf>

This paper seeks to explain why higher education operating costs and tuition are increasing faster than inflation by comparing and contrasting higher education with the nonprofit sector.

National Higher Education Benchmarking Institute (NHEBI)—National Community College Cost and Productivity Project

<https://costandproductivity.org/>

NHEBI, located at Johnson County Community College, is the largest provider of community college benchmarking services in the country. Subscribers to the Cost & Productivity Project (also known as “The Kansas Study”) can access discipline-level benchmarks on instruction costs, student-faculty workloads, and other resources and tools. This information can help support accreditation, program management, and internal accountability.

SHEEO—Four-State Cost Study (Highlighted Resource on Page 18)

<http://www.sheeo.org/resources/publications/four-state-cost-study>

This meta-analysis of spending per student uses detailed spending data from four states—Florida, Illinois, New York, and Ohio—to demonstrate overall cost and student credit hour trends over time, as well as examine the distribution of instructional costs and differences in cost per credit hour by level of instruction and by discipline.

Sightlines—Facilities Benchmarking & Analysis

<http://www.sightlines.com/>

Founded in 2000, Sightlines’ mission is to help educational institutions better manage their facilities investments. Using shared data and working collaboratively with its members, Sightlines provides an innovative model to benchmark performance and is a good source of aggregate information about spending trends for facilities. Details about spending by institution are kept private. However, budget officers can ask their institutions if they participate in the Sightlines study, and if so may be able to obtain this information from them. Even without getting institution-level data, the Sightlines website frequently posts presentations about trends in facilities spending, which may provide useful context for state budget officers.

University of Delaware—National Study of Instructional Costs and Productivity

<http://ire.udel.edu/hec/cost/>

Better known as The Delaware Cost Study, this site provides a tool for parsing the direct cost of undergraduate instruction by discipline and provides users with a comparative analysis of faculty teaching loads, direct instructional cost, and separately budgeted scholarly activity at the level of academic discipline. The measures exclude spending for administration and overhead, and do not address sources of revenue. Despite some limitations, this site remains a good source of comparative measures on cost variations by discipline.

GOAL-SETTING AND PERFORMANCE BENCHMARKING

Complete College America

<http://www.completecollege.org/resources.html>

A national nonprofit organization funded primarily by the Bill & Melinda Gates Foundation and Lumina Foundation, Complete College America has a goal of increasing college attainment through state policies and practices including organization of coursework, reforms to remedial education, and state budget policies.

Education Trust—College Results Online

<http://www.collegeresults.org/>

This interactive web-based tool provides comparative information about college graduation rates for almost all four-year higher education institutions in the U.S. The data is also presented and searchable by specific student and institutional characteristics.

Georgetown Center for Higher Education and the Economy

<http://cew.georgetown.edu/publications>

Lead by Anthony Carnavale and a team of senior economists with backgrounds in education and labor economics, the Center is an independent, nonprofit research and policy institute that studies the link between education, career qualifications, and workforce demands. The Center seeks to inform and educate federal, state, and local policymakers and stakeholders on ways to better align education and training with labor market demand and qualifications using research conducted in three core areas (jobs, skills, and people).

NCHEMS and CLASP—Calculating the Economic Value of Increasing College Credentials (Interactive Tool)

<http://nchems.org/clasp.php>

The National Center for Higher Education Management Systems (NCHEMS) and the Center for Law and Social Policy (CLASP) developed a model to estimate the state-by-state economic impact of increasing degree attainment by 2025. They have made their model publically available as an interactive tool, where users can adjust a state's postsecondary performance goals and its 2025 college attainment goal, and view returns on investment by measuring projected changes in economic indicators such as personal income per capita and additional state revenues generated.

NHEBI—National Community College Benchmark Project

<https://www.nccbp.org/>

NHEBI, located at Johnson County Community College, is the largest provider of community college benchmarking services in the country. Its National Community College Benchmark Project (NCCBP) uses a “balanced scorecard” approach for community college benchmarking to provide comparable data on institutional effectiveness and student success outcomes.

OUTCOMES-BASED FUNDING

Center for American Progress—Performance-Based Funding of Higher Education

http://cdn.americanprogress.org/wp-content/uploads/issues/2012/08/pdf/performance_funding.pdf

This report by the Center for American Progress reviews the history of state-level performance funding initiatives in higher education; uses a case-study approach to explore different performance funding design considerations, structures and policies; and outlines a set of best practices. The following states are profiled in this publication: Indiana, Louisiana, Ohio, Pennsylvania, Tennessee, and Washington.

HCM Strategists—Driving Better Outcomes: Typology and Principles to Inform Outcomes-Based Funding Models

<http://hcmstrategists.com/drivingoutcomes/>

This report offers a new classification system (or typology) for evaluating outcomes-based funding models and examines states' policies within this framework.

HCM Strategists—Performance Funding in Indiana: An Analysis of Lessons from the Research and Other State Models

http://hcmstrategists.com/wp-content/themes/hcmstrategists/docs/Indiana_Report_12.pdf

HCM Strategists, with support from the Lumina Foundation, produced this report for the Productivity Strategy Labs, which provides resources and knowledge-sharing tools for higher education policymakers. The report was produced on behalf of the Indiana Commission for Higher Education to provide background information as the Commission worked with higher education institutions to refine the state's performance funding mechanism. The analysis identifies a number of considerations regarding the design elements of a state performance-funding formula, based on lessons learned in Indiana and other states, and includes in-depth case studies of Indiana, Florida, Ohio, Pennsylvania, Tennessee and Washington.

