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**OUTCOMES-BASED  
FUNDING AND  
RESPONSIBILITY CENTER  
MANAGEMENT:  
COMBINING THE BEST  
OF STATE AND  
INSTITUTIONAL BUDGET  
MODELS TO ACHIEVE  
SHARED GOALS**

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JUNE, 2016



## Abstract

State governments serve as a key funding source for public higher education. An alternative to historically based state subsidies or enrollment-based formulas, outcomes-based funding allows states to convey goals for higher education by allocating state tax dollars based on measures of outcomes. Within higher education institutions, the Responsibility Center Management model engages deans and other mid-level managers in the responsibility and accountability for revenue generation as well as expense management. Policymakers will benefit from understanding this approach and how it could be used in concert with outcomes-based funding to support the development and delivery of new academic paradigms, expand access to underrepresented students, and, ultimately, increase educational attainment for a greater number of people. This article describes the potential alignment between incentives created by the Responsibility Center Management model and goals of outcomes-based funding. With an integration of the two models, there is a greater assurance of achieving the goals of both—fiscal sustainability and student success. By using Responsibility Center Management, college and university administrators are better able to marshal resources to help students complete their degrees and other credentials while also reaping the benefits of an outcomes-based funding system that directs public funding toward institutions that are doing just that.

**Keywords:** Outcomes-based funding, Responsibility Center Management, Higher education budgeting, State funding of higher education

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## Introduction

State governments serve as a key-funding source for public higher education. Outcomes-based funding<sup>1</sup> is an alternative to other methods of state allocations to institutions, such as base-plus funding,<sup>2</sup> enrollment-based funding,<sup>3</sup> and early performance-centered funding<sup>4</sup> (Hearn, 2015). Outcomes-based funding allows states to convey and promote alignment with goals and objectives

<sup>1</sup>Outcomes-based funding is a state funding allocation process that funds colleges and universities based on how well they perform on key metrics or measures of outcomes. Today's outcomes-based funding models seek to provide incentives for and reward progress toward a set of stated goals, and have a direct link to the state's higher education attainment needs and place primary emphasis on student completion and narrowing the attainment gap across racial and ethnic groups, though they often include measures beyond student progression and completion. Advanced models also determine how a significant portion of the state's general budget allocation to institutions is determined.

<sup>2</sup>Base-plus funding is a non-formula based approach begun in the 1800s through which states provide annual or biannual changes to an established base institutional budget.

<sup>3</sup>Enrollment-based funding is a formula-based approach developed following World War II that emphasizes professionalized planning, efficiency and predictability in states' allocations to institutions.

<sup>4</sup>"Performance funding" refers to a broad set of policies linking allocation of resources to accomplishment of certain desired objectives. Historically, postsecondary performance funding models were often add-ons or bonuses to base institutional allocations that institutions earned for meeting various goals or benchmarks. Additionally, many of these earlier models included measures focused more on inputs or processes than student progression and outcomes and were not intended to drive increased student completion.

for higher education by allocating state tax dollars to institutions based on measures of outcomes.<sup>5</sup> As policymakers revise methods for allocating state funding to higher education, it is helpful to understand how higher education administrators manage the funds that the state sends to higher education institutions. These institutions use different budget models to deploy and monitor funding. One effective budget model that has recently gained prominence in public and private universities is Responsibility Center Management, a decentralized model that engages deans and other mid-level managers in development and management of budgets, thereby creating broader understanding and accountability for the budgetary and programmatic consequences of administrative decisions.<sup>6</sup> Policymakers will benefit from understanding budget management in higher education and how the Responsibility Center Management model could be used in concert with outcomes-based funding to achieve state goals and objectives for higher education.

Policymakers want higher education institutions to develop and deliver new, more effective academic paradigms; improve access for underrepresented populations; and, ultimately, increase educational attainment for a greater number of people. Higher education administrators at both two- and four-year institutions share these goals with state policymakers, not only to continue to serve as many students as possible (securing their sustainability), but also to fulfill their mission to support the public good. Outcomes-based funding and Responsibility Center Management create incentives to help achieve these goals. Indeed, the strengths of each funding structure can help to mitigate the potential drawbacks of the other when they are implemented together. Outcomes-based funding places value on student access, progression, and completion. Responsibility Center Management shares budgetary control with deans and department heads to help ensure that decisions

<sup>5</sup>Outcomes measures are pre-defined measurable results of higher education programmatic performance. For example, number of degrees completed, number of courses completed by students from underrepresented populations, or percentage growth in six-year completion rates for students in science disciplines. Outcome measures are more effective when aligned with each institution's mission and defined in a joint effort of policymakers and higher education leaders.

<sup>6</sup>Responsibility Center Management is also called responsibility-centered budgeting, incentive-based budgeting, and revenue center management.

