

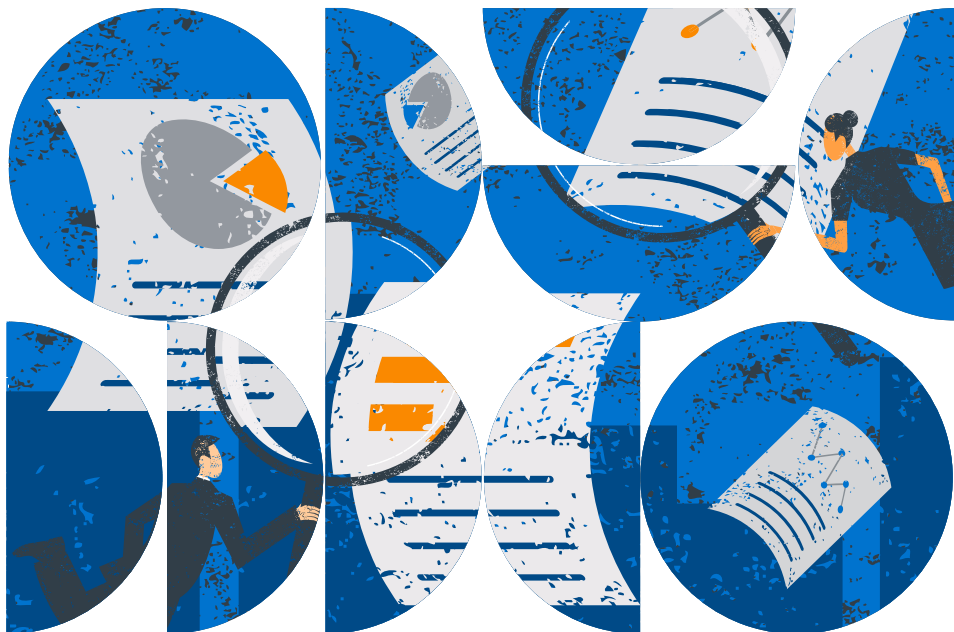


EAB

# Optimizing Institutional Budget Models

Strategic Lessons for Aligning Incentives and  
Improving Financial Performance

Business Affairs  
Forum







# Optimizing Institutional Budget Models

Strategic Lessons for Aligning Incentives and  
Improving Financial Performance

# Business Affairs Forum

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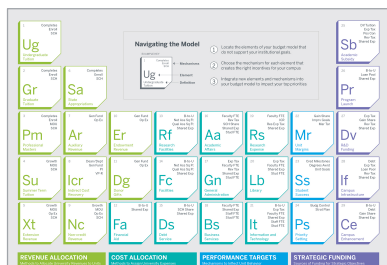
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To learn more, visit: [eab.com/2014/budgetmodels](http://eab.com/2014/budgetmodels)

# Executive Summary

## Moving Beyond Incremental Budgeting

While most colleges and universities saw stable growth over the last several decades, many now face significant downward pressure on revenue. By one estimate, nearly one in ten institutions face significant financial stress from declining revenue or poor operating performance.

With limited potential for significant new revenue growth, academic and business leaders agree that spending on new initiatives must come from a reallocation of existing resources. However, actually reallocating resources from one area of campus to another remains difficult. In particular, the traditional model of incremental budgeting, which served institutions well in times of growth, is ill-suited to meet today's demands for smarter resource allocation.

## RCM: Solution or Fad?

Seeking new budgeting methodologies, many colleges and universities are exploring Responsibility Center Management (RCM), which gives units greater control over the revenue they generate and costs they incur. While RCM can create powerful incentives for unit leaders to seek out new opportunities for revenue growth and cost control, it also has four key limitations:

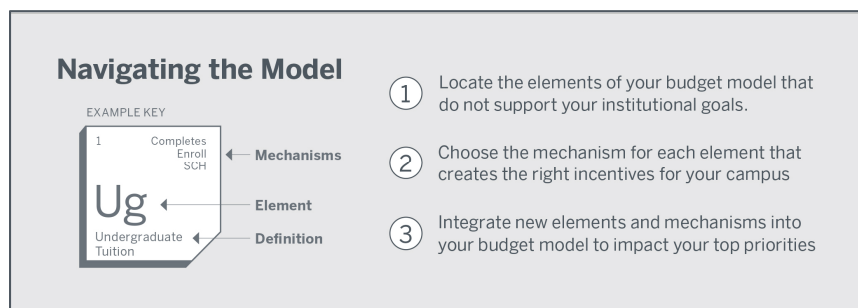
- RCM requires a significant investment of time and resources to implement
- RCM precipitates leadership turnover
- Top-line impacts of RCM on enrollment and revenue are unclear and difficult to measure
- RCM reduces central resources for strategic investment

## Leading Better Budget Model Conversations

In reality, no single budget model provides a complete solution to all of an institution's financial challenges. Underlying RCM and any other budget model are a set of budget model elements that specify how to allocate revenues, how to distribute costs, and how to define and operationalize institutional priorities. Focusing on these elements and the specific activities to encourage or discourage is more productive than debating the overall merits of an off-the-shelf budget model.

## Resources to Guide Budget Model Design

To help colleges and universities develop more strategic resource allocation systems, the Education Advisory Board offers two resources in this publication. The first resource outlines four executive-level lessons on budget design. The second resource provides a compendium of 29 budget model elements with detailed descriptions and case studies.



# Understanding Your Current Budget Model

The following diagnostic is designed to help members identify behaviors on campus that are indicative of a problem with the institution’s underlying budget model. Members may use these questions to identify weakness in their current budget model and evaluate which changes represent the largest opportunity for improvement.

## Incentives for Revenue Growth

On our campus...	
...Some colleges turn away qualified students due to lack of capacity <i>If this occurs on your campus, please turn to page 44</i>	
...Deans and chairs refuse to launch new revenue generating master’s programs <i>If this occurs on your campus, please turn to page 48</i>	
...Departments with strong PhD programs struggle to get sufficient funding to support students, while weaker programs continue to grow If this occurs on your campus, please turn to page 46	
...Deans will not support new online programs because they do not believe they will receive any of the revenue <i>If this occurs on your campus, please turn to page 48</i>	
...Summer term courses are under enrolled, but students can’t get the summer courses they need <i>If this occurs on your campus, please turn to page 50</i>	
...Departments refuse to increase capacity because they do not believe that they will receive the necessary resources to support growth <i>If this occurs on your campus, please turn to page 44</i>	
...Researchers have no funding to travel to critical conferences <i>If this occurs on your campus, please turn to page 58</i>	
...Service departments with few majors are underfunded <i>If this occurs on your campus, please turn to page 44</i>	
...Departments compete with each other for course enrollments because revenue follows student credit hours <i>If this occurs on your campus, please turn to page 44</i>	
...Academic units resist partnering with extension to offer high demand courses or programs <i>If this occurs on your campus, please turn to pages 52 and 60</i>	
...Cash flush auxiliary units do not provide any financial support to the central administration <i>If this occurs on your campus, please turn to pages 56</i>	



# Understanding Your Current Budget Model (continued)

## Incentives for Cost Control

On our campus...	
...Departments resist cutting costs because they know all of the savings will be recaptured by the central administration <i>If this occurs on your campus, please turn to page 90</i>	
...Many buildings leave the lights on all night despite lack of activity <i>If this occurs on your campus, please turn to page 72</i>	
...Departments hold on to office space or departmental classrooms even as they go unused <i>If this occurs on your campus, please turn to page 74</i>	
...PIs with declining funding hold on to laboratory space while promising new investigators struggle to find space to accommodate their research <i>If this occurs on your campus, please turn to page 70</i>	
...Deans spend a great deal of time arguing about the allocation of overhead costs <i>If this occurs on your campus, please turn to page 32</i>	
...Academic units resist efficiency improvements because they believe they will lose staff <i>If this occurs on your campus, please turn to page 91</i>	
...Schools raise part of the money for a new building, but the university is committed to paying for debt service, maintenance, etc. <i>If this occurs on your campus, please turn to page 74</i>	

# Understanding Your Current Budget Model (continued)

## Performance Targets

On our campus...	
<p>...Departments do not see institutional completion targets as their responsibility  <i>If this occurs on your campus, please turn to page 92</i></p>	
<p>...College and departmental measures do not link to state performance funding goals  <i>If this occurs on your campus, please turn to page 92</i></p>	
<p>...The budget model rewards revenue growth and cost control but not improved academic performance  <i>If this occurs on your campus, please turn to page 90</i></p>	

## Strategic Funding

On our campus...	
<p>...Initiatives in the strategic plan do not include cost projections  <i>If this occurs on your campus, please turn to page 94</i></p>	
<p>...The strategic investment fund is less than 5% of budget  <i>If this occurs on your campus, please turn to pages 35 to 37</i></p>	
<p>...Budget cuts reduce strategic funding while lower priorities continue to be funded  <i>If this occurs on your campus, please turn to page 36</i></p>	
<p>...The provost lacks central funding for new multidisciplinary research initiatives  <i>If this occurs on your campus, please turn to page 102</i></p>	
<p>...Not enough central funding exists to incentivize deans to support activities with an impact beyond their own college  <i>If this occurs on your campus, please turn to page 36</i></p>	
<p>...Deferred maintenance is increasing rapidly  <i>If this occurs on your campus, please turn to page 104</i></p>	
<p>...Deans lack funds to invest in long-term priorities  <i>If this occurs on your campus, please turn to page 100</i></p>	
<p>...High cost-to-teach disciplines receive insufficient funding  <i>If this occurs on your campus, please turn to page 98</i></p>	



# Budgeting in an Era of Change

New Approaches to Resource Allocation and Lessons from RCM Leaders

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INTRODUCTION

# A Model Out of Balance

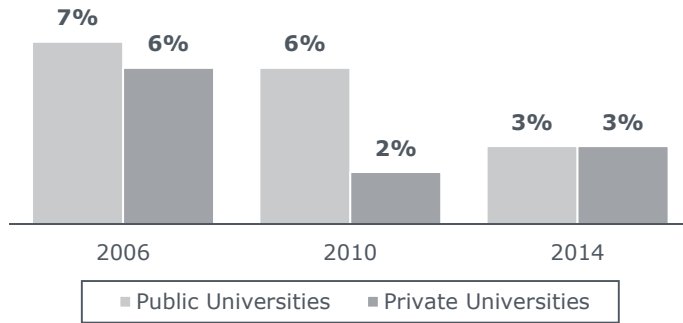
While most colleges and universities saw stable growth in enrollment over the last several decades, many now face significant downward pressure on revenue. Growth in enrollment has slowed substantially for many; inflation-adjusted state appropriations for public institutions are lower today than any point in last 30 years; and advancement offices are becoming less effective overall as institutions increasingly rely on a small number of large donors.

Moody's Investor Services estimates that one in ten institutions is experiencing acute financial distress from falling revenue or poor operating performance.

## Negative Pressure on Traditional Revenue Sources

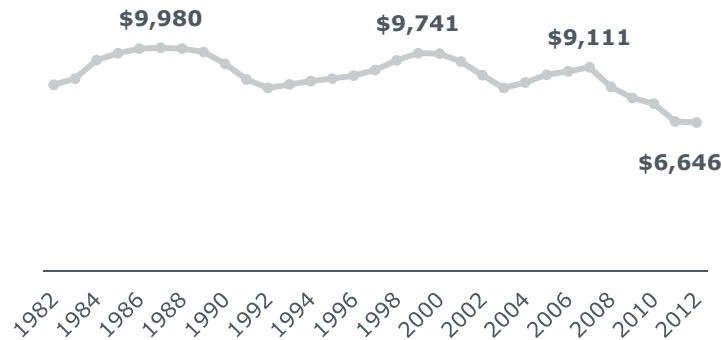
### Net Tuition Growth Slows at All but Most Elite Institutions

Median Annual Change in Net Tuition Revenue, by Sector



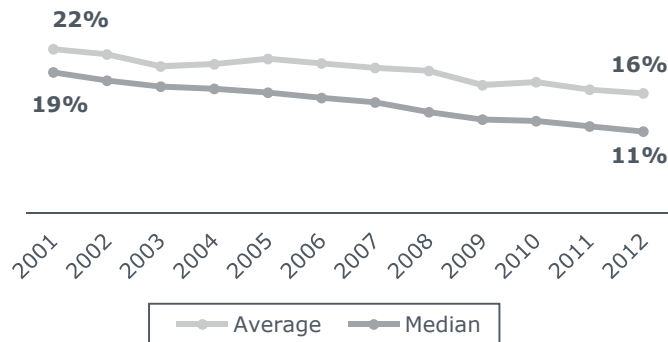
### State Appropriations Continue to Decline

State Appropriations for Higher Education per FTE, 2012 Dollars



### Declining Returns from Philanthropic Outreach

Average and Median Solicitation Effectiveness<sup>1</sup> Rate, 2001 to 2012



1) Solicitation effectiveness represents the number of donors divided by the number of solicited alumni.

Source: College Board, "Trends in College Pricing," 2013; Moody's Investors Service, "Negative Outlook for US Higher Education Continues Even as Green Shoots of Stability Emerge," 2014; Council for Aid to Education, Voluntary Support of Education Survey (2012), <http://vse.cae.org>; Moody's Investors Service, "Weakened Tuition Revenue Plagues US Higher Education," 2013; EAB interviews and analysis.

# Seek Within You

With limited potential for significant new revenue growth, academic and business leaders agree that any spending on new initiatives must come from a reallocation of existing resources.

In theory, the opportunity for smarter resource allocation is high. Nearly all institutions currently offer some programs that, given the appropriate resources to grow, could expand to fill unmet student demand. At the same time, most colleges and universities also maintain legacy programs that have outlived their original purpose.

However, actually reallocating resources from one area of campus to another remains difficult.

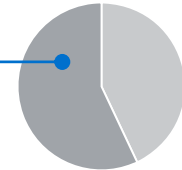
## Administrators Acknowledge Need for Strategic Reallocation of Resources

### Chief Business Officers

“New spending at my institution will come from reallocated dollars, not an increase in revenue.”

57%

Agree or Strongly Agree

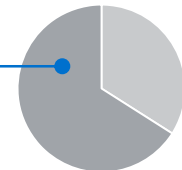


### Provosts

“Most new funds for academic programs will come from reallocation rather than new revenue.”

66%

Agree or Strongly Agree



“We’re not seeing the same student growth that we used to, and our governor is saying that we’re not going to get the tuition bump we were expecting. **If we’re going to do anything new, then it’s got to come out of what we already have.** And folks around here don’t want to hear that.”

*Chief Business Officer,  
Regional Public University*

# A Model That No Longer Works

The traditional model of incremental budgeting, which served institutions well in times of growth, is ill-suited to meet today's demands for smarter resource allocation. Currently, 66% of institutions report using some form of incremental budgeting, where new resources are shared more or less equally across campus.

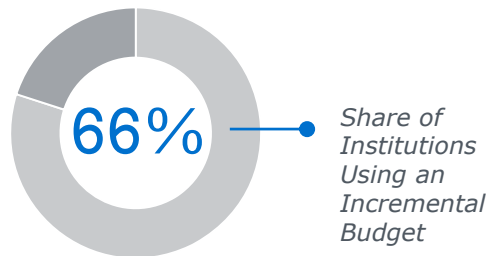
Given sustained downward pressure on revenue, however, this model faces three critical challenges.

First, equal sharing of resources promotes stability, but it does not create financial incentives for unit leaders to grow revenue or cut costs. Instead, units are encouraged to pursue business as usual while the institution as a whole is financially stressed.

Second, incremental budgeting makes equal "bets" across campus, rather than channeling resources to areas with greatest potential for impact or financial return.

Finally, the model is difficult to maintain without growth. Little funding is available to launch new programs or change with market demands. When faced with deficits, institutions must often deploy unsustainable across-the-board cuts.




## Beyond Incremental Budgeting






### EAB Definition of Incremental Budgeting

A resource allocation process where each unit's budget is based on its allocation in the previous year, plus or minus an adjustment equal to the overall change in institutional resources.

### Advantages

-  Simple for academic leaders to understand and manage
-  Equitable sharing of resources reinforces campus culture
-  Minimal year to year disruption for units (as long as growth continues)

### Disadvantages

-  Creates disincentives to grow revenue or control costs
-  No link between potential for growth and investments
-  Difficult to maintain when revenues no longer growing

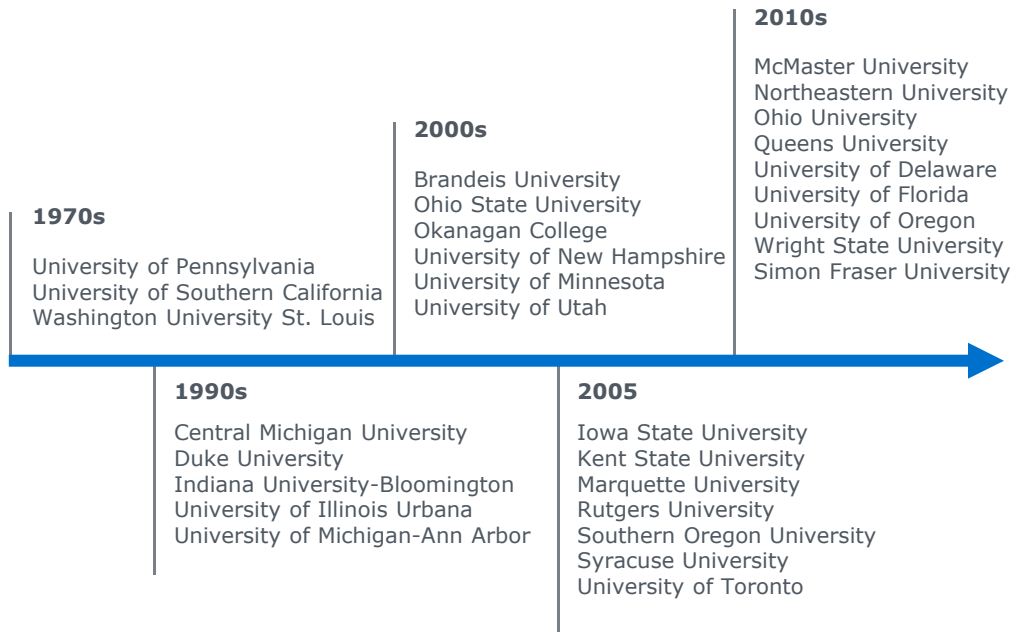
# RCM Budgeting Back in the Spotlight

Seeking new budgeting methodologies, many colleges and universities are exploring Responsibility Center Management (RCM). In particular, the number of RCM institutions has increased dramatically since 2000.