National Center for Higher Education Management Systems (NCHEMS)—Outcomes-Based Funding: The Wave of Implementation

<http://www.nchems.org/pubs/docs/Outcomes-Based%20Funding%20Paper%20091613.pdf>

NCHEMS has been heavily involved in performance budgeting or outcome-based budgeting for higher education. This document captures individual state examples of outcomes-based funding models and provides insight on some of the implementation challenges and how to overcome them.

NCHEMS—Information Center for Higher Education Policymaking and Analysis (Highlighted Resource on Page 45)

<http://www.higheredinfo.org/>

This interactive website provides several useful performance measures organized by state, including: data on student attainment, access, affordability, and completion; information on higher education efficiency, effectiveness and finance; and state workforce data and economic conditions. State-level finance information on this site can be organized in a number of ways, including a "state profile" that shows various measures of revenues and support, how a given state compares to national averages, and highs and lows in each category. This site is the best, easily available source for state and regional data on employment trends and workforce data.

NCSL—"Performance-Based Funding for Higher Education"

<http://www.ncsl.org/research/education/performance-funding.aspx>

The National Conference of State Legislatures (NCSL) has compiled detailed information on state-level performance funding activities for higher education. This resource provides an interactive, at-a-glance map showing the status of performance funding by state, as well as a table on performance funding amounts, key metrics, and links to supporting legislation and other documents for each state's performance funding program.

IDENTIFYING AND USING STATE POLICY LEVERS

Community College Research Center (CCRC), Teachers College, Columbia University

<http://ccrc.tc.columbia.edu/>

This center produces working papers, research reports, presentations and other resources on promoting student success at the nation's nearly 1,200 two-year colleges. The site's resources are organized by topic as well as by intended audience (e.g., administrators & faculty, institutional researchers and policy makers). One particular research area is focused on reform efforts to improve community college institutional performance.

Complete College America—*Guided Pathways to Success and Four-Year Myth* (Highlighted Resource on Page 63)

<http://completecollege.org/the-game-changers/>

<http://completecollege.org/wp-content/uploads/2014/11/4-Year-Myth.pdf>

The “Guided Pathways” model is a “comprehensive, integrated restructuring of higher education delivery” designed to help students better navigate their postsecondary education program to increase the likelihood of them graduating, and doing so on time. The *Four-Year Myth* report includes state profiles for a number of members belonging to the Complete College America Alliance of States, with state-specific data on the share of full-time students who graduate on time, the average number of credits earned, and the average time to degree

Education Commission of the States—*Blueprint for College Readiness* (Highlighted Resource on Page 65)

<http://www.ecs.org/docs/ECSBlueprint.pdf>

This interactive database was developed based on a comprehensive 50-state analysis and features information on 10 secondary, postsecondary, and bridge policies determined by ECS as critical to promoting college readiness and success. The database will show you which states have adopted these policies and provide additional detail. An accompanying “Blueprint Report” describes the role of these policies in promoting college readiness and student success.

Jobs for the Future—*DesignForScale: State Policy Self-Assessment Tool*

<http://www.jff.org/publications/designforscale-state-policy-self-assessment-tool>

This tool is designed for states to use to examine their higher education policies and to what extent they are aligned with promoting student success and degree or credential completion. The tool was created with states in the Postsecondary State Policy Network, a multistate collaboration led by Jobs for the Future and focused on improving community college student success and completion. The assessment tool consists of 88 detailed questions, many of which align with the policy set developed for structured pathways. Grouped by policy area, there are questions for states to consider regarding outcomes-based funding and financial aid and affordability, among other topics.

Jobs for the Future (JFF)—*Policy Meets Pathways* (Highlighted Resource on Page 63)

<http://www.jff.org/publications/policy-meets-pathways-state-policy-agenda-transformational-change>

This comprehensive report, which accompanies the DesignForScale self-assessment tool, is designed to help states examine their higher education policy environments and how well they align with promoting student success at community colleges.

National Conference of State Legislatures (NCSL)—*Higher Education Research*

<http://www.ncsl.org/research/education/higher-education.aspx>

NCSL has compiled information and performed analysis on a variety of current topics in state higher education policy. The research explores state efforts and legislation intended to increase college access, degree completion, and affordability, as well as to align postsecondary education to meet workforce demands.

National Student Clearinghouse Research Center

<http://nscresearchcenter.org/>

This Center is the research arm of the National Student Clearinghouse. It works with higher education institutions, states, districts, high schools, and educational organizations to better inform practitioners and policymakers about student educational pathways. Through accurate longitudinal data outcomes reporting, the Research Center enables better educational policy decisions leading to improved student outcomes.

Strategy Labs (Highlighted Resource on Page 46)

<http://strategylabs.luminafoundation.org/>

Strategy Labs are a project funded by the Lumina Foundation to identify and promote effective models for state policy to improve postsecondary attainment. The Labs conduct research, prepare analyses, and provide consulting for state policy makers and staff. One section of the website provides a comprehensive set of links to additional valuable resources on outcomes-based funding from other groups:

<http://strategylabs.luminafoundation.org/higher-education-state-policy-agenda/core-element-2/adopt-and-sustain-outcomes-based-funding/>



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