### Outcomes-Based Funding and Responsibility Center Management

- ▶ When used in tandem, the two models have the potential for greater success
- ▶ State goals and institutional objectives may be achieved more effectively by using the strongest aspects of both models

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### Responsibility Center Management

- ▶ RCM is a decentralized budget model that holds unit-level leaders responsible for generating revenue as well as staying within an expense budget
- ▶ RCM helps complex institutions that need engagement of mid-level managers for success

about resource allocations directly result in recruiting, serving, retaining and graduating students. By using Responsibility Center Management, college and university administrators are better able to marshal resources to help students complete their degrees and other credentials while also reaping the benefits of an outcomes-based funding system that directs public funding toward institutions that are doing just that.

## Higher Education Institution Budget Models

Higher education institutions use different budget models to plan and manage revenue and expense (see Appendix A for a brief description of common models). Centralized control of the budget, a model in which most decisions and accountability are held by the upper-level administration (president and key advisors), is still the most prominent structure. In this centralized structure, state appropriations and/or tuition revenue are captured, reported and analyzed at the institution level, and expense is allocated by upper-level administrators to financial units,<sup>7</sup> such as the college of law or the department of history, usually based on historical funding levels with small year-to-year changes (similar to the state-level “base-plus” funding approach). As state funding has decreased and criticism of rising tuition rates has increased, institutions have been challenged to examine and improve their budget processes to achieve their missions with less funding, increased transparency and demonstration of strong stewardship of public and tuition dollars. One of the changes some institutions have made is to decentralize responsibility, accountability and control of portions of the institution’s budget, engaging the next layer of administrators in the work of managing the institution’s budgetary outcomes. This is Responsibility Center Management.

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<sup>7</sup>A financial unit, also known as a “Responsibility Center,” is a defined subset of a higher education institution with a uniquely qualified manager with a distinct area of responsibility. Examples include a college or school led by a dean (such as arts and sciences, business or law), a large department (such as facilities or admissions) led by a director, or a division with a distinctive area of responsibility (such as student life or athletics). Units that generate revenue (from tuition, ticket sales, room and board, etc.) are called revenue-generating units. Units that do not generate revenue (such as admissions, facilities, library, central administration, etc.) are cost centers supported through the indirect expenses paid by revenue-generating units.

## Impacts of Implementing Responsibility Center Management

Responsibility Center Management decentralizes decision-making so that deans and department heads have substantial budgetary authority for their financial unit. In this structure, these mid-level managers are directly responsible for both revenues (such as tuition, state allocation and gifts) and expenses (such as mix of courses and use of faculty) associated with their operation. This authority can make them more entrepreneurial and potentially—if implemented in concert with outcomes-based funding—more aware of state goals and objectives such as increasing completion rates and the potential benefits and consequences of meeting these pre-defined goals. Upper-level administrators in higher education institutions can use Responsibility Center Management as an effective management tool to engage and create incentives for middle-level managers in the successful oversight and planning of both revenue generation and expense containment.

In a study of Responsibility Center Management at 27 universities, deans confirmed that it is an effective budget model that allows them to work on all aspects of their operation (see Appendix B for an abbreviated list of institutions implementing this model) (Kosten, 2009; Kosten and Lovell, 2011). As a result of implementing this model, deans confirmed they are more fiscally aware, empowered to manage

their unit, more accountable and, as a result, more entrepreneurial. Deans believe that Responsibility Center Management creates incentives for growth by rewarding units for increasing revenue (Kosten, 2009; Kosten and Lovell, 2011). Reports from multiple universities confirm that the model has been shown to: place authority in the hands of the proper decision makers; motivate mid-level managers and recognize their performance; and serve as an effective tool for constructive change (Bava, 2001; Brown-Wright, Newman, and Bradley, 1993; Bruegman, 1995; Clark, 1998; Clarke and Chancey, 1997; Cunliff, Martin, and Mounce, 1993; Curry, Laws, and Strauss, 2013; Facione, 2002; Hiam, 2003; Mancini and Goeres, 1995; Massy, 1992; Messinger, 1994; Murray, 2000; Nelson and Soby, 1998; Robbins and Rooney, 1995; Salluzzo, 1999; Smith, 1985; Strauss & Curry, 2002; West, Seidita, DiMattia, and Whalen, 1997; Whalen, 1991). Others have described the model's impact on improving campus climate and the effectiveness of fiscal management throughout the organization (Lawrence, 1995; Mancini and Goeres, 1995; Jacquin, 1994). Responsibility Center Management encourages transparency and clear cause-and-effect accountability. It also promotes more "accurate and meaningful" strategic planning activities (Mancini and Goeres, 1995, p. 44) and "permits tighter analytical focus on problem areas" (Jacquin, 1994, p. 44).