Controlling costs, improving transparency, and (most of all) incentivizing revenue growth are the primary objectives under RCM, according to institutional leaders.

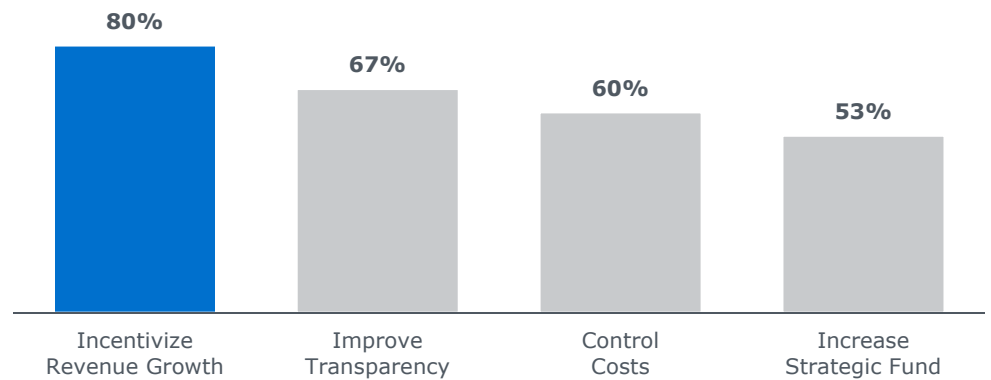
## Solution or Fad?

### Pace of RCM Adoption Accelerates After 2000



### Revenue and Transparency Top of Mind for RCM Institutions

EAB Survey of Budget Taskforce Reports  
n=40



Source: EAB interviews and analysis.

# The Many Meanings of RCM

---

While there are many manifestations of RCM, all are designed to incentivize unit leaders to seek out new opportunities for revenue growth and cost control.

Under RCM, academic units retain some share of the revenue they generate through teaching, research, and other activities. Similarly, they are also responsible for paying some of the costs they incur, including a share of institutional overhead. In principle, the more control over revenue and expenses institutions allocate to units, the more incentive those units have to drive top-line growth.

In practice, models vary. At the largest and most decentralized RCM institutions, individual colleges may operate as de-facto independent businesses, controlling most or all of their revenue and expenses.

At smaller institutions, the center may allocate some resources to colleges, but retain significant control over the overall institution's revenue and expenses.

## Different Adaptations for Small, Medium, Large Institutions

### Large Size, Significant Decentralization



- Large-sized academic units
- Distinct student markets
- Large philanthropy and research revenue
- Colleges employ financial support staff
- Units possess significant financial autonomy
- Large portion of revenue allocated to units

### Medium Size, Moderate Decentralization



- Medium-sized academic units
- Regional student market
- Limited discretionary funding at unit level
- Financial support staff within central administration
- Few units financially independent
- Revenue allocated to units, with significant subvention

### Small Size, Limited Decentralization



- Small-sized academic units
- Overlapping student markets
- Most costs managed centrally
- Colleges lack financial support staff
- Use cost accounting to set margin targets for units
- University overhead funded out of margin contributions

Source: EAB interviews and analysis.



# In Defense of RCM

Detractors of RCM point to a series of unintended consequences introduced by sharing more control of revenue and expenses with units.

First, seeking more revenue, units can have a perverse incentive to grow enrollment at the expense of quality or to compete with other departments for students.

Second, responsibility to manage profits and losses may hamstring high-cost or small-enrollment programs, which cannot manage without financial subsidies.

Finally, empowering unit leaders may unintentionally complicate institutional priorities, such as cross-disciplinary work or student success.

While these concerns are legitimate, successful RCM institutions have adopted a set of common policies to mitigate their impact, shown here. For example, split-revenue funding that rewards both credit hours and student majors helps to discourage student poaching.

However, even institutions that have overcome these concerns have struggled against four key limitations of the RCM budget model, detailed across the following pages.

## Policy Tweaks Solve Majority of Common RCM Concerns

	Common Concern	Typical Solutions
<b>Perverse Incentives</b>	Departments incentivized to create low-quality classes	Curricular review committees and faculty senate oversight enforce quality bar
	Departments compete for student enrollments	Split-revenue models and curricular review committees restrain improper competition
<b>Program Costs</b>	High-cost-to-teach programs disadvantaged	Course fees and cost-weighted credits compensate high-cost programs
	Small programs unable to finance operations	Subvention funding provides resources to support small units
<b>Institutional Priorities</b>	Enrollment incentives conflicts with completion agenda	Incorporate performance funding into allocation models
	Financial barriers to multidisciplinary work	Standardized MOUs, financial incentives, and start-up funds ease collaborations

Source: EAB interviews and analysis.

# RCM Transition Costs Significant

The first limitation to adopting RCM is the significant investment of time and resources required. On average, institutions need three to four years to transition to RCM, and even then the full effects may not be felt on campus for a number of years.

A step-by-step guide to the transition process is shown here.

The process begins with model selection, often initiated by a presidential taskforce charged with studying budgeting options and articulating a set of principles for a new approach.

Next, after the taskforce has developed consensus, institutions spend 12 to 16 months convening sub-committees, researching budget practices, and testing allocation models. Many institutions hire a consultant during this phase to help manage the process.

Finally, the institution can begin implementation, which often requires upgrading finance and accounting tools, redesigning job roles, and a significant investment in training existing budget staff.

Even after implementation is complete, an additional two to three years may be needed for the full financial impact to be felt on campus if the institution adopts a hold harmless policy.

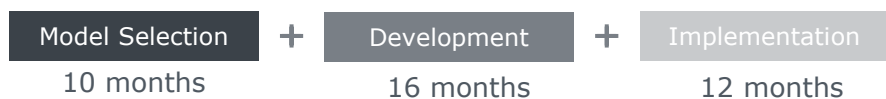
## The High Price of Change

### Representative RCM Implementation Process

**Start:** Presidential taskforce on budgets convened

- 1 Taskforce meets with campus groups to study current model
- 2 Report on current model submitted to President
- 3 New committee formed to study alternatives
- 4 Committee drafts principles for new budget model
- 5 Consultant hired to manage model development
- 6 New committees formed to examine budget parameters
- 7 Committees begin modeling financial impact of different models
- 8 Finance officers meet with unit leaders to discuss model impacts
- 9 Preliminary models released showing financial impacts
- 10 Open forums held to explain new model and impact on campus
- 11 **Take 3 Steps back** and revise model based on feedback
- 12 Budget office works with HR to develop training for unit managers
- 13 Training and new job roles integrated into hiring process

**Finish:** Model launched with hold harmless provision



**Total Budget Model Transition: 38 months**

# Significant Turnover Likely After RCM Adoption

The second limitation of RCM is leadership turnover. Nearly every institution that adopts RCM experiences significant turnover among academic and administrative leaders.

Deans, in particular, are often unprepared for their new responsibilities in an RCM environment. Beyond standard academic duties, RCM requires deans to take a larger role in managing their unit's finances, marketing, fundraising, and business development.

Notably, though, leaders who survive the transition are highly satisfied with RCM. In a national survey of RCM deans, nearly all strongly agreed that RCM had raised their awareness of financial issues and made them more effective deans overall.

In fact, many recent RCM adoptions were driven by new presidents or provosts who formerly worked under RCM. Moreover, deans who begin their careers under RCM commonly ask for similar budgetary authority when they change institutions.

## Current Faculty Need Not Apply...

### Dean Wanted

**Description:** University seeks qualified dean for College of Arts & Sciences

#### Skills

- Change management
- Business development
- Fundraising
- Financial accounting

#### Qualifications

- Five-years experience in RCM budgeting environment
- Comfortable managing P&L for multi-million dollar organization

### Proportion of Deans Replaced After Transition to RCM

Public Research University

**9 of 10**

Deans replaced after moving to RCM

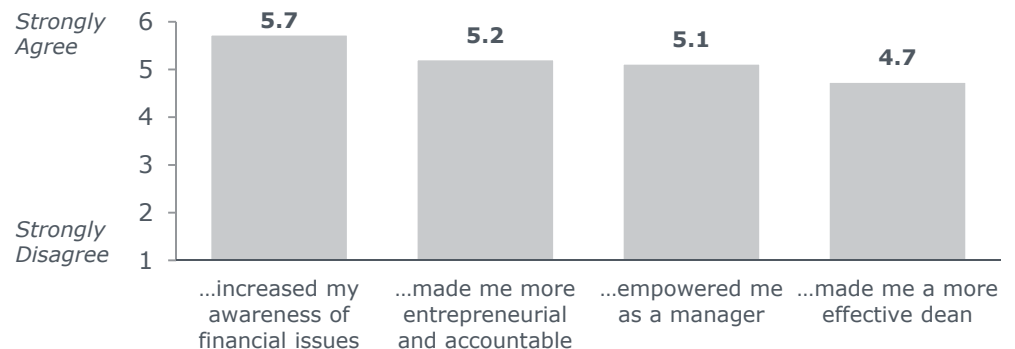
“RCM is a great system, but you'll need to replace all of your deans to make it work.”

Provost,  
Public Research University

## ...But Managers Who Remain Show Strong Support

### National Survey of RCM Deans Finds Strong Support

“I believe that RCM has...”



Source: Kosten L and Lovell C, "Academic Deans' Perspectives on the Effectiveness of Responsibility Center Management," Society for College and University Planning, 2011; EAB interviews and analysis.

# Top-Line Impacts of RCM Vary by Institution

The third limitation of RCM is unclear impact. In particular, RCM does not always lead to better enrollment or revenue growth.

This table summarizes an analysis of nine institutions that transitioned to RCM between 1991 and 2006. Some institutions, such as Utah and New Hampshire, had impressive results. Others were mixed. Fewer than half saw revenue or enrollment grow faster than other institutions in their state.

Certainly, the state average is an imperfect measure and fails to capture exogenous political or institutional factors. However, even this simplistic analysis shows RCM does not guarantee growth.

## Looking for Proof

### EAB Analysis of Enrollment and Revenue Impact of RCM

	Enrollment <sup>1</sup>		Revenue <sup>2</sup>	
	Increased After RCM Adoption	Outpaced State Average	Increased After RCM Adoption	Outpaced State Average
Duke (1991)	✗	✓	✓	✓
Univ. of Michigan (1995)	✓	✗	✗	✗
Central Michigan Univ. (1999) <sup>3</sup>	✗	✗	✓	✗
Univ. of Minnesota (2000)	✓	✗	✗	✓
Univ. of Utah (2000)	✓	✓	✓	✓
Brandeis Univ. (2001) <sup>4</sup>	✓	✗	✗	✗
Univ. of New Hampshire (2001)	✓	✓	✓	✓
Ohio State (2003)	✓	✓	✗	✗
Syracuse (2006)	✓	✓	✗	✗

#### Methodology in Brief

The table above shows results from a difference-in-difference estimate of the impact of RCM on enrollment and revenue. It compares enrollment and revenue growth at an institution before and after implementing RCM. Next, it compares these figures to the statewide change in enrollment and revenue over the same period.

1) Enrollment was measured using total full-time equivalent enrollments.  
 2) Revenue was measured as total revenue excluding auxiliary enterprises.  
 3) Central Michigan experienced a large state budget cut shortly after implementation.  
 4) Brandeis implemented RCM in phases over multiple years.

# Financial Changes Limited by Policy Choices

One reason that RCM often has a minimal impact on top-line growth is that institutions have intentionally built guardrails to soften the transition to RCM.

For example, institutions commonly implement RCM with a hold harmless policy or a phased transition plan to blunt the impacts of the model in the first two to three years. As a result, many institutions find it takes two to three years before RCM leads to meaningful changes.

## A Radical Change... In Slow Motion

### Common Design Elements to Mitigate Transitional Friction



#### **Learning Years** *(1 Year)*

One-year data-baselining period to familiarize units with new allocation formula



#### **Phased Implementation** *(4-5 Years)*

Increase amount of funds subject to formula in predetermined increments



#### **Hold Harmless Period** *(Indefinite)*

Use reallocation to hold unit budgets to pre-implementation levels



#### **Stop-Loss Measures** *(Indefinite)*

Set limit on how much individual units can gain or lose in a single year

# Difficult to Fund Strategic Reserves in RCM

The fourth and final limitation of RCM is a lack of central strategic reserves. Allocating a large share of revenue to colleges can create positive incentives for academic leaders, but can also leave the central administration without resources to invest in institution-wide priorities.

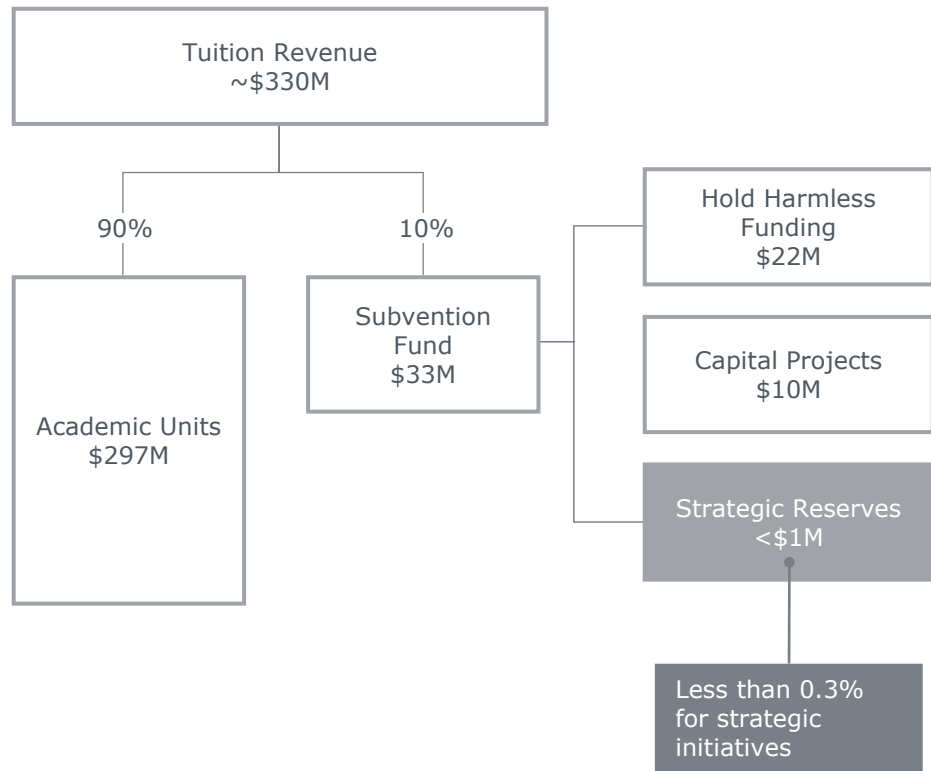
After hold harmless funding and capital and maintenance projects, the RCM institution shown here allocates only 0.3% of tuition revenue to strategic reserves, far less than the typical 1% to 3% at most colleges and universities.

In fact, for institutions where the greatest opportunities for growth are in entirely new programs or cross-disciplinary initiatives, RCM may actually be more of a hindrance than an advantage.

## Mortgaging Your Wheelhouse

### Representative Tuition Revenue Distribution Model

*Public Research University*



Source: EAB interviews and analysis.

# Asking the Wrong Questions

Not fully understanding RCM’s limitations, institutions often focus on the wrong set of questions. RCM has advantages and disadvantages, but no budget model provides an off-the-shelf solution to all of an institution’s budgeting challenges.

Instead, underlying RCM and any other budget model are a set of budget model elements that specify how to allocate revenues, how to distribute costs, and how to define and operationalize institutional priorities. Focusing on these elements and the specific activities to encourage or discourage is generally more productive than debating the overall merits of RCM.

To help institutions lead more productive budget design conversations, the remainder of this report defines and details the individual elements that comprise any budget model.

## Typical RCM Debate Misses Important Strategic Choices

### Typical Questions Driving Campus Debate

Are incentives in an RCM model good or bad?



Will RCM reduce our costs and expenses?



Is RCM too decentralized for our institution?



Should we adopt RCM?



### Key Lessons for a Productive Conversation

All budget models create incentives and disincentives



RCM requires more expensive staff, which may raise costs



Important financial decisions are made by units in any budget model



RCM is a collection of budget practices that can be adapted in any model



### Better Questions to Guide Discussions

Do we adequately incentivize the behaviors we want to encourage?

Are resources better spent on individual unit growth or institution-wide investments?

Does the administration have enough funding to implement our strategic plan?

What elements of our budget model should we change to achieve our strategic goals?







# Budget Design Principles

Executive Lessons on Budgeting  
and Resource Allocation

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SECTION

- Lesson #1: Let Institutional Goals Drive Revenue Allocation
- Lesson #2: Keep Cost Allocation Metrics Simple
- Lesson #3: Incorporate Performance Targets into Budget Allocations
- Lesson #4: Build and Protect Strategic Reserves

1

# More Than Dollars and Cents

Budgets are “the surest single indicator” of what a university is committed to doing. Beyond simply allocating revenue and costs, budgets can reinforce and even define an institution’s priorities and commitments.

Yet many institutions’ budgets fail to do so, reinforcing the wrong objectives, or no objectives at all. In too many cases, university budgets lock in damaging cost structures, underfund strategic priorities, or create harmful campus incentives. It is imperative that institutions think critically about how their resource allocation choices reinforce (or obstruct) their priorities.

To build a more intentional budget model, institutions should consider how individual elements of their budget process can be redesigned to incentivize revenue growth and cost control, set performance targets, and fund strategic priorities. To help lead more productive conversations, this section details four lessons for designing institutional budget models.