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There are some possible drawbacks that policymakers and university administrators should be aware of and institutions should be careful about as they consider implementing Responsibility Center Management. There are reports that, when not well managed, the model may lead to: (1) financial considerations superseding academic ones; (2) interdisciplinary teaching and research being hindered; (3) competition, rather than collaboration, increasing among academic units; and (4) unit-level plans and goals receiving future investment opportunities, to the neglect of the institution's goals (Adams, 1997; Chabotar, 1995, 1999; Dubeck, 1997; Heath, 1993; Kirp, 2003a, 2003b; Messinger, 1994; Murray, 2000; Rodas, 2001; Scott, 2001; Wolverton, Gmelch, Montez, and Nies,

2001). Deans at institutions using Responsibility Center Management believe that while these consequences may result if not managed well, the positive outcomes mentioned above were much more prevalent (Kosten, 2009; Kosten and Lovell, 2011). As the model is implemented, awareness of these possible drawbacks and creative leadership to avoid them is needed. The use of Responsibility Center Management in conjunction with outcomes-based funding may mitigate these drawbacks.

## Responsibility Center Management in an Outcomes-Based Funding Environment

Combining the financial resource discussion central to Responsibility Center Management with the need to achieve specific goals outlined by state outcomes-based funding models is reasonable, and also addresses one of the prior concerns of Responsibility Center Management—that managers can become too focused on financial outcomes. The scope of the funding model is expanded beyond simple financial success to include true measures of goal attainment related to student success.

For Responsibility Center Management and outcomes-based funding to succeed, both models need strong design and leadership; effective, responsive and flexible data systems and support; clear communication and transparency; and engagement of campus leaders (central, mid-level and faculty) through shared responsibility and accountability. As institution and state leaders have learned, “funding models create incentives for institutional behavior” (Jones, 2013, p. 2).

Outcomes-based funding has already demonstrated that: (1) it increases institutional engagement in and awareness of state priorities and goals for higher education; (2) institutions are cognizant of their performance against measures of these goals; and (3) institutions compete for status on these measures, producing better outcomes as a result (Dougherty and Reddy, 2011; Jones, 2013). Outcomes-based funding, if done well, is “a powerful tool for supporting increased postsecondary student attainment” (Lumina Strategy Labs, 2014).

There are, however, some potential barriers to the success of an outcomes-based model. These barriers include: (1) the lack of mission differentiation in the design of some outcome measures; (2) the small portion that state funding represents in relation to total funding at many institutions; and (3) the lack of understanding of outcomes measures below the upper-level administration. The first barrier, the lack of mission differentiation, refers to outcomes measures that are developed without regard to institution type, a significant issue with early performance-funding models. Outcomes-based funding is more successful in states, such as Tennessee, that take into account different institutional missions and have worked with faculty and administrators in defining measures of outcomes and the related funding processes (Dougherty and Reddy, 2011; Jones, 2013; Wright, 2016). States that have engaged with “institution leaders and the community during the design and

### Shared Characteristics for the Success of Responsibility Center Management and Outcomes-Based Funding

- ▶ Strong design and leadership
- ▶ Effective data systems and support
- ▶ Clear communication and transparency
- ▶ Extensive engagement of campus leaders (central, mid-level and faculty)



implementation period" have dispelled the fear that outcomes-based funding will "undermine an institution's autonomy" (Miao, 2012, p. 8). The second barrier to success is the small portion of overall funding provided by state appropriations, as tuition constitutes a large and growing share of operating funds at most institutions (Postsecondary Analytics, 2013). Supplemental revenue from philanthropy, sports programs, and other sources can further dilute the impact of state aid. Making the state funding pool "large enough to command attention" is difficult (Jones, 2013, p. 8). If institution leaders are thoroughly engaged in creating and implementing outcome measures, they may believe in the merit of these goals and use them as criteria for distribution of other institution resources. Third, it has been shown that there is at best "uneven knowledge about and responsibility for performance funding" and that the "awareness of performance funding and its requirements varies greatly within institutions, with those at the top of the hierarchy possessing greater understanding of and responsibility for the performance funding process than middle-level administrators and faculty who also play an important role in implementing performance funding" (Dougherty and Reddy, 2011, p. 34). This last challenge, as well as the related engagement challenges above, can be addressed more effectively by a state with institutions that have implemented, or are implementing, a Responsibility Center Management model that engages all levels of campus leadership.

In Responsibility Center Management institutions, mid-level managers are already engaged in analyzing data concerning their unit's financial success as well as a wide variety of other data. Such data points often overlap with those used in outcomes-based funding models, and include enrollments, course-level outcomes, retention rates, job-placement success, and licensure-exam-passage rates that illustrate the unit's value to current and future students and foster long-term revenue strength. To engage these leaders in discussions to define outcomes measures for student access, progression and completion is an obvious next step. Many managers are already completing academic program reviews or studies for accreditation processes that include evaluation of student success data.

Within Responsibility Center Management institutions, a structure of accountability and responsibility for outcomes is in place. Positive student outcomes, as well as financial success, are only achieved by focused efforts within the organization at all levels. All unit leaders need to be aware and engaged as active change agents to achieve desired outcomes. Shifting the focus of unit leaders to include outcomes, such as timely degree completion or an increase in the number of low-income students served, more clearly defines the scope of influence and responsibility under their purview.

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Outcomes-based models can leverage help institutions leverage or refine the entrepreneurialism and competition inherent in Responsibility Center Management models institutions to obtain positive results on measures of outcomes. States want to reach more students and increase access to higher education. The Responsibility Center Management model works most effectively in a

time of growing enrollment. The creativity and entrepreneurialism encouraged by the model's financial incentives are useful in expanding access and reaching a larger audience of students. In addition, the transparency of financial results that competition generates pairs nicely with the transparency of student-success outcomes measures. For instance, as performance on outcomes measures (such as on-time degree completions or number of underserved students enrolled) is incorporated into distribution of state funds within an institution down to the unit level, it changes the conversation. There is a greater awareness of performance in these areas and an opportunity to implement changes to improve student success. This focus on better outcomes only creates more innovation and outreach that keeps higher education relevant to the students it serves. There are clear advantages to coordinating Responsibility Center Management with the expectations of outcomes-based funding models.

Critical to the success of both models is the clear capability of leaders, staff and systems to support them. Strong leadership is needed at both the institution and unit level, with people who comprehend the state goals, the outcome measures and the budgetary impacts of their decisions in these positions. These leaders need to be able to work individually and as a group with other deans and administrators to be successful at achieving change on outcome measures, as well as proficiency in budget management and planning. In addition, strong unit-level budget and data professionals are needed to support deans. These professionals must understand fiscal planning and management, the use of data in decision-making, educational evaluation, and how to monitor and manage multiple factors for success. Understanding the drivers that lead to a positive budget outcome, as well as change in student success outcome measures and their linkage, is required to facilitate sustainable change. To support these leaders and their staff, the availability of consistent data collection and reporting systems are needed. This reporting needs to be seamlessly integrated with the state's systems for measuring outcomes (Quinterno, 2012). These data should not only be aligned with desired outcomes, but also be accurate, current (while also displaying historical trends) and available on dashboards accessible to academic leaders and budget and data professionals throughout the state.

#### Integration of the Two Models

- ▶ Responsibility Center Management holds unit-level leaders responsible and accountable for financial results
- ▶ Outcomes-based funding focuses beyond the bottom line to consider student success
- ▶ The entrepreneurialism and healthy competition of Responsibility Center Management can be leveraged for better student outcomes
- ▶ Responsibility Center Management is a useful tool for institutions to understand embrace outcomes and promote engagement to increase student success

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These budgetary and student outcomes also need to be clearly communicated to institutional stakeholders who are responsible for implementing change. Clear communication and transparency enhances the success of both models. This understanding allows for the design and implementation of effective and sustainable policy that best meets the needs and interests of the people it is meant to serve.

## Institutions Incorporating Outcomes-based Funding into Responsibility Center Management

There are institutions implementing Responsibility Center Management models that are also in states with state-level outcomes-based allocations (see Table 1). However, few institutions have used the outcomes-based funding formula for campus-based allocation within the Responsibility Center Management model. Indiana University-Bloomington, for example, does not merge the state outcomes formula into its Responsibility Center Management process, partially due to the relative small amount received from the outcomes portion of the states funding model compared to other revenue sources. The institution allocates based on percentages of state operating funds per college, not on achieving the outcome measures of the funding formula (Indiana University-Bloomington, Provost's Office, 2011). Kent State University, however, has combined the Responsibility Center Management with the state of Ohio's outcomes-based allocation process. In the Kent State Responsibility Center Management manual it states, "The degree completion component of state share of instruction provided for baccalaureate and master degrees is allocated to departments using the State's formula" (Kent State, n.d.). In other words, departments will receive the dollars from the state associated with degree completion if they meet the established outcome measure—motivating deans at Kent State to improve degree-completion rates. Two institutions are in the process of implementing their states' outcomes-based funding in concert with Responsibility Center Management. University of Memphis has a team looking to implement Responsibility Center Management for Fall 2015. No information is yet released on the integration of the state funding formula, but given Tennessee's leadership on outcomes-based funding, this should be forthcoming (University of Memphis, n.d.). At the University of New Mexico (2012), a bold plan is under way to combine Responsibility Center Management with the state's performance-based budgeting metrics to "empower academic leaders to achieve these goals and objectives through the use of entrepreneurial models that reward financial stewardship and performance" (p. 11).