## Executive Lessons for Budget Model Design



### Lesson #1

Let Institutional Goals Drive Revenue Allocation



### Lesson #2

Keep Cost Allocation Metrics Simple



### Lesson #3

Incorporate Performance Targets into Budget Allocations



### Lesson #4

Build and Protect Strategic Reserves



“We’re not seeing the same student growth that we used to, and our governor is saying “The budgets of a university are the surest single indicator of what it is committed to do and what it is stuck with... Underneath the rhetoric of leadership...is a hard logic in putting institutional funds where necessity permits.”

*Frederick Balderston,  
Managing Today’s University, 1974*

# Matching Control and Authority

The first budget design lesson is that institutional goals should determine how the budget model allocates revenue.

Seeking new revenue, more colleges and universities are considering incentivizing academic units to grow by allocating them a share of the revenue they generate. However, allocating all revenue to units versus retaining all revenue centrally is a false choice. Instead, institutions should first consider what type of revenue they want to grow and then select an allocation method that creates an incentive for the behavior they want.

Some types of revenue can be greatly impacted by academic unit leaders, and greater allocation can incent meaningful growth. Others cannot be easily inflected by academic units and are more logically kept under central control.

Expanding Professional Master's programs, for example, is contingent on academic leaders' cooperation. Allocating units a share of revenue from the new program provides incentives for leaders to support growth. On the other hand, academic leaders have little control over state appropriations, so allocating these funds to units has less impact.

## Ability of Units to Influence Growth of Revenue Sources

**Low Influence**

**High Influence**



- State Appropriations
- Undergraduate Tuition
- Graduate Tuition

- Endowment Revenue
- Auxiliary Revenue

- Indirect Cost Recovery
- Donor Gifts

- Professional Master's Tuition
- Summer Term Tuition
- Extension Revenue
- Non-credit Revenue

Greatest benefits from incentivizing units through revenue allocation

Source: EAB interviews and analysis.

# Common Methods to Allocate Revenue to Units

The best allocation method to create incentives for growth depends on the type of revenue. The nine distinct mechanisms institutions can use are listed here, organized by the type of incentive leaders want to create.

## Allocation Approaches for Enrollment Incentives



### Student Credit Hours

Revenue distributed by credit hour production



### Program Enrollment

Revenue distributed by program enrollments



### Degrees

Revenue distributed by degrees granted

## Allocation Approaches for Program Incentives



### MOU

Arranged revenue share for new programs



### Growth

New revenue over baseline shared with units



### Operating Expenses

Revenue allocated to unit for operating expenses

## Allocation Approaches for Research Incentives



### VP-Research

Grant revenue given to VP-Research office



### Dean/Dept

Grant revenue given to college dean



### Principal Investigator

Grant revenue given to principal investigator

# Charge Ahead?

The second budget design lesson is to keep cost allocation simple. Distributing overhead costs at a college or university is difficult because most institutions lack the activity-based accounting tools required to calculate an individual unit's precise share of overhead.

For select services, such as classroom space or utilities, directly metering each unit's usage is an appropriate strategy. These services are both readily measurable and resources most leaders want to better ration across campus. In most instances, though, metering has little or no impact, as services provide broad institutional benefits and costs are mostly fixed.

## Little Benefit from Metering Most University Services

### Hard to Measure

- Office of President
- Institutional Research
- Bursar
- Registrar
- Payroll
- Public Safety
- Admissions



*Low Return from Metering Usage*

### Easy to Measure

- Library
- IT Admin
- Student Affairs Office
- Advancement
- Purchasing
- Campus Utilities
- VP-Research Office
- Financial Aid
- Classroom Space
- Laboratory Space



*High Return from Metering Usage*



# Diminishing Returns to Complexity

For costs where metering is not possible, the simplest allocation formulas have proven most effective.

As an example, when the University of Southern California implemented RCM in the 1980s, administrators created over 100 unique cost allocation formulae to distribute nearly every line item on the university's budget to colleges. The system required significant effort to manage, and unit leaders found the model confusing and frustrating.

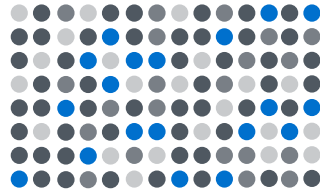
In the mid-2000s, leaders moved to a radically simplified approach based on only four cost categories, with each unit's charge determined by a single, easy-to-understand metric.

## USC Simplifies Cost Accounting to Improve Acceptance

**100+ Cost Allocations with Unique Formulas**



**Four Cost Pools Driven by Single-Metric Formula**



- Undergrad Services (# of Majors)
- Graduate Services (# of Students)
- General Admin. Services (Revenue Tax)
- Research Services (3-yr Grant Funding)



Expensive to manage



Few allocations simplifies management



Easy to criticize individual metrics



Cost pooling reduces measurement bias



### Case in Brief: University of Southern California

- 40,000-student private university located in Los Angeles, California
- Redesigned cost allocation system to dramatically simplify cost formulas
- New system based on only four metrics

## Common Metrics for Major Expense Categories

Other institutions have successfully adopted similarly simple approaches to cost allocation. Typical metrics used to allocate major categories of institutional costs are listed here.

Charging units a tax on the revenue they generate is the most common approach, followed by charging units based on the share of faculty they employ or students they teach.

Expense	Revenue Tax	Expense Tax	Faculty FTE	Staff FTE	Student FTE	SCH	Alternative Metrics
General Admin	✓	✓	✓	✓	✓		
Business Services	✓	✓	✓	✓			
Academic Affairs	✓	✓			✓	✓	Student majors, Graduates
Library	✓		✓		✓	✓	
IT	✓		✓	✓	✓		Fee-for-service
Facilities				✓		✓	Net assignable square feet
Research Admin		✓	✓				ICR, Research Expenses

Source: EAB interviews and analysis.

# Accounting for Performance

The third lesson is to formally incorporate performance targets and institutional goals into the budget.

Through the budgeting process, leaders should agree to concrete performance targets and the funds necessary to ensure success in each of the three areas listed here.

First, although the strategic plan is the most visible expression of an institution's priorities, the budget should refine and operationalize the strategic plan by defining tangible priorities and performance targets.

Second, budgets can enforce performance targets around student success by linking budget allocations to student outcomes or by allocating funding for performance incentives.

Third, margin targets serve to define financial performance benchmarks to protect institutional resources.

## Categories of Institutional Performance Goals



### Priority Setting

Mechanisms to align unit resources with mission critical priorities

#### Examples:

- Increasing access to study abroad
- Bolstering faculty diversity



### Student Success

Performance incentives to achieve student outcome and completion targets

#### Examples:

- Incorporating state performance targets
- Enhancing student services



### Unit Margins

Revenue and cost control targets to protect institutional resources

#### Examples:

- Maintaining positive margins
- Integrating process efficiencies



# Planning Ahead

The fourth and final budget design lesson is to build and maintain a central strategic reserve fund. While allocating more revenue to units creates incentives to grow, it can leave the center with relatively few funds for other priorities. To counteract this, institutions must consistently budget dollars into a reserve fund to fuel larger strategies.

This lesson is particularly important for institutions facing increasingly disruptive markets and the need to make transformative changes. Executing these changes will require significant investments that only the center, not any individual unit, can provide.

While most institutions have traditionally made investments with budget surpluses, slowing revenue growth will require leaders to more intentionally build reserve funds. The five primary cross-campus initiatives that will require a budgeted reserve fund to implement are shown here.

## Examples of High-Value Cross-Unit Investments



### Academic Subsidy

Resources to support academic excellence within mission critical areas



### Campus Enhancement

Capital funding to realign campus infrastructure with new opportunities and needs



### Campus Infrastructure

Investment resources to upgrade and maintain critical campus infrastructure



### R&D Funding

Seed money for targeted “big bets” and institutional investments



### Program Launch

Bridge funding to launch new revenue generating ventures



### Who’s Steering the Ship?

“How do you have enough central resources to do institutional, cross-university initiatives, particularly when the units themselves do not have the resources to achieve their individual strategic plans? ...You can’t run a \$2.4B business without central resources—there aren’t enough.”

*Henry S. Webber,  
Washington University in St. Louis*

# Building a War Chest in Tight Times

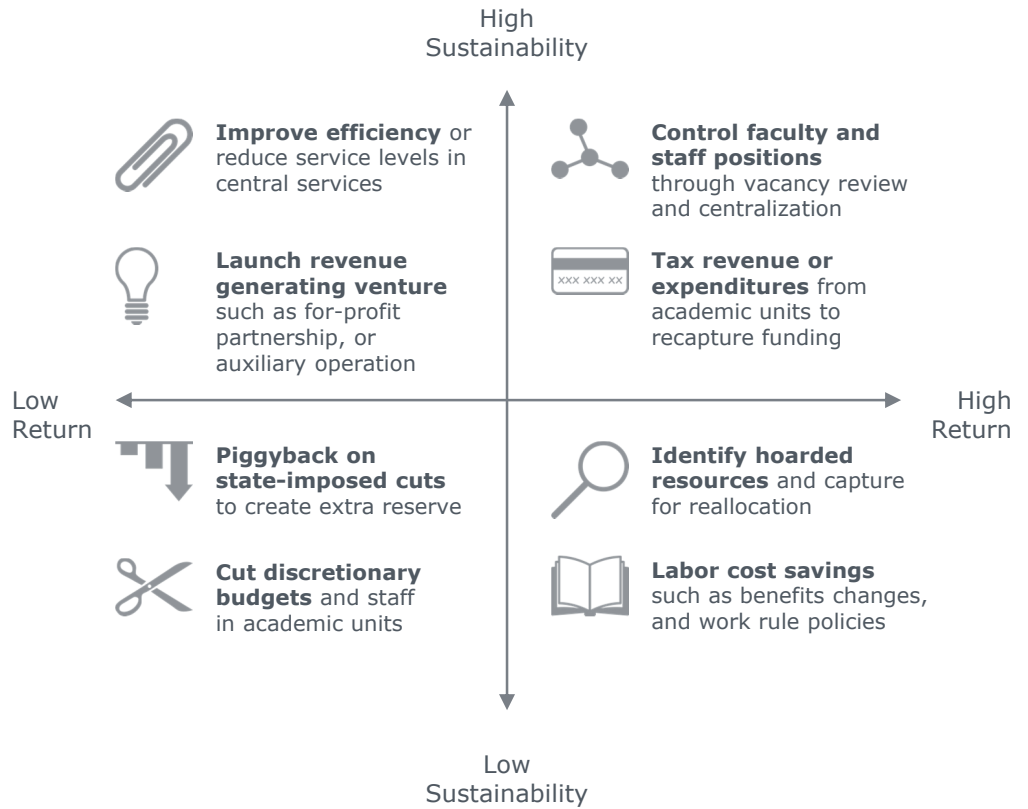
One of the most important limitations of RCM or other budget models that allocate revenue out to academic units is that they often severely limit the funds available for institution-wide strategic investments. Yet, central funding is increasingly essential to subsidize mission-critical but money-losing programs and to launch new initiatives or programs that may not align with existing academic units.

The most common methods to capture strategic discretionary funding for the central administration are shown here.

Cutting departmental discretionary budgets or using a state-imposed budget cut to reduce unit budgets can yield meaningful discretionary funding in the short-term, but neither approach is sustainable.

Instead, institutions should focus on sustainable strategies such as controlling the allocation of faculty and staff lines or imposing a tax on tuition to direct a share of funding to central discretionary budgets.

## Common Methods to Recapture Resources for Strategic Funding



Source: EAB interviews and analysis.

# The Center Cannot Hold

Rensselaer Polytechnic Institution (RPI) is an example of an institution that prioritized building central funds for strategic investments.

They implemented RCM in the early 1990s. While the model helped drive enrollment growth, the new enrollment did not support the institution's mission. RPI's humanities school flourished under RCM, while the flagship engineering program failed to thrive. With most resources allocated to colleges, the administration did not have adequate funds to invest in priority programs or to catalyze new research.

Under a new president, RPI abandoned RCM for a more centralized, performance-based budget model. They centralized faculty and staff lines and required each unit to annually reallocate resources toward the institution's five strategic priorities related to research productivity, faculty retention, and new centers and institutes.

As a result, the administration dramatically increased central resources and focused on growing in areas that aligned with RPI's mission and brand, rather than allowing growth to happen organically.

## Elements of RPI's Performance Budgeting Process

1



### Robust Strategic Planning

Annual budget retreat used to define five priority areas around which budgets will be built

2



### Annual Performance Plans

- Activity-budget submitted annually showing how expenses relate to institutional priorities
- Budgets cover all funds (unit resources and new requests)

3



### Budget Prioritization

Administrators rank performance plans, funding only elements which most closely align with five priority areas.

4



### Centralized Resource Control

- Annually, 3% of all funds reallocated towards strategic priorities
- Additional resources reallocated through centralization of faculty lines



### Case in Brief: Rensselaer Polytechnic Institute

- 7,000-student private university located in Troy, New York
- Adoption of RCM in 1990's led to enrollment growth outside of institutional strengths and limited administrative investment capabilities
- Migrated to performance-based budget where all faculty and staff lines are centralized and resource allocations must be justified against five institutional priority areas





# Compendium of Budget Elements

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SECTION

2

- The Periodic Table of Budget Model Elements
- Revenue Allocation Elements
- Cost Allocation Elements
- Performance Targets Elements
- Strategic Funding Elements

# The Periodic Table of Budget Model Elements

This page shows EAB’s periodic table of budget model elements. Each of the 29 elements represents one component of a budget model. Rather than debating the merits of a fully formed budget model, leaders should focus on the specific activities to be encouraged or discouraged and the associated elements that will help achieve those goals. Institutions should use those elements to build a budget model best suited for them.

Budget model elements are organized into four categories—revenue allocation, cost allocation, performance targets, and strategic funding. The following pages provide a compendium of all 29 elements, with detailed descriptions and case studies.

<p>1</p> <p>Completes Enroll SCH</p> <p><b>Ug</b></p> <p>Undergraduate Tuition</p>			
<p>2</p> <p>Completes Enroll SCH</p> <p><b>Gr</b></p> <p>Graduate Tuition</p>	<p>6</p> <p>Completes Enroll SCH</p> <p><b>Sa</b></p> <p>State Appropriations</p>		
<p>3</p> <p>Completes Enroll MOU SCH</p> <p><b>Pm</b></p> <p>Professional Masters</p>	<p>7</p> <p>Gen Fund Op Ex</p> <p><b>Ar</b></p> <p>Auxiliary Revenue</p>	<p>10</p> <p>Gen Fund Op Ex</p> <p><b>Er</b></p> <p>Endowment Revenue</p>	<p>13</p> <p>B-to-U Net Ass Sq Ft Qual Ass Sq Ft Shared Exp</p> <p><b>Rf</b></p> <p>Research Facilities</p>
<p>4</p> <p>Growth MOU SCH</p> <p><b>Su</b></p> <p>Summer Term Tuition</p>	<p>8</p> <p>Dean/Dept Gen Fund PI VP-R</p> <p><b>Icr</b></p> <p>Indirect Cost Recovery</p>	<p>11</p> <p>Gen Fund Op Ex</p> <p><b>Dg</b></p> <p>Donor Gifts</p>	<p>14</p> <p>B-to-U Net Ass Sq Ft Qual Ass Sq Ft Shared Exp</p> <p><b>Fc</b></p> <p>Facilities</p>
<p>5</p> <p>Growth MOU Op Ex SCH</p> <p><b>Xt</b></p> <p>Extension Revenue</p>	<p>9</p> <p>Growth MOU Op Ex SCH</p> <p><b>Nc</b></p> <p>Non-credit Revenue</p>	<p>12</p> <p>B-to-U Shared Exp</p> <p><b>Fa</b></p> <p>Financial Aid</p>	<p>15</p> <p>B-to-U SCH Share Shared Exp</p> <p><b>Ds</b></p> <p>Debt Service</p>

25 Dif Tuition  
Exp Tax  
Pos Con  
Rev Tax  
Shared Exp

# Sb

Academic  
Subsidy

26 B-to-U  
Loan Pool  
Shared Exp

# Pr

Program  
Launch

27 Exp Tax  
Gain Share  
Rev Tax  
Shared Exp

# Dv

R&D  
Funding

28 Debt  
Exp Tax  
Loan Pool  
Rev Tax  
Shared Exp

# If

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Infrastructure

29 B-to-U  
Debt  
Gain Share  
Shared Exp

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22 Gain Share  
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23 Cred Milestones  
Degrees Awrd  
Unit Goals

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24 Budg Control  
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19 Faculty FTE  
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Expense

20 Exp Tax  
Faculty FTE  
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Stud FTE

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16 Faculty FTE  
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17 Exp Tax  
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# Gn

General  
Administration

18 Faculty FTE  
Shared Exp  
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# Bs

Business  
Services

15

# Ua

Unit  
Administration

18

# Ua

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16 Faculty FTE  
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SCH Share  
Shared Exp  
Stud FTE

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Affairs

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Rev Tax  
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# Gn

General  
Administration

18 Faculty FTE  
Shared Exp  
Staff FTE  
Stud FTE

# Bs

Business  
Services

# Revenue Allocation Elements

Traditionally institutions have held revenue centrally and allocated resources to units based largely on historical precedent. Today, more institutions are considering how to use revenue allocation in strategic ways to create incentives for units to grow.

Revenue allocation elements represent different sources of institutional revenue. For each element, institutions can define allocation mechanisms that create incentives for revenue growth.



Source: EAB interviews and analysis.



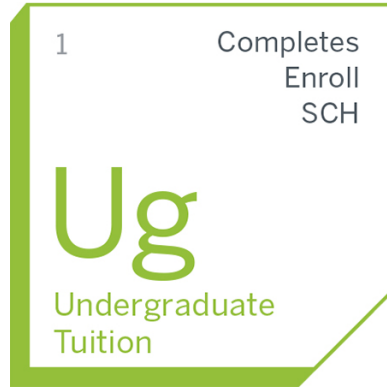
# Element #1: Undergraduate Tuition

Undergraduate tuition makes up one of the largest sources of revenues at most universities. Declining public funding has put even more pressure on universities to increase tuition revenues.