### Successful Integration at Indiana University-East

- ▶ Prior to implementing Responsibility Center Management in 2008, the institution was running annual deficits
- ▶ With the implementation of outcomes-based funding in 2012, the discussion changed to a "culture of completion"
- ▶ Because of Responsibility Center Management, deans were already engaged and made changes to courses and advising to reduce time to graduation

The best example of an integration of Responsibility Center Management and outcomes-based funding is at Indiana University-East. Prior to 2008, IU-East was facing deficits at year-end. Through a change in leadership and the implementation of Responsibility Center Management, this particular

institution has turned around financially. In 2012, IU-East implemented a simplified version of the state's performance-funding formula within the Responsibility Center Management structure. The state's outcomes-based formula was too complex to implement directly at the institution level, so the campus leaders adapted the plan to use three criteria—enrollment levels, degree completion and on-time degree completion—to distribute increases in state allocations. While the amount of money involved in this distribution was not substantial, the use of student success measures and the resulting discussions have led to a new “culture of completion” among the deans. The deans are savvy managers and have made changes to advise students to be careful about the timing of course choices to be successful in completing their degrees timely (L. Richards, personal communication, August 11, 2014).

Another example of outcomes-based funding changing the discussion and spurring change in the budget processes is at California State University-Fullerton. While not employing a full Responsibility Center Management model, the institution is using budget processes and data analysis to motivate division-level leadership toward change. Cal State-Fullerton “is framing the outcomes-based conversation on campus, deploying actionable data and technology tools to drive action, and restructuring its budget processes to be better-positioned for the advent of outcomes-based funding in the state” (Cruz, 2016). Two of the areas in which the institution has successfully used actionable data are the implementation of a student success dashboard for student advising and the use of data visualizations to identify bottleneck courses that are hindering student progress toward degree completion.

Policymakers in states that already have outcomes-based funding in place should encourage higher education administrators to push the evaluation, responsibility and benefits of outcome measures to the Responsibility Center Management level to change the conversation, as was done at both Cal State-Fullerton and IU-East. The Responsibility Center Management year-end results should involve not only financial outcomes, but also student success outcomes concerning persistence, degree completion and increasing the number of underserved students enrolled and graduating.

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## Here's How It Works: Key Decisions in Implementing Responsibility Center Management

As policymakers consider encouraging higher education institutions in their state to adopt Responsibility Center Management in association with outcomes-based funding, it is critical to understand the complexity of this implementation process. The implementation of Responsibility Center Management within an institution involves key administrators and faculty who will need to make a series of essential decisions and develop systems to support the new decentralized structure. The key decisions include: (1) the method to be used for revenue distribution, including the use of outcome measures to determine funding; (2) the definition of financial units or Responsibility Centers; (3) the process for major budget parameter decisions; (4) the treatment of indirect costs; and, finally, (5) the disposition of year-end variances.

The method for distribution of revenue within a budget year varies by institution as well. State appropriations are shared with units in a variety of ways. Some institutions divide state dollars on a per-full-time-student enrollment basis and others keep a portion of the state appropriation for central expenses, such as facilities. For a true integration of Responsibility Center Management and outcomes-based funding to be effective, institutions need to use state outcomes-based funding criteria to distribute state dollars. As discussed earlier, only a few institutions have successfully integrated the two models (Kent State, n.d.; University of New Mexico, 2012; L. Richards,

Outcome measures applied to revenue distribution

- ▶ To successfully integrate outcomes-based funding and RCM, the state's measures of outcomes must be applied to the unit-level data and dictate the receipt of state appropriation revenue
- ▶ For RCM to be leveraged for student success, these measures must be linked to revenue distribution

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  - 5) the disposition of year-end variances.
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personal communication, Aug. 11, 2014). For instance, at IU-East, if the state appropriation increases, the academic units are awarded additional funding. This funding is based one-third on enrollment, one-third on degree completion, and one-third on on-time graduations. Beyond the state appropriation distribution, the earning of tuition revenue is at times represented in the unit that teaches the course and at times in the unit in which the student is enrolled as a major. For instance, a student might be an accounting major and take many of her courses from the accounting department, but also be required to take general education courses in science, writing and foreign language. Some institutions send 80% of tuition to the unit teaching and 20% to the student's major unit. This can be tricky to automate with double, and sometimes triple, majors at the undergraduate level. At IU-East, all tuition flows to the teaching unit. Other institutions will divert a percent of undergraduate tuition to the upper-level administration to create a "subvention fund" (centrally pooled dollars used to help units who have expenses beyond generated revenues or to invest in central priorities). Some institutions have a different method for tuition distribution for graduate and undergraduate revenue. At the University of Denver, for instance, graduate-student tuition flows back to the student's home academic unit, and undergraduate tuition flows to the academic unit of the faculty member teaching the course. Institutions have a wide range of policies for sharing gift and endowment funds, indirect cost recovery from external grants, room and board fees, and event ticket sales. The decisions about revenue distribution lead to the incentives that motivate mid-level managers to better performance.