While most institutions hold all undergraduate tuition centrally, allocating academic units a portion of the undergraduate tuition they generate creates an incentive for units to grow enrollment (and helps to ensure that enrollment growth is supported by additional resources).

There are three budget model mechanisms colleges and universities can use to allocate undergraduate tuition: student completions, program enrollments, and student credit hours.

## Strategies to Incentivize Undergraduate Revenue Growth



Mechanism	Name	Description	Advantage
Enroll	<b>Program Enrollment</b>	Directs tuition to units where students enroll	Creates incentive to develop programs that appeal to students
SCH	<b>Student Credit Hours</b>	Directs tuition to units where students take classes	Creates incentive to develop classes that appeal to students
Completes	<b>Student Completions</b>	Directs tuition to units where students graduate	Creates incentive to increase graduation rates and enrollment

Source: EAB interviews and analysis.

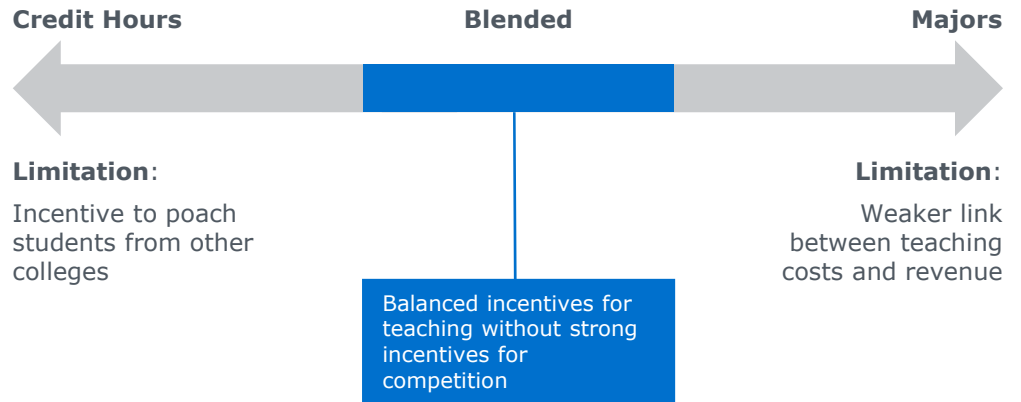
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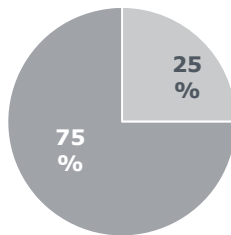
## The Tuition Allocation Spectrum

### Balancing Allocation Incentives for Undergraduate Tuition

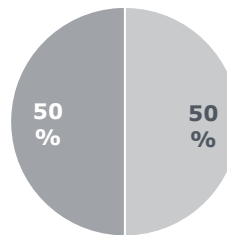


### Range of Blended Revenue Models

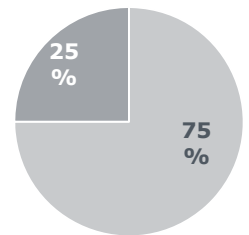
Iowa State University



University of Michigan



University of Minnesota



■ Revenue Allocated by Credit Hour ■ Revenue Allocated by Program

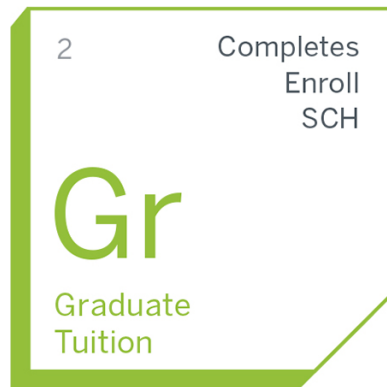
Source: Iowa State University, Ames, IA; University of Michigan, Ann Arbor, MI; University of Minnesota, Minneapolis, MN; EAB interviews and analysis.

## Element #2: Graduate Tuition

Since most research master’s and PhD students pay little or no tuition, tuition from graduate programs is not a significant revenue source for most colleges and universities. Unlike undergraduate tuition, which institutions allocate to create enrollment incentives, institutions should use graduation tuition as a way to help programs defray teaching costs or attract highly qualified students.

There are three budget model mechanisms colleges and universities can use to allocate graduate tuition: student completions, program enrollments, and student credit hours.

### Strategies to Incentivize Undergraduate Revenue Growth



Mechanism	Name	Description	Advantage
Completes	<b>Student Completions</b>	Directs tuition to units where students graduate	Creates incentive to increase graduation rates and enrollment
Enroll	<b>Program Enrollment</b>	Directs tuition to units where students enroll	Creates incentive to develop programs that appeal to students
SCH	<b>Student Credit Hours</b>	Directs tuition to units where students take classes	Creates incentive to develop classes that appeal to students

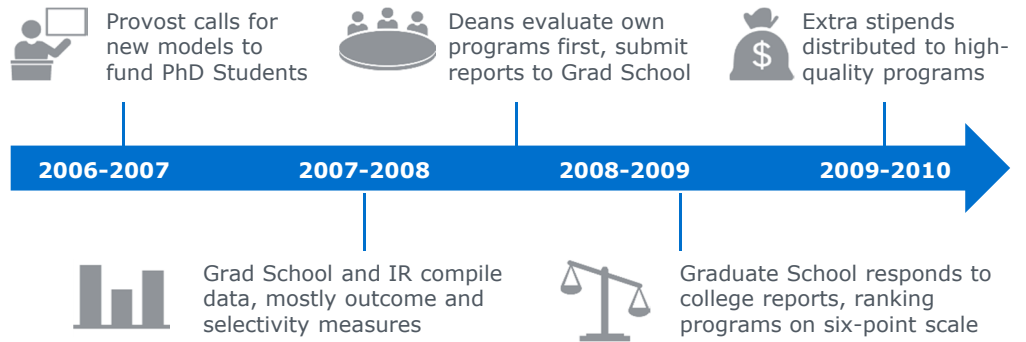
Source: EAB interviews and analysis.

Because graduate students in research programs traditionally do not pay tuition, scholarship stipends are often a more valuable resource than tuition revenue.

At Ohio State, administrators conducted a four-year process to reevaluate how graduate stipends were allocated between programs. After ranking each graduate program in one of six performance categories, the university consolidated under-performing programs and reallocated stipend funds to the highest performing programs, helping to improve yield rates in the institution's 12 flag-ship programs.

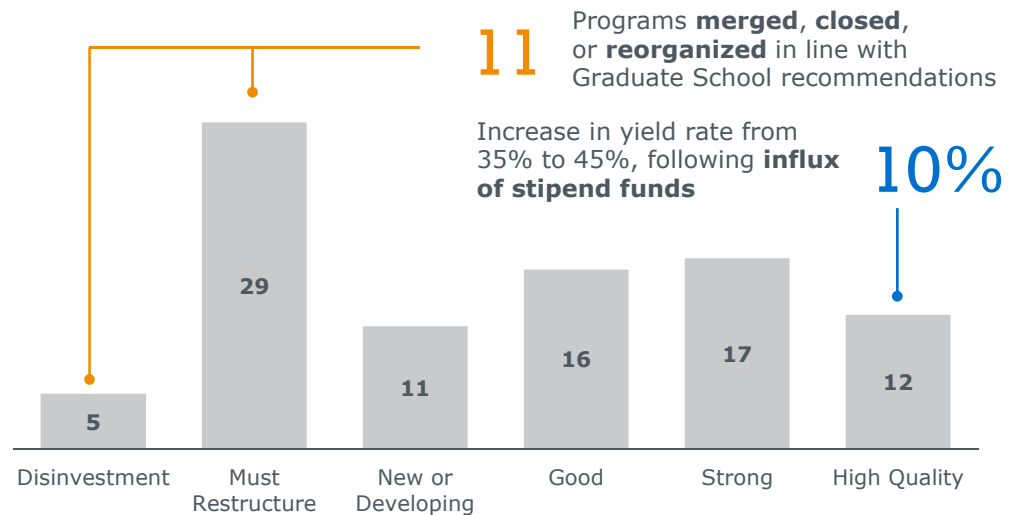
## Ohio Reallocates Scholarships to Enhance Program Quality

### Doctoral Program Assessment Process, 2006 to 2010



### Reallocation Provokes Significant Changes Among Graduate Programs

Number of Programs by Graduate School's Ranking



#### Case in Brief: Ohio State University

- 57,466-student public university located in Columbus, Ohio
- Doctoral program assessment led to significant reallocation of graduate program stipend funding

Source: Osmer P, "Doctoral Program Assessment and Plan," The Ohio State University, 2008; Osmer P, "Doctoral Program Review: Cumulative Status Report," The Ohio State University, 2010; EAB interviews and analysis.

## Element #3: Professional Master's

With undergraduate enrollment growth beginning to slow, many universities are turning to professional master's programs to drive enrollment and revenue growth. Without effective incentives, however, many universities find it difficult to convince faculty to participate in revenue-generating programs, which some faculty may view as a distraction from their core research mission.

There are four budget model mechanisms colleges and universities can use to allocate professional master's tuition: student completions, program enrollments, memoranda of understanding, and student credit hours.

### Strategies to Incentivize Professional Master's Programs



Mechanism	Name	Description	Advantage
Completes	<b>Student Completions</b>	Directs tuition to units where students graduate	Creates incentive to increase graduation rates and enrollment
Enroll	<b>Program Enrollment</b>	Directs tuition to units where students enroll	Creates incentive to develop programs that appeal to students
MOU	<b>Memorandum of Understanding</b>	Revenue sharing arrangement targets specific programs	Creates incentive for targeted program growth

Source: EAB interviews and analysis.

Colleges and universities should use caution when creating incentives for deans to launch new programs. A financial incentive will be counter-productive if the resulting programs generate less revenue than the cost of the incentive.

At Bemidji State University, administrators used an MOU to selectively incentivize new professional master’s programs with the most promise for growth. To receive the incentive, programs must pass a three-part program screen, shown here.

To learn more about the growth in professional master’s programs, see [Future Students, Future Revenues](#).

## Aligning Incentives with Best Growth Opportunities

*Bemidji State Uses MOUs to Selectively Incentivize High-Potential Programs*

### Three Key Elements of Bemidji State New Program Screen



#### Student Demand

Require evidence from surveys or market analysis to demonstrate viable student demand



#### Unique Market

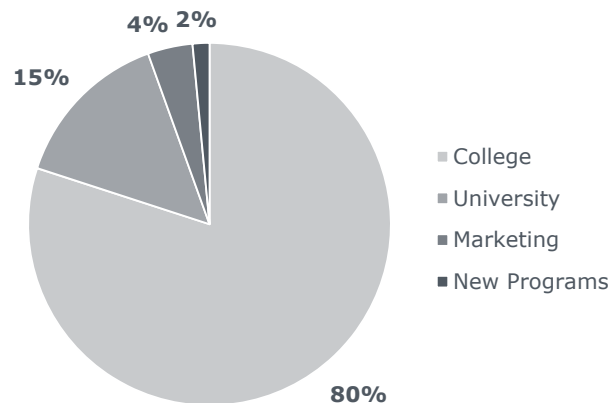
Require evidence that new program will not cannibalize existing university offerings



#### Financial Model

Require projections of direct and indirect cost to demonstrate financial viability

### Revenue Share Breakdown for Programs That Pass MOU Screen



### Case in Brief: Bemidji State University

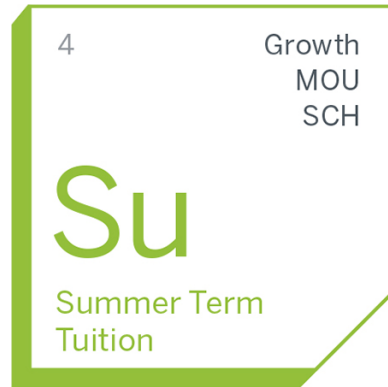
- 5,046-student public university located in Bemidji, Minnesota
- Requires new programs to pass three-element screen to receive revenue incentive
- Launched four programs under new MOU program in three years, including nursing, business, and special education

## Element #4: Summer Term Tuition

Summer term is a clear opportunity to generate new revenue without straining campus capacity. Although many institutions hold summer term revenue centrally, allocating a portion of the tuition from summer courses to units creates incentives for enrollment and revenue growth. Moreover, summer is an ideal time to test and refine new incentive policies before rolling them out more broadly.

There are three budget model mechanisms colleges and universities can use to allocate summer term tuition: growth, memoranda of understanding, and student credit hours.

### Strategies to Incentivize Summer Term Revenue Growth



Mechanism	Name	Description	Advantage
Growth	<b>Growth</b>	Units keep a share of new revenue they generate	Creates incentive for units to growth revenue
MOU	<b>Memorandum of Understanding</b>	Revenue sharing arrangement targets specific programs	Creates incentive for targeted program growth
SCH	<b>Student Credit Hours</b>	Directs tuition to units where students take classes	Creates incentive to develop classes that appeal to students

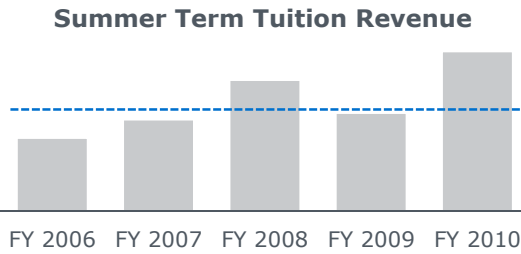
Source: EAB interviews and analysis.

Cleveland State University utilized a growth-based incentive to increase summer term utilization. Administrators measured growth against a five-year rolling average of tuition revenue to minimize year-to-year fluctuations.

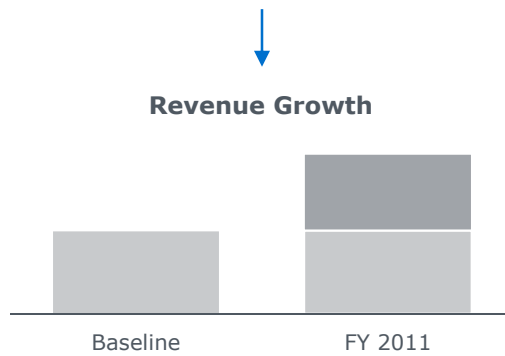
Colleges that generate more revenue than their five-year average receive 50% of new revenue. Colleges falling below their five-year average receive no additional revenue.

At other institutions where faculty have more control over summer term courses, administrators have experimented with allocating a portion of tuition revenue directly to faculty through an MOU as an incentive to offer high-demand courses.

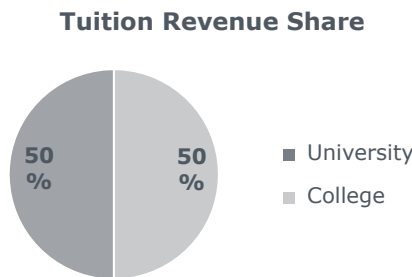
## Growth Incentives to Increase Summer Term Utilization



*For each college, calculate five-year average of summer term tuition revenue*



*Compare current year summer term tuition revenue with five-year average*



*Colleges that exceed their five-year average receive 50% of new revenue*

### Case in Brief: Cleveland State University

- 17,278-student public university located in Cleveland, Ohio
- Colleges eligible to receive 50% of new summer term tuition if they grow revenue above their five-year average
- Introduced summer term growth incentive in 2011



## Element #5: Extension Revenue

Most institutions operate a continuing or extension unit that offers online, hybrid, or face-to-face academic programs. While some extension units offer their own for-credit classes, others partner with departments and colleges to develop offerings for non-traditional audiences.

In either case, allocating tuition from for-credit extension programs to units creates incentives for enrollment and revenue growth.

There are four budget model mechanisms colleges and universities can use to allocate extension revenue: growth, memoranda of understanding, operating expenditures, and student credit hours.

### Strategies to Allocate Extension Unit Revenue



Mechanism	Name	Description	Advantage
Growth	<b>Growth</b>	Units keep a share of new revenue they generate	Creates incentive for units to growth revenue
MOU	<b>Memorandum of Understanding</b>	Revenue sharing arrangement targets specific programs	Creates incentive for targeted program growth
Op Ex	<b>Operating Expenditures</b>	Use revenue to pay for unit operating expenses	Incentivizes units to be self-sufficient
SCH	<b>Student Credit Hours</b>	Directs tuition to units where students take classes	Creates incentive to develop classes that appeal to students

Source: EAB interviews and analysis.

Mizzou Online is a self-supported unit at the University of Missouri-Columbia, which helps academic units offer courses and programs online.

Tuition revenue from Mizzou Online-supported courses is distributed via an MOU among the academic units that offer classes, Mizzou Online, and the Provost. Mizzou Online determines the allocation for academic units and the Provost based on the type of course and type of students served.

For semester-based courses and programs, the partnering academic unit assumes all direct costs associated with course design, course delivery, and program operation. Semester-based courses also take advantage of the institution’s LMS and technological support. Therefore, the revenue share for these programs is based on the gross tuition generated by distance students. During summer terms, gross revenue is also shared from undergraduate campus students who enroll in semester-based courses.

Conversely, Mizzou Online assumes all costs for self-paced courses. Therefore the revenue share from these courses is based on net tuition, rather than gross. The provost receives academic units’ revenue share for campus students in self-paced courses.

## Many Fits for Many Sizes

*University of Missouri Uses Multiple Mechanisms for Online Revenue*

Course Type	Semester-Based		Self-Paced	
<b>Student Classification</b>	Distance Students	Campus Students	Distance Students	Campus Students
<b>Course Term</b>	Fall, Spring, Summer	Summer (Undergrad)	Fall, Spring, Summer	Fall, Spring, Summer
<b>Academic Unit Share</b>	60%	60%	60%	0%
<b>Mizzou Online Share</b>	25%	25%	25%	25%
<b>Provost Share</b>	15%	15%	15%	75%
<b>Tuition Share</b>	Gross Tuition		Net Tuition	



### Case in Brief: University of Missouri-Columbia

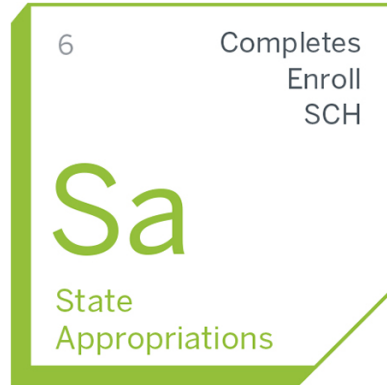
- 34,658-student public university located in Columbia, Missouri
- Mizzou Online operates as a shared service supporting academic units offering online programs
- Revenue share depends on course structure and student type

# Element #6: State Appropriations

While state appropriations have been declining as a share of revenue, they still comprise a critical component of the overall budget at most public universities. Although many institutions use state appropriations to fund university overhead and shared expenses, others are considering ways to strategically allocate state appropriations to advance institutional priorities.