How an institution defines its financial units, or Responsibility Centers, determines who will be involved in and responsible for many budget decisions. The obvious people to take on this responsibility are deans of colleges and directors of large units, such as athletics, facilities and student life. Using the existing organizational chart is the best place to start. Some institutions send revenue and expense control in academic areas to the department level (biology or history, for example); however, most keep it at a dean or college level (arts and sciences, for example). One alternative is to make annual decisions at the college level, but share in the positive year-end results at the department level to provide incentives for department-chair performance. Identifying this level of decentralization is needed before making the next series of decisions.

Institutions must also decide on annual budget parameters such as tuition rates, discount rates and salary increases. In most institutions, there is one undergraduate tuition rate. Often, graduate professional schools, such as medicine, law, dentistry or continuing education, have their own tuition rates; and the decision to approve this rate may be at the sole discretion of the unit leader, or made in consultation with upper-level administrators, or up to the approval of an institution or state board. Beyond tuition, the level of scholarships awarded, and whether scholarships are awarded based on need, merit or both criteria, are decisions that may be centralized or decentralized, and may even vary by type of student within a Responsibility Center Management institution. For instance, graduate scholarships may be controlled by a dean, while undergraduate scholarships are handled by a central financial aid office. Finally, the decision on whether to provide salary increases and the size of the pool of available dollars is a key annual budget parameter. Salary increases are often the largest change in expense within the annual budget. The decision about whether this is a financial-unit, institution or state-board decision is pivotal to the management of the budget.

One of the most challenging decisions that must be made when implementing Responsibility Center Management is how to allocate indirect expenses. Some institutions implement the model with allocation of indirect expenses<sup>8</sup> to units through a formula budget process that is shared with deans. Such an allocation formula would quantify the portion of indirect expense incurred by each revenue-generating unit on a per-use principle. For instance, facilities may be “billed back” at a certain amount per square foot of space. In a study of the perspectives of academic deans working within Responsibility Center Management institutions, the most common area of concern mentioned was the inadequacy of the indirect-cost formula used at their institutions (Kosten, 2009). Alternatively, other institutions budget a unit’s operating “net” (differential between revenue and expense) based on the revenue a unit is projected to generate and the direct expense<sup>9</sup> a unit will incur. Then, centralized units or “cost centers”<sup>10</sup> are paid for using this operating net. This process acknowledges the fact that some units have the capacity to support others, and each one should not have to solely sustain itself within a higher education institution, given the wildly varied abilities to generate revenue in different units and the overall mission of the institution. In both options, discussions are held with mid-level managers about the service levels provided to students by central offices. Within the former allocation process, the discussion is more likely to center on the price of those services in the allocation formula; and in the latter, the discussion is likely to center on the quality of those services and how they might be enhanced.

Another essential decision that an institution must make relates to the disposition of positive and negative variances from the budget. Some keep the variance at the institution level, while others represent the full variance within the units. At the University of Denver, there is a program called “gain share” that allows for a balance of these two extremes. Positive *expense* variances (dollars not used in the expense budget) are held at the unit level, thereby discouraging the purchase of unneeded goods at year-end that might otherwise result from the dollars “going away.” Positive *revenue* variances are shared 50 percent with the unit and 50 percent with the institution. This may lead to budgeting conservatively so as to guarantee some positive variance at year-end. Some level of conservatism is welcomed, as it results in positive year-end results; however, it can also result in lost opportunities from not investing in additional salary to attract strong faculty or additional scholarships to attract highly qualified students. More than twenty-five years of Responsibility Center Management and the “gain share” program at the University of Denver have resulted in strong operating margins, the growth of expendable reserves and thereby an improved balance sheet. In addition, some portion of “gain share” dollars is available to units for investment in pilot programs to develop and deliver more-effective academic models. In an outcomes-based funding model, these dollars could be used to recognize excellence in meeting outcome measures or to fund pilot projects to address areas of student success.

<sup>8</sup>An indirect expense is one that is not directly managed by the financial-unit manager. For instance, space-related expenses such as power are indirect expenses for all areas except facilities. An allocation formula often quantifies the portion of indirect expense incurred by revenue-generating units on a per-use principle. For instance, facilities are “billed back” at a certain amount per square foot of space, library expenses at a percentage of total faculty, or admission expenses at a percentage of student applications processed.