There are three budget model mechanisms colleges and universities use to allocate state appropriations: completions, program enrollments, and student credit hours.

## Strategies to Allocate State Appropriation Funds



Mechanism	Name	Description	Advantage
Completes	<b>Student Completions</b>	Directs funds to units where students graduate	Creates incentive to increase graduation rates and enrollment
Enroll	<b>Program Enrollment</b>	Directs funds to units where students enroll	Creates incentive to develop programs that appeal to students
SCH	<b>Student Credit Hours</b>	Directs funds to units where students take classes	Creates incentive to develop classes that appeal to students

Source: EAB interviews and analysis.

Allocating state appropriations to academic units can be complex, especially in states that provide differential program funding.

The state of Ohio, for example, has 13 different per-student funding rates for undergraduate courses designed to subsidize high-cost programs such as science and engineering.

To incorporate the state’s funding formula into its budget model, Ohio State University uses a combination of weighted and unweighted credit hours to determine unit funding.

Undergraduate programs receive a weighted funding allocation that provides additional per-student funding to high-cost courses. At the same time, an unweighted funding allocation provides a flat per-student funding rate to all programs.

Ohio State adjusts weighted funding rates for undergraduate courses each year so that total weighted funding comprises 40% of the institution’s marginal allocation for undergraduate education.

## Ohio State’s Weighted and Unweighted Undergraduate Funding

### Calculating Weighted Undergraduate Funding for College A

*(Illustrative Example)*

Course Type	Funding Rate	×	Credit Hours Completed in Unit	= \$81,462
Rate 1	\$64.35		350	
Rate 2	\$76.02		150	
Rate 3	\$91.37		400	
Rate 4	\$109.88		100	

Funding Rates per Credit Hour      Total Credit Hours Completed in College A      Total Weighted Funding Allocation for College A

### Calculating Unweighted Undergraduate Funding for College A

*(Illustrative Example)*

\$219	×	1,000	=	\$219,000
Unweighted Funding per Credit Hour		Total Credit Hours Attempted in College A		Total Unweighted Funding Allocation for College A



#### Case in Brief: The Ohio State University

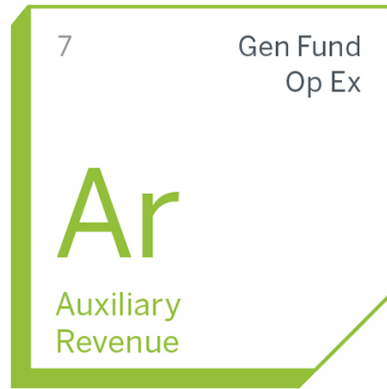
- 57,466-student public university located in Columbus, Ohio
- Allocates differential credit-hour funding for programs based on the state’s differential funding allocations.

# Element #7: Auxiliary Revenue

In addition to tuition and state appropriations for instruction, universities also generate revenue from a host of non-academic auxiliary businesses such as student housing and dining services.

There are two budget model mechanisms colleges and universities can use to allocate auxiliary revenue: general fund and operating expenditures.

## Strategies to Allocate Revenue from Auxiliary Units



Mechanism	Name	Description	Advantage
Gen Fund	<b>General Fund</b>	Direct revenue to the general fund	Creates mechanism to pool funds for larger investments
Op Ex	<b>Operating Expenditures</b>	Use revenue to pay for unit operating expenses	Incentivizes units to be self-sufficient



Source: EAB interviews and analysis.

The operating expenditures mechanism grants units control over the revenue they generate to pay for their expenses. With auxiliary units operating more independently, campus administrators can use tuition and other funds for more strategic purposes.

However, some universities impose a modest tax on auxiliary unit revenue. Funding collected through the tax goes into the general fund and supports campus-wide investments. Revenue tax rates typically range from 10% to 15%.

## Using Revenue Tax to Recapture Auxiliary Revenue

### Representative Universities Utilizing Auxiliary Revenue Taxes

Institution	Auxiliary Unit Tax	Sample Auxiliary Units
 <b>Northeastern University</b>	10%	<ul style="list-style-type: none"> <li>• Conference Centers</li> <li>• Parking</li> <li>• Residence Halls</li> </ul>
 <b>UNIVERSITY of NEW HAMPSHIRE</b>	13.5%	<ul style="list-style-type: none"> <li>• Computer Store</li> <li>• Print Services</li> <li>• Health Services</li> </ul>

Source: Northeastern, Boston, MA; University of New Hampshire, Durham, NH; EAB interviews and analysis.

# Element #8: Indirect Cost Recovery

Indirect cost recovery (ICR) funds are reimbursements for administrative and overhead costs associated with research. Although these funds are technically a reimbursement for costs already incurred, many universities treat them as additional revenue because they are more flexible than other funding sources.

There are four budget model mechanisms colleges and universities can use to allocate ICR funds: dean or department chair, general fund, principal investigator, or VP for research.

## Strategies to Allocate Indirect Cost Recovery Funds



Mechanism	Name	Description	Advantage
Dean/Dept	<b>Dean or Department Chair</b>	Directs ICR to a Dean or Department Chair	Creates mechanism for units to pool research funds for larger investments
Gen Fund	<b>General Fund</b>	Direct ICR to the general fund	Creates mechanism to pool funds for larger investments
PI	<b>Principal Investigator</b>	Directs ICR to the grant's Principal Investigator	Creates direct incentive for grants and provides funding for research expenses
VP-R	<b>Vice President for Research</b>	Directs ICR to the Vice President for Research	Creates mechanism to fund research overhead and pool funds for larger investments

Source: EAB interviews and analysis.

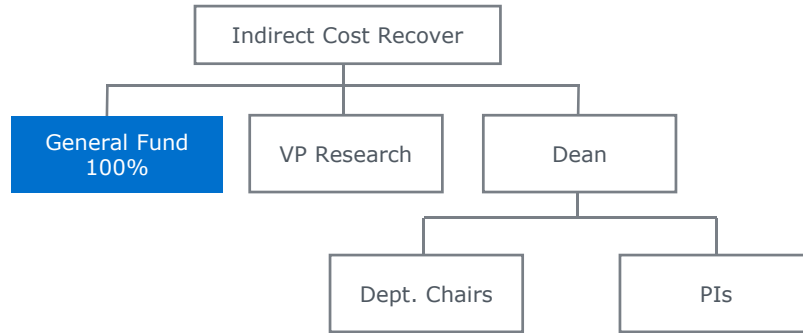
While universities have different policies governing how indirect cost recovery funds are distributed, no single policy appears to correlate with higher research productivity. Instead, the budget mechanism institutions use to allocate ICR reflects each campus' culture.

At MIT, for example, ICR funding flows to the general fund to support institutional priorities. By contrast, University of Oregon and Indiana University use ICR to support the research infrastructure at the university and college levels, respectively.

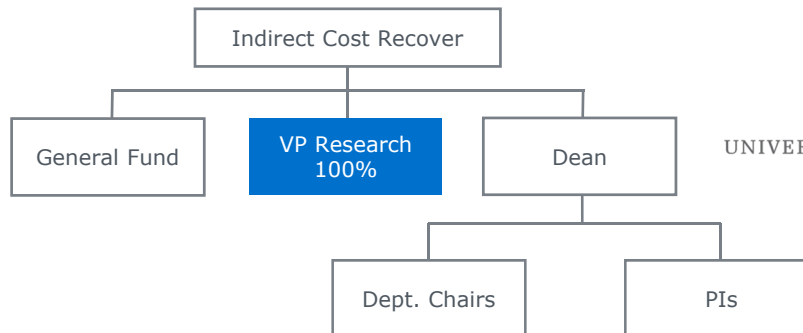
For more information on using ICR, see [Optimizing the Distribution of F&A Recovery Funds](#).

## A Spectrum of Approaches to Allocating ICR

### Most Funds Retained in General Fund

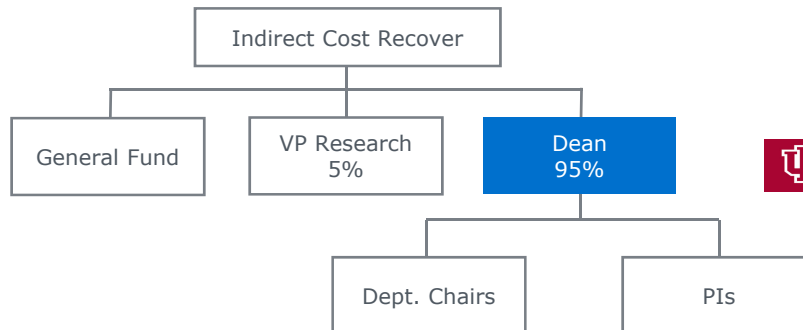


### Most Funds to VP for Research



UNIVERSITY OF OREGON

### Most Funds to Deans



Source: Indiana University, Bloomington, IN; Massachusetts Institute of Technology, Cambridge, MA; University of Oregon, Eugene, OR; EAB interviews and analysis.



# Element #9: Non-credit Revenue

Many institutions are interested in growing their non-credit training and non-credit certificate programs as a way to develop deeper connections with local industries and to drive new revenue growth. These programs are often offered through the institution’s continuing or extension unit, which either creates its own courses or works with academic faculty to develop programs.

There are four budget model mechanisms colleges and universities can use to allocate non-credit revenue: growth, memoranda of understanding, operating expenditures, and student credit hours.

## Allocating Revenue from Non-Credit Programs



Mechanism	Name	Description	Advantage
Growth	<b>Growth</b>	Units keep a share of new revenue they generate	Creates incentive for units to growth revenue
MOU	<b>Memorandum of Understanding</b>	Revenue sharing arrangement targets specific programs	Creates incentive for targeted program growth
Op Ex	<b>Operating Expenditures</b>	Use revenue to pay for unit operating expenses	Incentivizes units to be self-sufficient
SCH	<b>Student Credit Hours</b>	Directs tuition to units where students take classes	Creates incentive to develop classes that appeal to students

Source: EAB interviews and analysis.

Non-credit programs are often offered through the institution’s continuing or extension unit. To allocate non-credit revenue, institutions should use the budget model mechanism that best reflects their strategic goals.

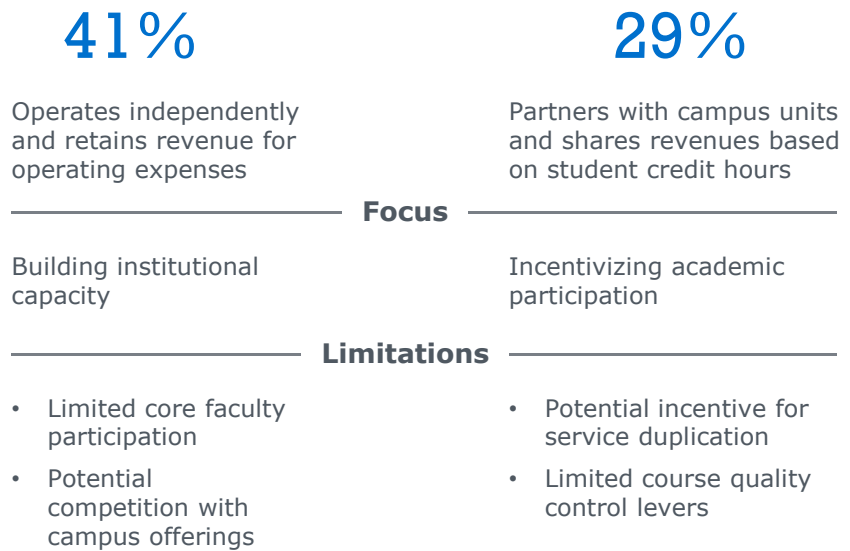
The two most common mechanisms institutions use to allocate revenue from non-credit programs are listed here.


Institutions focused on building capacity should allow the extension unit to retain a larger share of revenues for operating expenses. Institutions focused on incentivizing new course development and participation from other academic units should use student credit hours to allocate a share of revenue to units that participate in non-credit programs.

For more information on optimizing incentives for units to develop online and hybrid offerings, see [Engaging Faculty in Online Education](#).

## Common Approaches to Non-Credit Revenue Allocation

*Share of Institutions Using Each Allocation Approach*





### Lessons for Designing Effective COE Funding Models

- Develop simple and transparent allocation mechanisms
- Recognize program development and delivery costs
- Hardwire incentives for faculty participation
- Reevaluate formula as programs mature and startup costs diminish

Source: The Ohio State University, Columbus, OH; EAB interviews and analysis.

# Element #10: Endowment Revenue

Fortunately, endowment returns have largely recovered from the recession-driven losses many institutions experienced in 2009 and 2010. In fact, 10-year returns on university endowments averaged 7.1% in 2013.

There are two budget model mechanisms colleges and universities can use to allocate endowment revenue: general fund and operating expenditures.

## Strategies to Allocate Endowment Revenue



Mechanism	Name	Description	Advantage
Gen Fund	<b>General Fund</b>	Direct revenue to the general fund	Creates mechanism to pool funds for larger investments
Op Ex	<b>Operating Expenditures</b>	Use revenue to pay for unit operating expenses	Incentivizes units to be self-sufficient

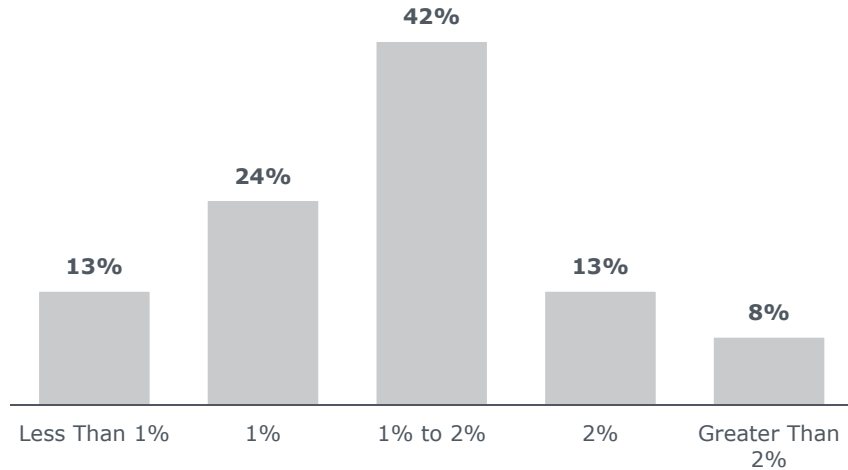
Source: National Association of College and University Business Officers, "NACUBO-Commonfund Study of Endowments, 2013," 2013; EAB interviews and analysis.

Most institutions use the operating expenditures budget mechanism to fund their endowment operations—charging a management fee equal to a proportion of yearly endowment returns.

A recent survey of endowment managers found that management fees were the most common source of funding for university foundations. Fees most commonly range from 1% to 2%, as shown here.

## Funding Endowment Costs Through Management Fees

### Common Range for Endowment Management Fees



Source: Council for Advancement and Support of Education, "Results of the FY 2012 Institutionally Related Foundations Data Book Survey," 2012; EAB interviews and analysis.

# Element #11: Donor Gifts

Over the last three decades, the proportion of gifts directed to unrestricted funds has fallen at both public and private institutions. In 2011, 88% of gifts at privates and 97% of gifts at publics were restricted. As the availability of unrestricted gifts continues to decline, the imperative to use these funds more strategically has increased.

There are two budget model mechanisms colleges and universities can use to allocate donor gifts: general fund and operating expenditures.

## Strategies to Allocate Donor Gifts



Mechanism	Name	Description	Advantage
Gen Fund	<b>General Fund</b>	Direct revenue to the general fund	Creates mechanism to pool funds for larger investments
Op Ex	<b>Operating Expenditures</b>	Use revenue to pay for unit operating expenses	Incentivizes units to be self-sufficient

Source: Council for Aid to Education, "Voluntary Support of Education Survey," 2012; EAB interviews and analysis.

With a larger share of gifts going toward restricted purposes, more institutions are using gift fees to direct at least a small portion of restricted funding toward operating expenses and general funds.

For example, the advancement office at North Carolina State University applies a one-time 5% fee on all gifts, of which 60% supports advancement office operating expenses. The remaining 40% of the fee goes to the unit where the gift was designated as unrestricted funds.

## Increasing Flexible Dollars Through Gift Fees

### Key Lessons for Communicating Gift Fees to Donors



#### Compare to Nonprofits

Most gift fees range from 2% to 6% of the original gift. This range is far below the 15% to 20% that nonprofits typically allocate toward administrative expenses.



#### Be Transparent About Use

Educate donors about the gift fee early and ensure that information about uses of fee revenue is publically available in multiple formats.