<sup>9</sup>A direct expense is one that is directly associated with a program managed by the financial unit. For instance, staff and faculty salary, printing and publications, office supplies and travel are direct expenses.

<sup>10</sup>Financial units that do not generate revenue (such as admissions, facilities, library, central administration, etc.) are cost centers supported through the indirect expenses paid by revenue-generating units.

## Limitations of Implementing Responsibility Center Management in an Outcomes-Based Funding Environment

There are possible limitations to consider when implementing Responsibility Center Management in an outcomes-based funding environment. Here are four: (1) As discussed earlier, state appropriations dictated by the outcomes-based formula may be too small to provide incentives for change and therefore may be too small to decentralize in a Responsibility Center Management structure with any impact. (2) The Responsibility Center Management model is based on a cost/revenue relationship—i.e. revenue from instruction should cover the cost of instruction. Introducing an outcomes-based funding formula to the distribution of revenue disrupts this direct relationship and adds complexity to the model. (3) Devolving the outcomes-based funding formula to sub-units in the institution may be overly complex and not apply equally to all. If not managed well, it may create another issue of contention among the administration and the faculty. (4) Outcomes-based funding formulas only dictate the allocation of dollars to state institutions. Ideally, private institutions of higher education within the state should be engaged in meeting similar outcome measures, possibly through shared reporting systems.

The obvious complexity of implementing a Responsibility Center Management model in conjunction with outcomes-based funding may seem daunting; however, the positive outcomes make the investment worthwhile. It is a flexible, powerful budgeting system that can be used to motivate and engage leaders and provide incentives for change.

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## Conclusion

As policymakers seek to ensure that their investment of state dollars in higher education is achieving the outcomes they seek, including increased student access, progression and degree completion, it is well-worth considering Responsibility Center Management as a partner to outcomes-based funding.

If the strengths of an institution-based Responsibility Center Management budget model are coupled with a state outcomes-based funding formula, the probability for successful achievement of outcomes is greatly increased. Deans and other mid-level managers who are in direct contact with students and faculty members are involved in the generation and implementation of mission-specific outcome measures and then held accountable for the outcomes they help create. Given this involvement in creation of measures and the built-in accountability of Responsibility Center Management, deans are more likely to improve student support programs and design curricula with the outcome measures in mind. Deans will have a vested interest in improving support services and leading

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If the strengths of an institution-based Responsibility Center Management budget model are coupled with a state outcomes-based funding formula, the probability for successful achievement of outcomes is greatly increased.  
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curriculum-design discussions that will lead to student success. Without Responsibility Center Management in place with outcomes-based funding, the responsibility for achieving outcome measures is limited to the central administration, and the creativity and entrepreneurialism of deans and other mid-level managers is lost.

Research has proven that higher education institutions can achieve greater success, both financially and academically, by bringing dean-level leadership into budget management. Bringing deans into monitoring outcome measures of their programs benefits their institutions, their students and the state goal of developing an educated populace. With an integration of the two models, there is a greater assurance of achieving the goals of both states and institutions: student success and fiscal sustainability.

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Without Responsibility Center Management in place with outcomes-based funding, the responsibility for achieving outcome measures is limited to the central administration, and the creativity and entrepreneurialism of deans and other mid-level managers is lost.

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## Author Bio

### Linda A. Kosten

Linda A. Kosten is interim senior associate provost for planning, budget, and analysis at the University of Denver. She works on development of the annual and multi-year budget, oversees the institutional research office, and coordinates academic program review as well as faculty appointment processes for the provost. She has taught graduate courses on higher education finance, institutional research, and enrollment management. Following publication of her book *Decentralized Budgeting and the Academic Dean: Perspectives on the Effectiveness of Responsibility Center Management* (2009), Kosten has served as a consultant to universities exploring the transition to decentralized budgeting. She earned her doctorate in higher education administration from the University of Denver.

## APPENDIX A: Higher Education Institution Budget Models

To understand how higher education institutions organize their budgets, often with a unique blend of existing options, it is helpful to understand the various types of models.

**Incremental budgeting** uses the budget from the prior year as a starting point; alterations, cuts or additions are made while the core of the budget remains the same (Barr, 2002; Lasher and Greene, 1993; Messinger, 1994; Rodas, 2001). Many universities default to this model due to time constraints and the fact that much of the budget associated with compensation for faculty and staff remains relatively constant.

**Zero-based budgeting** is the opposite of incremental budgeting, as it takes the budget down to zero and rebuilds it, examining the intent of each dollar planned from the bottom up (Messinger, 1994). It does not acknowledge the reality of continuing commitments, such as salaries for tenure-track faculty (Barr, 2002; Lasher and Greene, 1993; Messinger, 1994; Rodas, 2001). This budget allocation model is often used when leadership or mission changes. It is time-intensive and generally not realistic to do every year with every unit in a complex institution.

**Planning, programming and budgeting systems** link planning with resource allocation by investigating the costs and benefits of program choices, providing a detailed analysis of each option and allocating resources by program, rather than by organizational unit (Barr, 2002; Lasher and Greene, 1993; Messinger, 1994; Rodas, 2001). This program-by-program funding process does not hold leadership of larger academic units accountable for program outcomes (Messinger, 1994) and depends on the development of detailed cost data, such as average costs per credit hour, and the creation of input-output matrices to map students' progression through particular programs to guide decision-making.

**Formula budgeting** is a method that quantifies a portion of the expense incurred by a specific unit on campus (Messinger, 1994). For instance, facilities expense may be represented per square foot and instructional cost by credit hour. Because formulas tend to be perceived as objective in nature, they reduce the political nature of budget decision-making (Messinger, 1994), though they can also trigger questions about the validity of the formula's design.

**Responsibility Center Management** involves a greater number of decision-makers in the planning and management of the budget. The model engages deans and other mid-level managers in the development and management of their budgets and, in doing so, creates a broader understanding and accountability for the budgetary and programmatic consequences of administrative decisions.

Many higher education institutions use a **blend of multiple models**. For instance, an institution may have a Responsibility Center Management structure (sharing responsibility for revenue and expense at the decentralized unit level) but develop the annual budget in an incremental fashion each year, and every five years require each unit to complete a zero-based budget exercise and analyze every expense and revenue at a much greater level of detail.

## APPENDIX B: The History and Prevalence of Responsibility Center Management

Responsibility Center Management has been in use in higher education institutions for more than 30 years. Jon Strauss and John Curry are two of the early and continued leaders in the development of this model. Jon Strauss is often referred to as the “father” of the model, having developed it in the late 1970s and early 1980s as the vice president for budget and finance at the University of Pennsylvania. He then overlapped with John Curry at the University of Southern California in the early 1980s, and together they developed the use of Responsibility Center Management at that institution. Both have gone on to lead other institutions and introduce the use of the model. They also have authored several articles and books on the topic through the National Association of College and University Business Officers and consulted at many other institutions. An abbreviated list of Responsibility Center Management institutions is provided in the table below. The model’s use at two-year colleges is missing from the literature. This may be due to the more centralized management in two-year institutions, with fewer independent deans and directors leading units.

**Table 1. Subset of Institutions Identified as Utilizing Responsibility Center Management**

Private Institutions	Public Institutions
1 American University <sup>1</sup>	1 Central Michigan University <sup>2</sup>
2 Case Western Reserve <sup>2</sup>	2 Cleveland State University <sup>2</sup>
3 Claremont Graduate University	3 Florida International University <sup>2</sup>
4 Cornell University	4 Indiana University-Bloomington <sup>2</sup>
5 Duke University <sup>2</sup>	5 Indiana University-East <sup>2</sup>
6 Emory University	6 Indiana University-Purdue University Indianapolis <sup>2</sup>
7 Georgetown University	7 Iowa State University
8 Harvard University	8 Kent State University <sup>2</sup>
9 Northwestern University <sup>1,2</sup>	9 Texas Tech University
10 Johns Hopkins University	10 The Ohio State University <sup>2</sup>
11 Rensselaer Polytechnic Institute	11 University of Alabama-Birmingham
12 Stanford University <sup>1</sup>	12 University of Arizona <sup>2</sup>
13 Syracuse University	13 University of California Berkeley
14 University of Delaware	14 University of Cincinnati <sup>2</sup>
15 University of Denver	15 University of Florida <sup>2</sup>
16 University of Pennsylvania <sup>2</sup>	16 University of Idaho
17 University of Rochester	17 University of Illinois <sup>2</sup>
18 University of Southern California	18 University of Michigan <sup>2</sup>
19 Vanderbilt University <sup>2</sup>	19 University of Minnesota <sup>2</sup>
20 Washington University, St. Louis <sup>2</sup>	20 University of Missouri-Kansas City <sup>2</sup>
	21 University of New Hampshire
	22 University of New Mexico <sup>2</sup>
	23 University of Oregon
	24 University of Pittsburgh <sup>2</sup>
	25 University of Virginia
	26 University of Washington
	27 Wright State University <sup>2</sup>

<sup>1</sup>Hybrid institutions, some colleges RCM and some not

<sup>2</sup>Institutions in states with outcomes-based funding in place at four-year institutions (National Council of State Legislatures, 2014)

(Bava, 2001; Birchfield & Cammarata, 2002; Curry, Laws, & Strauss, 2013; Kirp, 2003b; Nelson & Scoby, 1998; Robbins & Rooney, 1995; Strauss & Curry, 2002)

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