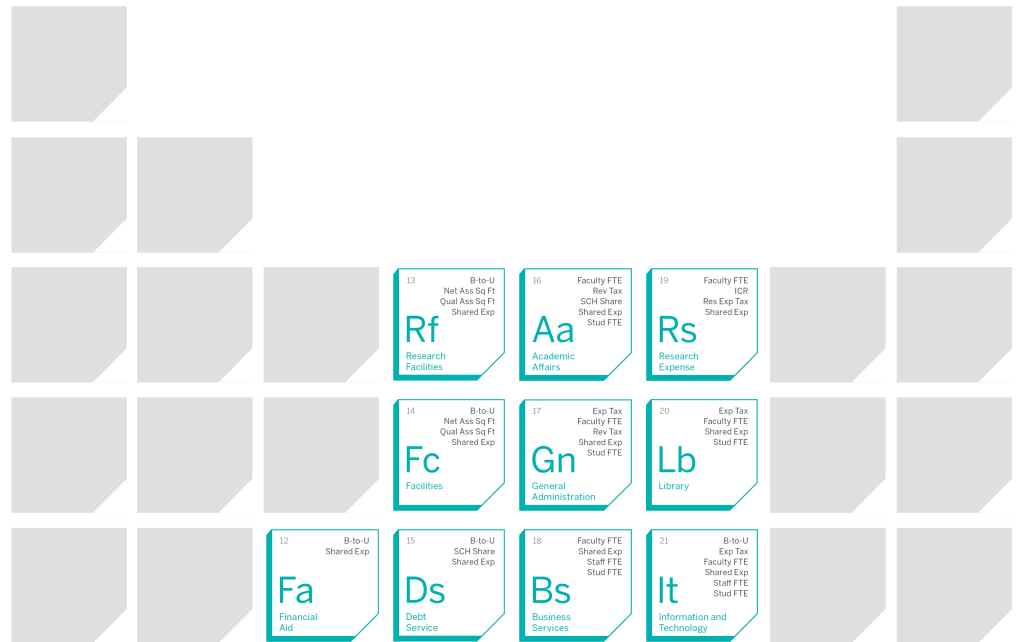
#### Articulate Clear Waiver Policies

The most common gift fee waivers are for corporations and foundations where the organization has a written policy prohibiting funding for administrative expenses.

# Cost Allocation Elements

Allocating costs is challenging because most institutions lack the activity-based accounting tools required to calculate each individual unit's precise share of overhead. Yet, as institutions distribute a larger share of revenue directly to units, they must also allocate a share of the institution's overhead.

Cost allocation elements represent different components of the institution's overhead. For each element, institutions can define mechanisms that distribute costs equitably between units or that create incentives to conserve institutional resources.



Source: EAB interviews and analysis.

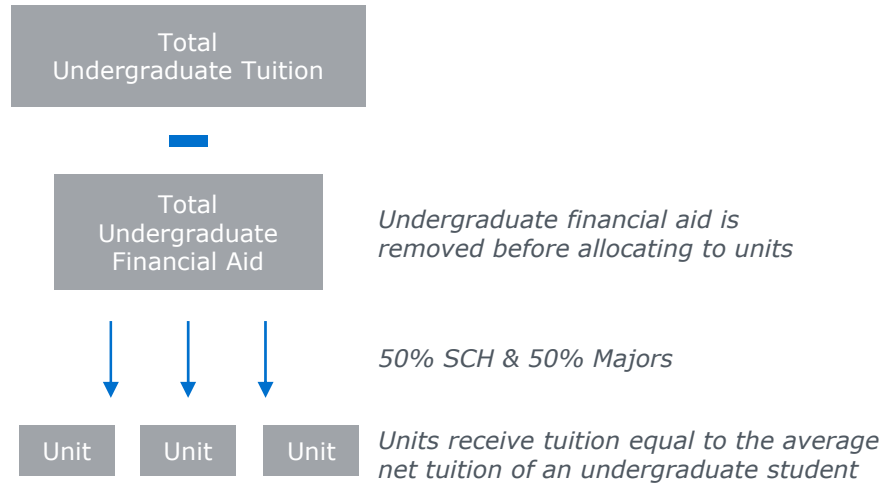
Units have more control over awarding financial aid at the graduate level. Using the shared expense mechanism could create a perverse incentive for colleges to offer as much aid as possible to increase their yield, without acknowledging the financial cost to the institution.

Therefore, institutions can blend these approaches, billing units for their graduate students' financial aid, but spreading the cost of undergraduate financial aid equally across all units.

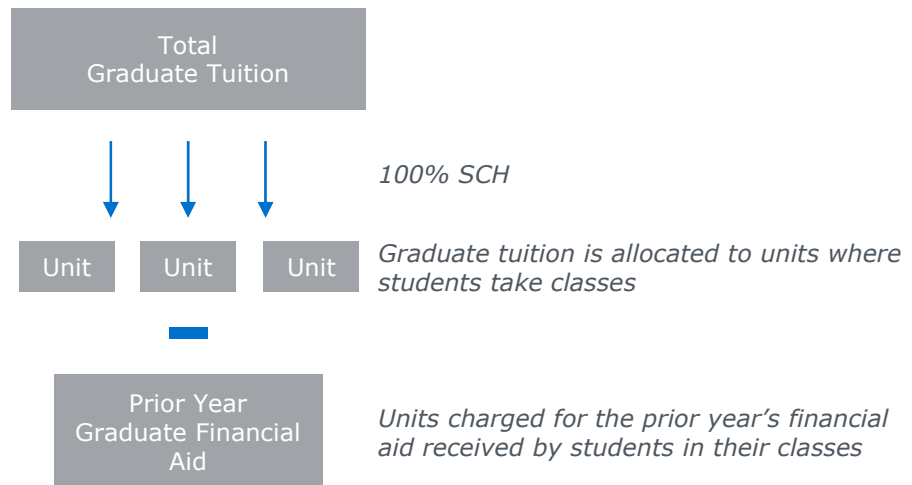
At Northeastern, for example, each unit is billed directly for the financial aid it provides to its master's students, but units share the cost of financial aid for undergraduates equally.

## Differentiating Financial Aid Costs for Graduate and Undergraduates

### Undergraduate Tuition Allocation Method



### Graduate Tuition Allocation Method





# Element #13: Research Facilities

By square foot, research facilities are often the most expensive space on campus. Moreover, the availability of research space is an important recruiting lever for new research faculty. Using research space productively is especially critical for colleges and universities interested in growing their research output.

There are four budget model mechanisms colleges and universities can use to allocate the cost of research facilities: bill-to-unit, net assignable square feet, quality of assignable square feet, and shared expense.

## Allocating the Cost of Labs and Other Research Facilities



Mechanism	Name	Description	Advantage
B-to-U	<b>Bill-to-Unit</b>	Unit billed directly for costs	Creates incentive to conserve resource use
Net Ass Sq Ft	<b>Net Assignable Square Feet</b>	Flat rate charged for each square foot used	Creates incentive to reduce space footprint
Qual Net Ass Sq Ft	<b>Quality of Assignable Square Feet</b>	Differential rates for quality or type of space used	Creates incentive to optimize type of spaces occupied
Shared Exp	<b>Shared Expense</b>	Cost shared equally by all units	Removes incentive to conserve resources

Source: EAB interviews and analysis.

Budget model mechanisms that allocate research space can improve research facility utilization, but non-budgetary mechanisms can also be effective.

Productivity-based leases, for example, tie continued occupancy to research intensity or grant generation. Researchers that fall below their institutional or department-specific benchmarks are obliged to give up their research space to other researchers.

For more information on how institutions are improving space utilization, see [Maximizing Space Utilization](#).

## Creating Budgetary and Non-budgetary Levers to Inflect Space Utilization

### Budgetary Mechanisms



#### Net Assignable Square Feet

Colleges charged flat rate for each assignable square foot occupied within research facilities

### Non-budgetary Mechanisms



#### Productivity-Based Lease

Continued occupancy of research space depends on institution- or investigator-specific benchmarks



#### New Space Utilization Hurdles

Department- and discipline-specific benchmarks required for new space requests

# Element #14: Facilities

Facilities space for classrooms and offices is a scarce resource on every campus. As institutions look to maximize space utilization, they are finding that charging units for the space they occupy is a powerful way to inflect campus behavior.

There are four common budget model mechanisms colleges and universities can use to allocate the cost of facilities: bill-to-unit, net assignable square feet, quality of assignable square feet, and shared expense.

## Allocating the Cost of Campus Facilities



Mechanism	Name	Description	Advantage
B-to-U	<b>Bill-to-Unit</b>	Unit billed directly for costs	Creates incentive to conserve resource use
Net Ass Sq Ft	<b>Net Assignable Square Feet</b>	Flat rate charged for each square foot used	Creates incentive to reduce space footprint
Qual Net Ass Sq Ft	<b>Quality of Assignable Square Feet</b>	Differential rates for quality or type of space used	Creates incentive to optimize type of spaces occupied
Shared Exp	<b>Shared Expense</b>	Cost shared equally by all units	Removes incentive to conserve resources

Source: EAB interviews and analysis.

The net assignable square feet budget mechanism can be challenging to use because university employees use space differently. Faculty members, for example, have different space needs than administrative staff and teaching assistants.

Administrators at Stanford University overcame this challenge by developing a net assignable square feet mechanism that accounts for the type of space units need.

Each unit receives a space allowance based on the number and type of staff they employ. Benchmarks for each staff role include a buffer to allow for idiosyncratic differences in space usage. Each unit's total space allocation is the sum of its role-specific allocations plus the buffer amount.

Units that exceed their allocation were charged a flat rate of \$33 per square foot. Units that fall below their space allocation received a space reimbursement of \$33 per square foot.

For more information on how institutions are improving space utilization, see [Maximizing Space Utilization](#).

## Setting Baselines to Benchmark Office Space Allocation

### Calculating a Unit's Space Allowance

*Representative Space Allowance for College A*


Role	Space Allowance	Buffer	Quantity	Total Allocation
Dean	240 sq ft	15%	1	276 sq ft
Faculty	160 sq ft	15%	44	8,096 sq ft
Admin Staff	100 sq ft	5%	87	9135 sq ft
Students (RA/TA)	52 sq ft	0%	292	15,184 sq ft
Visitors	80 sq ft	15%	35	3,220 sq ft
Total			459	35,911 sq ft

Larger buffers allow more variance, smaller buffers reflect greater standardization across campus

### Allocating Space Charges and Reimbursements

Unit	Actual Utilization	Space Allowance	Difference	Charge	Charge (Payment)
College A	46,955 sq ft	31,736 sq ft	15,219	\$33	\$502 K
College B	17,871 sq ft	20,949 sq ft	(3,078)	\$33	(\$102 K)

Charge set to equal square foot cost of rental space in Stanford's research park



### Case in Brief: Stanford University

- 15,877-student private university located in Stanford, California
- Units charged or reimbursed based on utilization of space against a standardized benchmark
- Over 10,000 square feet of office space returned to provost since implementing space charge in 2007

Source: Stanford University, Stanford, CA; EAB interviews and analysis.

# Element #15: Debt Service

With political pressure to limit reserve levels and donors increasingly adding restrictions to their gifts, more institutions are turning to debt to finance strategic priorities. Since 2009, 28% of public institutions have increased direct debt by over 50%, while 23% have increased their direct debt by 20% to 50%.

Whether debt is used to finance new construction, upgrade campus infrastructure, or jump-start a new initiative, colleges and universities need principled ways to pay for the costs associated with issuing debt.

There are three budget model mechanisms colleges and universities can use to allocate debt service: bill-to-unit, share of student credit hours, and shared expense.

## Allocating Debt Service



Mechanism	Name	Description	Advantage
B-to-U	<b>Bill-to-Unit</b>	Unit billed directly for costs	Creates incentive to conserve resource use
SCH Share	<b>Share of Student Credit hours</b>	Unit billed based on student credit hours generated	Ties costs to teaching productivity
Shared Exp	<b>Shared Expense</b>	Cost shared equally by all units	Removes incentive to conserve resources

Source: Moody's Investors Services, "Growing Pressure Evident in Fiscal 2013 Public University Medians," 2014; EAB interviews and analysis.

Charging units the full cost of facilities, including debt service, can influence how they occupy space and their plans for future expansion.

The University of Minnesota uses the bill-to-unit and share of credit hours mechanisms to allocate debt service. Under the university's system, academic units pay the full cost of debt service on space officially assigned to them, but only a portion of debt costs on shared or common space. These charges had two effects on facilities usage.

First, incurring the full cost of debt service on officially assigned space has encouraged units to be more intentional about new capital projects. In one instance, plans for a new facility to support the College of Biological Sciences were scaled back from \$25 million to \$5 million after leaders saw that projected revenues would not cover anticipated debt costs.

Second, because debt costs are generally lower for shared university space, units have a financial incentive to return classroom space back to the university's central classroom pool. One college was able to save \$300K a year by converting a portion of its classrooms into general purpose classrooms.

## Controlling Demand for Space

### Elements of University of Minnesota's Debt Service Allocation



#### Direct Charge for Occupied Space

Units billed directly for full cost of debt service on facilities they occupy. If occupancy is shared, units share debt costs proportionally to their share of building's assignable square feet.



#### Cost Allocation for General Purpose Classrooms

Units pay a share of the institution's debt service on general purpose classrooms based on the unit's share of registered students.



### Case in Brief: University of Minnesota

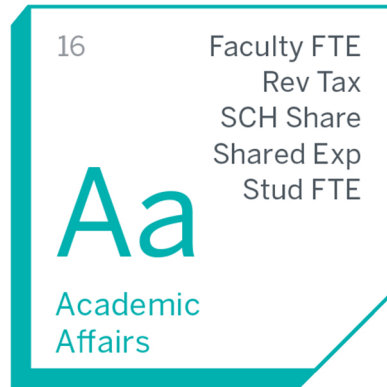
- 51,526-student public university located in Minneapolis, Minnesota
- Implemented new space charge system in 2006 allocating debt, operations, and utility costs to campus units
- Units receive debt charge for occupied space and pay a share of debt on general purpose classrooms

# Element #16: Academic Affairs

As with general administrative costs, costs associated with academic affairs represent university overhead associated with student services and other academic support. Since some academic units benefit more than others from these services, institutions should look for ways to equitably assign academic affairs costs across campus.

There are five budget model mechanisms colleges and universities can use to allocate the cost of academic affairs: full-time equivalent faculty, revenue taxes, share of student credit hours, shared expense, and full-time equivalent students.

## Allocating Debt Service



Mechanism	Name	Description	Advantage
Faculty FTE	<b>Full-Time Equivalent Faculty</b>	Unit billed based on number of faculty	Ties costs to number of faculty employed
Rev tax	<b>Revenue Tax</b>	Tax charged on unit revenues	Charge dependent on revenue streams included in tax
SCH Share	<b>Share of Student Credit hours</b>	Unit billed based on student credit hours generated	Ties costs to teaching productivity
Shared Exp	<b>Shared Expense</b>	Cost shared equally by all units	Removes incentive to conserve resources
Stud FTE	<b>Full-Time Equivalent Students</b>	Unit billed based on number of students	Ties costs to number of students served

Source: EAB interviews and analysis.

Examples of how two universities define academic affairs and the metrics they use to allocate those costs across academic units are provided here.

University of Delaware uses a combination of expense tax, full-time equivalent students, and full-time equivalent faculty to allocate costs associated with academic affairs.

University of Florida also uses a combination of mechanisms, but only full-time equivalent faculty and full-time equivalent students.

## Methods to Allocate Academic Affairs Costs



### Allocation Method

Half of the expenses are allocated based on each unit's share of undergraduate students.

Half of the expenses are allocated based on a unit's weighted share of:

- Graduate Student FTEs (Weighted 0.05)
- Faculty FTEs (Weighted 1.00)
- Post Doc FTEs (Weighted 1.00)

### Offices Classified as Academic Affairs

- Associate Provost for Admin & Enrollment
- Deputy Provost
- Director for Economic Innovation & Partnerships
- Intercollegiate Athletics & Recreation
- University Museums
- Vice President for IT
- Vice President for Student Life
- Vice Provost for Graduate and Professional Studies
- Vice Provost for Libraries



### Allocation Method

Allocation equals a unit's weighted share of:

- Faculty (Weighted 2.00)
- Undergraduates in Lower Division Courses (Weight 2.00)
- Undergraduates in Upper Division Courses (Weight 3.00)
- Graduate Students (Weight 4.00)

### Offices Classified as Academic Affairs

- Admissions
- Graduate School
- Registrar
- Student Affairs
- Student Financial Services
- University of Florida International Center



# Element #17: General Administration

Executive and administrative offices are a form of overhead at every college and university. Although they do not directly generate revenue for the institution, they provide important services that benefit the entire campus.

Spreading overhead costs associated with general administration equitably among revenue-generating units is challenging because it is difficult to measure which units benefit most from general administrative offices.

There are five budget model mechanisms colleges and universities can use to allocate the cost of general administration: expense taxes, full-time equivalent faculty, revenue taxes, shared expense, and full-time equivalent students.

## Allocating General Administration Costs



Mechanism	Name	Description	Advantage
Exp Tax	<b>Expense Tax</b>	Tax charged on unit expenditures	Charge dependent on expenditure categories included in tax
Faculty FTE	<b>Full-Time Equivalent Faculty</b>	Unit billed based on number of faculty	Ties costs to number of faculty employed
Rev tax	<b>Revenue Tax</b>	Tax charged on unit revenues	Charge dependent on revenue streams included in tax
Shared Exp	<b>Shared Expense</b>	Cost shared equally by all units	Removes incentive to conserve resources
Stud FTE	<b>Full-Time Equivalent Students</b>	Unit billed based on number of students	Ties costs to number of students served

Source: EAB interviews and analysis.

Examples of how two universities define general administration and the metrics they use to allocate those costs across academic units are provided here.

Northeastern University allocates general administration costs using the expense tax budget mechanism.

Iowa State University allocates general administration costs using a combination of the full-time equivalent faculty and full-time equivalent students mechanisms.

## Methods to Allocate General Administrative Costs



### Northeastern University

#### Allocation Method

Allocation equals the unit's share of total operating expenses averaged over the prior two years, excluding:

- Student Financial Aid
- Construction or Renovation Expenses

#### Offices Classified as Academic Affairs

- |                                   |                          |
|-----------------------------------|--------------------------|
| • Advancement                     | • Human Resources        |
| • Business Office                 | • Institutional Research |
| • Diversity & Affirmative Action  | • Insurance              |
| • Environmental Health and Safety | • Internal Audit         |
| • Executive Affairs               | • Investments Management |
| • External Affairs                | • Public Safety          |
| • Facilities Administration       | • Purchasing             |
| • Finance                         | • Risk Management        |
|                                   | • University Counsel     |

### IOWA STATE UNIVERSITY

#### Allocation Method

Allocation equals the unit's share of:

- Full-Time Equivalent Faculty
- Undergraduate Headcount
- Graduate Headcount
- Professional Student Headcount

#### Offices Classified as General Administration

- |  |   |
|--|---|
| • Academic Excellence Fund                       | • Interdisciplinary Graduate Programs Support     |
| • Center for Excellence in Learning and Teaching | • Office of the Senior Vice President and Provost |
| • Faculty Senate                                 | • Professional and Scientific Council             |
| • General University Classrooms                  | • Program for Women in Science and Engineering    |
| • Graduate College - Administration              | • Study Abroad Center                             |
| • Graduate Minority Assistantship Program        | • Teaching Assistant Assessment Program           |
| • Honors Program                                 |   |
| • Institutional Research                         |   |

# Element #18: Business Services

Business services are another form of institutional overhead. Like general administration, business services serve the entire campus, and it is difficult to equitably assign the costs associated with business offices because units benefit from these services equally.

There are four budget model mechanisms colleges and universities can use to allocate the cost of business services: full-time equivalent faculty, shared expense, full-time equivalent staff, and full-time equivalent students.

## Allocating the Costs of Business Services



Mechanism	Name	Description	Advantage
Faculty FTE	<b>Full-Time Equivalent Faculty</b>	Unit billed based on number of faculty	Ties costs to number of faculty employed
Shared Exp	<b>Shared Expense</b>	Cost shared equally by all units	Removes incentive to conserve resources
Staff FTE	<b>Full-Time Equivalent Staff</b>	Unit billed based on number of staff	Ties costs to number of support staff
Stud FTE	<b>Full-Time Equivalent Students</b>	Unit billed based on number of students	Ties costs to number of students served

Source: EAB interviews and analysis.

Examples of how two universities define business services and the metrics they use to allocate those costs to academic units are provided here.

Iowa State University uses a combination of full-time equivalent faculty and full-time equivalent staff to allocate costs associated with business services.

University of Minnesota exclusively uses the expense tax mechanism.

## Methods to Allocate Business Services Costs

### IOWA STATE UNIVERSITY

#### **Allocation Method**

Allocation equals the unit's share of:

- Full-Time Equivalent Faculty
- Full-Time Equivalent Staff

#### **Offices Classified as Business Services**

- Controller's Department
- Department of Public Safety
- Division of Business and Finance Administration
- Human Resources Services
- Office of Risk Management
- Purchasing Department

### UNIVERSITY OF MINNESOTA

#### **Allocation Method**

Allocation equals the unit's share of total operating expenses at the end of each fiscal year.

#### **Offices Classified as General Administration**

- Audits
- Board of Regents
- Budget and Finance
- Controllers Office
- General Counsel
- Human Resources
- President's Office

# Element #19: Research Expense

Direct costs associated with research, such as materials and supplies, can be paid by grants and research funds. However, indirect research costs, such as administrative overhead and grant compliance, cannot. Instead, institutions must find ways to allocate these costs to academic units.

There are four budget model mechanisms colleges and universities can use to allocate research expenses: full-time equivalent faculty, indirect cost recovery, research expense tax, and shared expense.

## Allocating Research Costs



Mechanism	Name	Description	Advantage
Faculty FTE	<b>Full-Time Equivalent Faculty</b>	Unit billed based on number of faculty	Ties costs to number of faculty employed
ICR	<b>Indirect Cost Recovery</b>	Unit billed based on share of ICR received	Ties costs to research productivity
Res Exp Tax	<b>Research Expense Tax</b>	Tax charged on research expenses	Ties costs to spending on research
Shared Exp	<b>Shared Expense</b>	Cost shared equally by all units	Removes incentive to conserve resources

Source: EAB interviews and analysis.

Examples of how two universities define research expenses and the metrics they use to allocate those costs across academic units are provided here.

Northeastern University uses research expense tax to allocate costs associated with research expenses.

Instead of allocating the budget of an entire office, the University of Southern California allocates out the share of each office's budget that is associated with research. These costs are allocated to academic units using ICR.

## Methods to Allocate Research Expenses



### Northeastern University

#### Allocation Method

Allocation equals the unit's share of total sponsored project grant expenditures averaged over the prior two years

#### Offices Classified as Research Expenses

- Office of Research Administration and Finance
- Office of Technology Transfer
- Vice President for Research



### USC University of Southern California

#### Allocation Method

Allocation equals the unit's share of total grant revenue averaged over the prior three years

#### Offices Classified as Research Expenses

Revenue allocated to the share of research related expenses in each administrative units budget.

# Element #20: Library

Academic libraries are faced with a daunting series of challenges brought on by the digital revolution. As more institutions begin to transition their academic library model from storage and dissemination of physical resources to one designed for digital services and collaborative learning, they should also reconsider how library costs are budgeted and assigned to academic units.

There are four budget model mechanisms colleges and universities can use to allocate library costs: expense tax, full-time equivalent faculty, shared expense, and full-time equivalent students.

## Allocating Library Costs



Mechanism	Name	Description	Advantage
Exp Tax	<b>Expense Tax</b>	Tax charged on unit expenditures	Charge dependent on expenditure categories included in tax
Faculty FTE	<b>Full-Time Equivalent Faculty</b>	Unit billed based on number of faculty	Ties costs to number of faculty employed
Shared Exp	<b>Shared Expense</b>	Cost shared equally by all units	Removes incentive to conserve resources
Stud FTE	<b>Full-Time Equivalent Students</b>	Unit billed based on number of students	Ties costs to number of students served

Source: EAB interviews and analysis.

Examples of how two universities define library services and the metrics they use to allocate those costs across academic units are provided here.

Iowa State University uses a combination of full-time equivalent faculty, full-time equivalent staff, and full-time equivalent students to allocate costs associated with the library.

Northeastern University uses the expense tax mechanism.

## Methods to Allocate Library Costs

### IOWA STATE UNIVERSITY

#### Allocation Method

Allocation equals a unit's weighted share of:

- Full-Time Equivalent Faculty (Weighted 3.00)
- Full-Time Equivalent Staff (Weighted 1.00)
- Undergraduate Student Headcount (Weighted 3.00)
- Graduate Student Headcount (Weighted 3.00)
- Professional Student Headcount (Weighted 3.00)

#### Offices Classified as Library

- Library Administration & Support
- Library Collection & Technical Services
- Materials and Access Budget
- Reference and Instructional Services



### Northeastern University

#### Allocation Method

Allocation equals the unit's share of total operating expenses averaged over the prior two years, excluding:

- Student Financial Aid
- Construction or Renovation Expenses

#### Offices Classified as Library

University Libraries



# Element #21: Information and Technology

Academic libraries are faced with a daunting series of challenges brought on by the digital revolution. As more institutions begin to transition their academic library model from storage and dissemination of physical resources to one designed for digital services and collaborative learning, they should also reconsider how library costs are budgeted and assigned to academic units.

There are four budget model mechanisms colleges and universities can use to allocate library costs: expense tax, full-time equivalent faculty, shared expense, and full-time equivalent students.

## Allocating the Costs of Information and Technology



Mechanism	Name	Description	Advantage
B-to-U	<b>Bill-to-Unit</b>	Unit billed directly for costs	Creates incentive to conserve resource use
Exp Tax	<b>Expense Tax</b>	Tax charged on unit expenditures	Charge dependent on expenditure categories included in tax
Faculty FTE	<b>Full-Time Equivalent Faculty</b>	Unit billed based on number of faculty	Ties costs to number of faculty employed
Shared Exp	<b>Shared Expense</b>	Cost shared equally by all units	Removes incentive to conserve resources
Staff FTE	<b>Full-Time Equivalent Staff</b>	Unit billed based on number of staff	Ties costs to number of support staff
Stud FTE	<b>Full-Time Equivalent Students</b>	Unit billed based on number of students	Ties costs to number of students served

Source: EAB interviews and analysis.

Examples of how two universities define IT services and the metrics they use to allocate those costs across academic units are provided here.

University of Florida uses expense tax to allocate costs associated with IT services.

Iowa State University uses a combination of the full-time equivalent staff, full-time equivalent faculty, and full-time equivalent mechanisms.

## Methods to Allocate the Cost of IT Services



### **Allocation Method**

Allocation equals the unit's share of total operating expenses at the end of each fiscal year, excluding:

- Pass through expenses
- Research expenditures

### **Offices Classified as IT**

- Academic Technology
- Computer Network Services
- Enterprise Systems
- Information Technology Office
- Operations Analysis

## IOWA STATE UNIVERSITY

### **Allocation Method**

Allocation equals the unit's share of:

- Full-Time Equivalent Faculty
- Full-Time Equivalent Staff
- Undergraduate Student Headcount
- Graduate Student Headcount
- Professional Student Headcount

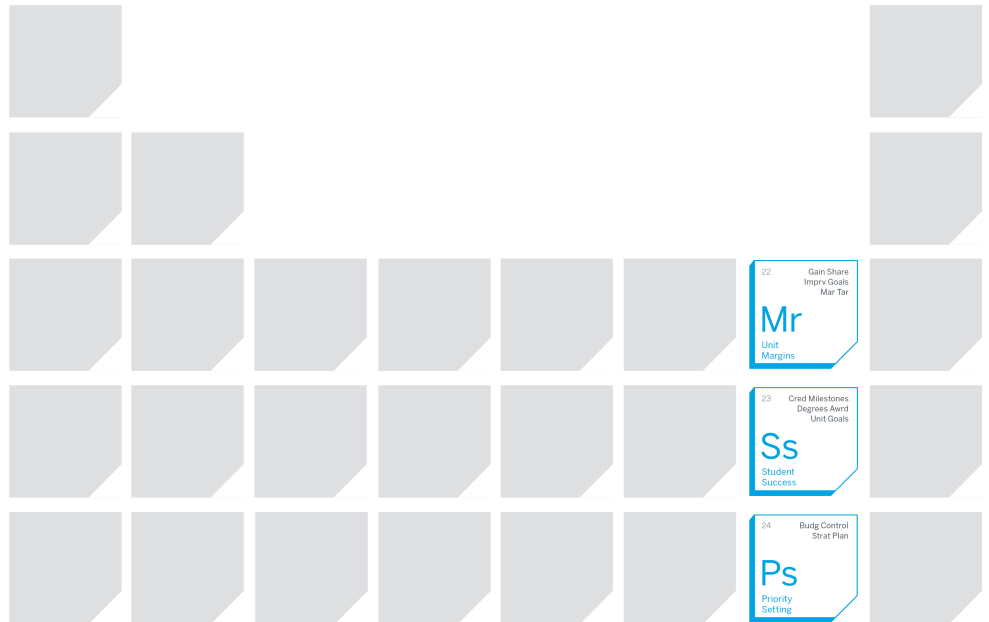
### **Offices Classified as IT**

- Academic Technology Office
- IT Services Administration
- Systems & Operations Services
- University Information Systems

# Performance Target Elements

The budgeting process is an opportunity for leaders to agree to concrete performance objectives for units. Yet, many budgets fail to do so, reinforcing the wrong objectives, or no objectives at all.

Performance target elements represent distinct types of objectives that can be defined through the budget process. For each element, institutions can define mechanisms to formally incorporate the institution's performance goals into resource allocation.



Source: EAB interviews and analysis.

## Element #22: Unit Margins

With traditional revenue streams like tuition and research under increased pressure, improving the operating margin of units on campus is a vital way to free up resources for new initiatives.

There are three budget model mechanisms colleges and universities can use to improve unit margins: gain sharing, improvement goals, or contribution targets.

### Allocating the Costs of Information and Technology



Mechanism	Name	Description	Advantage
Gain Sharing	<b>Gain Sharing</b>	Portion of efficiency gains shared with units	Incentivizes units to look for savings
Imprv Goals	<b>Improvement Goals</b>	Saving goals assigned to units	Sets explicit saving goals for units
Mar Tar	<b>Contribution Targets</b>	Units assigned contribution targets	Incentivizes revenue growth or cost reduction

Source: EAB interviews and analysis.

University of Cincinnati builds explicit revenue and savings targets into its budget model using the margin target mechanism.

The budget process begins in the fall, when administrators meet to project institutional revenues and costs for the upcoming fiscal year. The gap between projected revenues and projected costs represents new funds the institution must generate through revenue growth or cost cutting.

Shares of the institution’s deficit are assigned to units as contribution targets—resources the unit must contribute to the institution through new revenue growth, or cost cutting, or both.

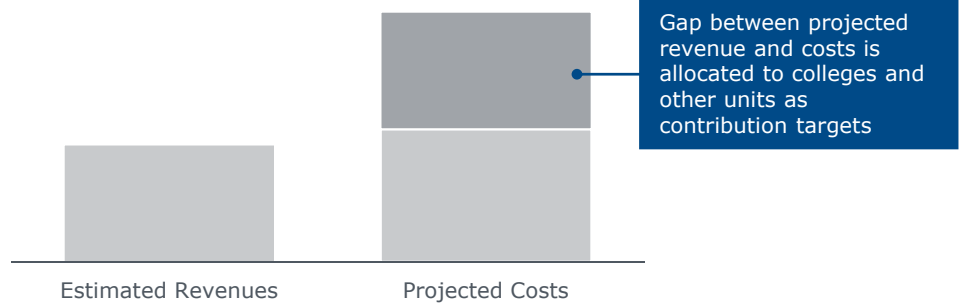
Non-academic units receive contribution targets as well. Since most non-academic units do not generate revenue, they must meet their contribution target solely through efficiency gains.

At the end of the fiscal year, units that exceed their contribution target retain half of their surplus revenue. Units that do not meet their contribution target must take a permanent cut in their base budget to make up the gap.

## Working at the Margin

*Elements of University of Minnesota’s Debt Service Allocation*

### Projected Revenues and Costs



- Projected Enrollment
- State Appropriation
- ICR/Research Revenue
- Inflationary Adjustments
- Salary Pool Increments
- Faculty/Staff Increases
- New Initiatives

### Setting Contribution Targets for Academic Units

	Prior Year Margin	Contribution Target	Projected Margin
College A	-3.0	+1.5	-1.5
College B	+0.2	+0.8	+1.0
College C	+1.5	+1.0	+2.5
College D	+7.8	+1.7	+9.5
Total	+6.5	+5.0	+11.5

Individual targets sum to campus-wide contribution target

### Case in Brief: University of Cincinnati

- 42,656-student public university located in Cincinnati, Ohio
- Adopted performance-based budgeting in 2009, using program margins to assign revenue and savings targets to each unit

Source: University of Cincinnati, Cincinnati, OH; EAB interviews and analysis.

# Element #23: Student Success

As of 2014, 30 states had implemented or were preparing to implement a performance-based funding system that would tie state appropriations to student success. As more states move to hold colleges and universities accountable for student outcomes, such as graduation and employment, institutions are seeking ways to incorporate student success targets into their budget model to align academic units' incentives with those of the institution.

There are three budget model mechanisms colleges and universities can use to set student success targets: credit milestones, degrees awarded, or unit goals.

## Setting Student Success Targets



Mechanism	Name	Description	Advantage
Cred Milestones	<b>Credit Milestones</b>	Award units for helping students meet credit accumulation goals	Incentivizes units to focus on credit velocity
Degrees Awd	<b>Degrees Awarded</b>	Tie unit revenue to completion targets	Provides incentive to improve completions
Unit Goals	<b>Unit Goals</b>	Create unit level success objectives	Individualizes success goals

Source: EAB interviews and analysis.

Administrators at UW-Eau Claire have developed a unique approach to setting success targets. Departments are eligible to receive a portion of a \$400K annual bonus pool based on their ability to achieve department-specific success benchmarks selected from a list of metrics determined by the provost.

Each department's success targets are recorded in the institution's Strategic Accountability Matrix (SAM), shown here. SAM allows the institution to roll up individual targets to show stakeholders how the institution as a whole is performing relative to the state's performance targets.

## Setting Departmental Student Success Goals



**Department-Specific Goals:**  
Deans negotiate expected values for each metric

**Flexible Weighting:**  
Unique weights applied for each department (0, 1, or 2) to accommodate differential missions

Strategic Accountability Matrix	Tactical								Weighted Score	Perform. Share		
	Student Progression											
	SCH Lost Due to WRF				30 Credits First Year							
Department/Program	Weight	Expected	Actual	PR	Weight	Expected	Actual	PR				
Department A	1.0	371	1,232	↓	3.32	1.0	80.0%	62.4%	↓	0.78	0.99	3.24%
Department B	1.0	7	136	↓	18.50	1.0	80.0%	16.7%	↓	0.21	2.31	7.52%
Department C	1.0	294	287	→	0.98	1.0	80.0%	49.4%	↓	0.62	0.85	2.77%
Department D	1.0	708	1,865	↓	2.63	1.0	80.0%	50.5%	↓	0.63	1.16	3.79%
Department E	1.0	42	173	↓	4.08						1.61	5.23%
Department F	1.0	471	1,086	↓	2.31	1.0	80.0%	53.8%	↓	0.67	0.96	3.12%
Department G	1.0	381	518	↓	1.36	1.0	80.0%	47.9%	↓	0.60	1.08	3.52%
Department H	0.0	95	199	↓	2.09	0.0	80.0%	59.9%	↓	0.75	1.01	3.29%
Department I	1.0	66	473	↓	7.15	1.0	80.0%	47.5%	↓	0.59	1.35	4.40%
Department J	1.0	142	560	↓	3.93	1.0	80.0%	44.3%	↓	0.55	1.09	3.55%
Department K	0.0	401	134	↑	0.33	0.0	80.0%	58.9%	↓	0.74	1.19	3.86%
Department L	1.0	1,879	1,384	↑	0.74	1.0	80.0%	46.4%	↓	0.58	0.88	2.86%
Department M	1.0	463	869	↓	1.88	1.0	80.0%	51.9%	↓	0.65	1.05	3.42%
Department N	1.0	265	687	↓	2.60	1.0	80.0%	40.4%	↓	0.51	0.98	3.18%
University of Wisconsin - Eau Claire		12,919	19,979		154.6%		80%	50%	62.5%			

**University Roll Up:**  
Provides campus-wide achievement and targets

**Financial Incentives:**  
Performance payout based on weighted sum of scores

### Full List of Metrics Included in the Accountability Matrix

**Student Progression:**

- SCH lost due to DFW
- % of majors earning 30 credits in their first year
- % of majors earning 60 credits in their first two years

**Sustainability:**

- Total earned income
- Direct expenditures
- Earned income ratio (income/expenditures)

**Advising:**

- % of freshmen with degree plans
- % of NSSE respondents that approve of departmental advising

**High-Impact Experiences:**

- % of majors participating in collaborative research or creative activities
- % of majors participating in an internship
- % of majors participating in an intercultural immersion experience

**Development:**

- Extramural grant \$
- Program revenue \$
- Fundraising \$

**Mini-Session Utilization:**

- Winter session undergraduate SCH delivered
- Summer session undergraduate SCH delivered

**Student Interest:**

- Share of applicants submitting ACT scores expressing interest in the department
- Number of new freshman majors
- Total number of majors

**Tuition:**

- Tuition paid by students for department courses
- Tuition paid by majors
- Winter and summer session tuition

**Citizenship:**

- SCH delivered in general education-eligible courses

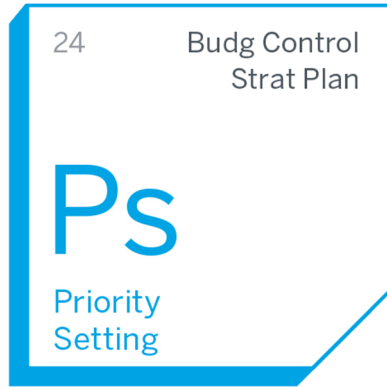
Source: University of Wisconsin-Eau Claire, Eau Claire, WI; EAB interviews and analysis.

# Element #24: Priority Setting

Beyond simply allocating revenue and costs, budgets can reinforce and even define an institution’s priorities and commitments. Yet many institutions’ budgets fail to do so, reinforcing the wrong objectives, or no objectives at all.

There are two budget model mechanisms that colleges and universities can use to more clearly define priorities: budget control and strategic planning.

## Setting Targets for Institutional Priorities



Mechanism	Name	Description	Advantage
Budg Control	<b>Budget Control</b>	Mandate activity spending on institutional priorities	Forces reallocation toward priorities
Strat Plan	<b>Strategic Planning</b>	Outline institutional goals and mission	Provides clear vision of institutional priorities

Source: EAB interviews and analysis.



Colleges and universities sometimes struggle to use strategic planning as a budget model mechanism to set priorities and guide resource allocation. Too often, strategic plans become “everything to everyone” and lack the operational or financial components necessary to guide budget decisions.

To overcome this challenge Elon University uses a strategic planning process that links large strategic initiatives to sets of more specific campus objectives. Each objective has a cost projection and operations plan. This helps board members prioritize initiatives that can be accomplished with available resources and provides a road map as the leaders move to implement elements of the plan.

For more information on linking budgeting and strategic planning, see [Operationalizing Strategic Initiatives](#).

## Developing Actionable Strategic Plans


### Budget Estimates Help Board Members Understand The Cost of Mission

*Strategic Plan Initiatives and Cost Projections (Example Illustrative)*

Initiative	Objectives	Cost Projection	Owners
World-Class Faculty	<ul style="list-style-type: none"> <li>Build leadership dev program</li> <li>Accelerate faculty/staff salaries</li> <li>Add endowed professorships</li> </ul>	<ul style="list-style-type: none"> <li>\$1.0M-\$1.5M</li> <li>\$6.0M-\$7.5M</li> <li>\$3.0M-\$5.0M</li> </ul>	CBO
Global Engagement	<ul style="list-style-type: none"> <li>Double need-based aid budget</li> <li>Reconfigure merit-based aid</li> <li>Study Aboard as 100% accessible</li> </ul>	<ul style="list-style-type: none"> <li>\$75M-\$90M</li> <li>\$15M-\$20M</li> <li>\$38M-\$54M</li> </ul>	VP-Student Affairs
New Programs	<ul style="list-style-type: none"> <li>Create new 4+1, 4+2 degrees</li> <li>Launch graduate programs</li> <li>Launch gap-year program</li> </ul>	<ul style="list-style-type: none"> <li>\$1.0M-\$2.0M</li> <li>\$2.5M-\$3.0M</li> <li>\$1.0M-\$2.0M</li> </ul>	Provost
<b>Total projected cost of strategic goals: \$380M-\$440M</b>			

**Best and Worst Case Scenarios:** University develops scenarios to indicate uncertainty around costs

**Project Owners:** Leaders responsible for updating campus on initiative progress.



### Case in Brief: Elon University

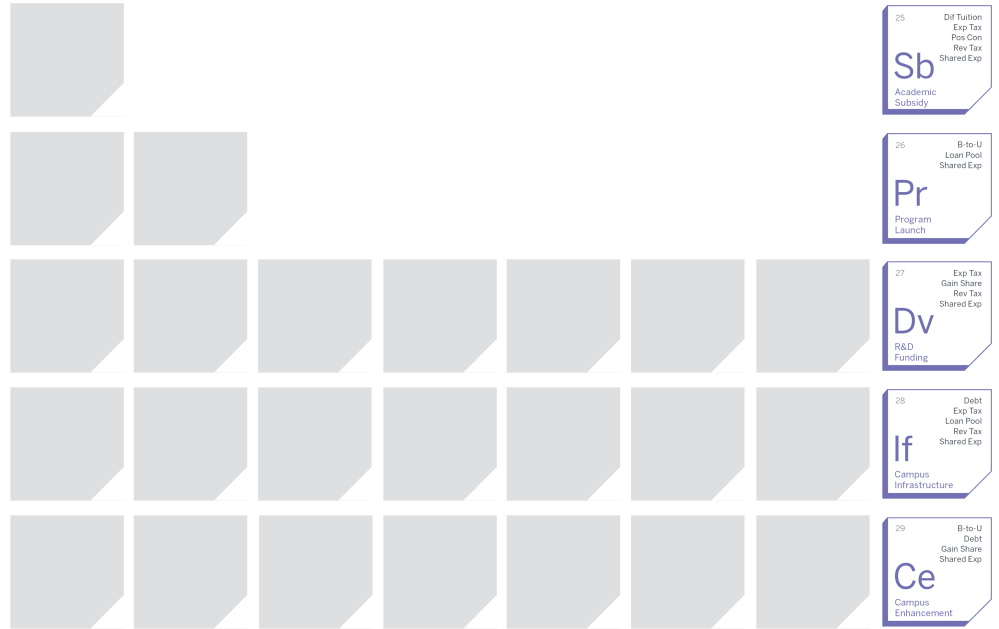
- 6,400-student private university located in Elon, North Carolina
- Budget model requires budget allocations to be directly linked to university strategic plan
- Strategic planning process develops operational and financial plans for each initiative and objective

Source: Elon University, Elon, NC; EAB interviews and analysis.

# Strategic Funding Elements

While allocating more revenue to units creates incentives to grow, it can leave the institution with relatively few funds for other priorities. Institutions must consistently budget dollars into a reserve fund to fuel larger cross-campus investments.

Strategic funding elements represent distinct categories of institutional strategic objectives that require centralized discretionary funding. The following pages describe the individual categories of institutional strategic objectives and the methods institutions have used to recapture central discretionary funding.



Source: EAB interviews and analysis.

# Element #25: Academic Subsidy

Every institution has high-value programs that do not cover their costs but still provide a valuable return to the institution. Moreover, the cost of teaching in disciplines like music, engineering, and nursing is much higher than the cost of teaching in other disciplines. Marshalling resources to support high-value programs and subsidize high-cost disciplines is a key part of what allows institutions to offer a rich curriculum.

There are five budget model mechanisms colleges and universities can use to fund academic subsidies: differential tuition, expense tax, position control, revenue tax, and shared expense.

## Supporting High-Cost, High-Value Programs

25

Dif Tuition  
Exp Tax  
Pos Con  
Rev Tax  
Shared Exp

Sb

Academic  
Subsidy

Mechanism	Name	Description	Advantage
Dif Tuition	<b>Differential Tuition</b>	Tuition levels set to cover differential cost of instruction	Directly link marginal revenues with costs
Exp Tax	<b>Expense Tax</b>	Tax charged on unit expenditures	Charge dependent on expenditure categories included in tax
Pos Con	<b>Position Control</b>	Vacant position revert to central control for reallocation	Labor represents largest fixed cost at most institutions
Rev Tax	<b>Revenue Tax</b>	Tax charged on unit revenues	Charge dependent on revenues included in tax
Shared Exp	<b>Shared Expense</b>	Cost shared equally by all units	Requires strategic reserves

Source: EAB interviews and analysis.

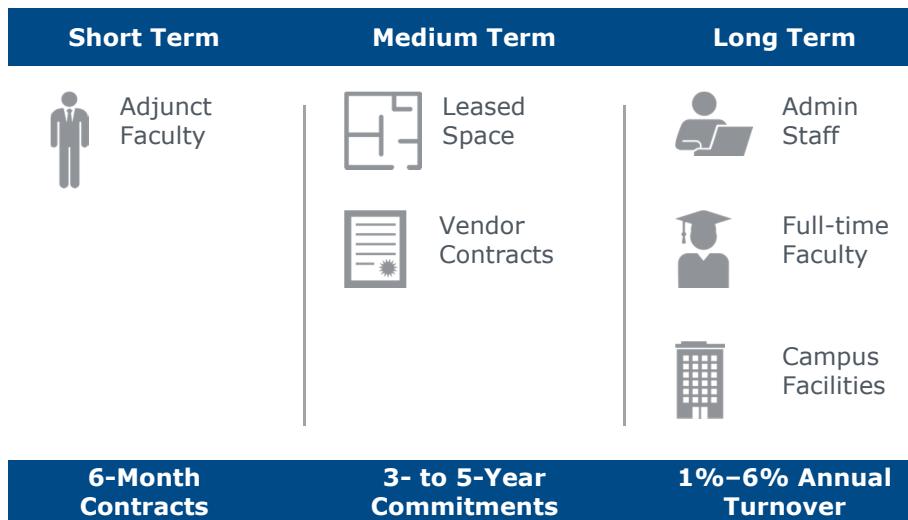
While revenue and expense taxes are the most common budget mechanisms to subsidize academic programs, Rensselaer Polytechnic Institute (RPI) also uses the position control mechanism.

As labor costs comprise 60% to 70% of operating expenses at most institutions, controlling vacant position lines is a powerful lever to inflect campus investments.

RPI’s annual faculty turnover is approximately 5%. By capturing and reallocating faculty lines, administrators are able to reallocate 3% to 4% of their operating budget each year to subsidize high-value academic programs and other strategic priorities.

## Using Turnover to Enable Resource Reallocation

### Typical Timeframe for Resource Turnover



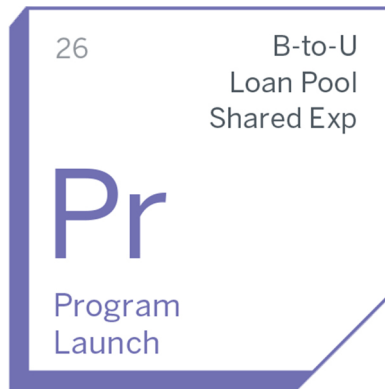
Source: Rensselaer Polytechnic Institute, Troy, NY; EAB interviews and analysis.

# Element #26: Program Launch

While every college and university must continue to find efficiencies and cost savings, no institution can sustain or enhance its commitment to excellence without revenue growth. Even though traditional 18- to 22-year-old students will remain a primary focus, most new enrollment is likely to come from new student segments. Therefore, developing and launching academic programs to attract new student populations, such as community college transfers, international undergraduates, and professional master’s students, is a top priority at many large and small institutions.

There are three budget model mechanisms colleges and universities can use to fund new program launches: bill-to-unit, loan pool, and shared expense.

## Financing New Program Launches



Mechanism	Name	Description	Advantage
B-to-U	<b>Bill-to-Unit</b>	Unit billed directly for costs	Creates incentive to conserve resource use
Loan Pool	<b>Loan Pool</b>	Costs paid from revolving loan pool	Creates self-replenishing startup fund
Shared Exp	<b>Shared Expense</b>	Cost shared equally by all units	Requires strategic reserves

Source: EAB interviews and analysis.

Online programs represent a promising new market for many institutions, but launching and scaling such programs requires significant upfront capital. These financial limitations often put online programs out of reach for small to mid-sized departments and colleges.

To overcome this challenge, Blauman<sup>1</sup> University utilizes the loan pool budget mechanism to help finance new online programs. Leaders utilized a private gift to create the \$1.5M revolving loan pool. The Provost is responsible for awarding loans based on financial projections and mission alignment. Loans range from \$800K to \$1M and carry a five- to ten-year payback period.

## Building a Revolving Loan Pool to Finance Program Launches

### Components of University Revolving Loan Pool



#### Priority Candidates

Provost and CBO prioritize programs that build on existing campus programs



#### Financial Model

Applicants submit financial plan showing self-sufficiency and five- to ten-year loan payback



#### Program Awards

Programs that provide matching contributions eligible for \$800K to \$1M in funding

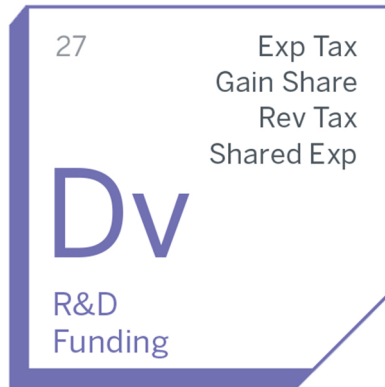
Source: EAB interviews and analysis.

# Element #27: R&D Funding

In an era of constrained resources, targeted “big bets” are an important part of a differentiated strategy in higher education. Whether launching new online programs, building a new satellite campus, or investing in student analytics, institutions require a robust R&D budget to explore new initiatives that invariably cut across campus silos.

There are four budget model mechanisms colleges and universities can use to fund R&D budgets: expense tax, gain share, revenue tax, and shared expense.

## Funding a Robust Research and Development (R&D) Budget



Mechanism	Name	Description	Advantage
Exp Tax	<b>Expense Tax</b>	Tax charged on unit expenditures	Charge dependent on expenditure categories included in tax
Gain Share	<b>Gain Share</b>	Central administration splits surplus with units	Creates incentive for units to reduce costs or increase revenues
Rev Tax	<b>Revenue Tax</b>	Tax charged on unit revenues	Charge dependent on revenues included in tax
Shared Exp	<b>Shared Expense</b>	Cost shared equally by all units	Requires strategic reserves

Source: EAB interviews and analysis.

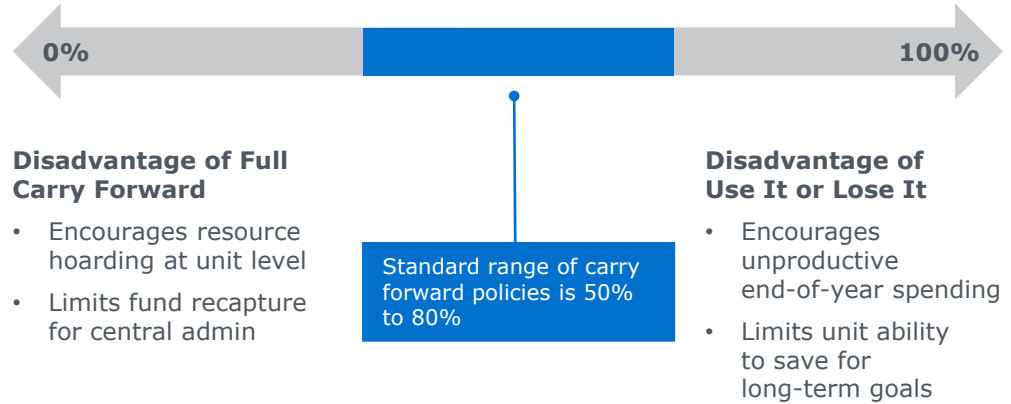
Gain sharing is a common way institutions encourage units to seek out savings to free up resources for new initiatives. Under a typical gain sharing plan, units that end the year with a budget surplus carry a portion of their surplus funding forward into the next budget cycle.

Setting the carry forward share too low recaptures more money, but also encourages wasteful end-of-year spending. Setting the carry forward share too high encourages unit savings, but produces fewer resources for institutional investments.

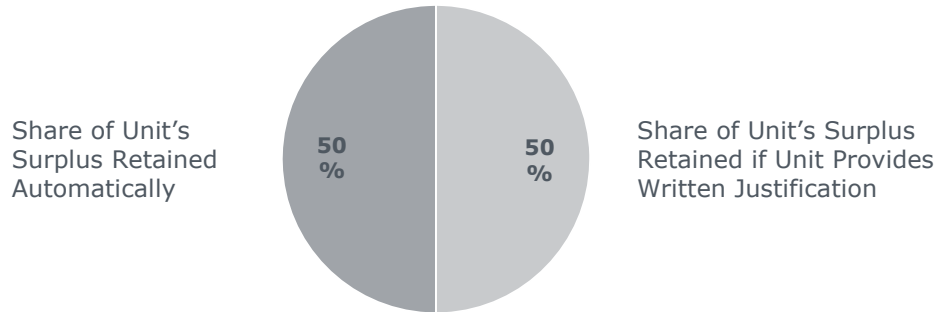
Bemidji State uses a carry forward share lower than most institutions, but builds in flexibility for units that can justify retaining a larger share of their resources. Under the university’s policy, units automatically carry forward half of their surplus funds. Units can also petition the administration for the remaining half of their surplus funds. While few units choose this option due to the additional administrative burden, it does provide additional flexibility for units that genuinely need additional funding.

## Sharing the Wealth

### Percentage of Budget Surplus Captured by Administration



### Bemidji State Carry Forward Policy



### Case in Brief: Bemidji State University

- 5,046-student public university located in Bemidji, Minnesota
- Uses carry forward policy that builds in flexibility for units that request a larger share of carry forward funds
- University has used \$400K to \$700K in annual savings to hire a new international recruiter and internship coordinator

Source: Bemidji State University, Bemidji, MN; EAB interviews and analysis.

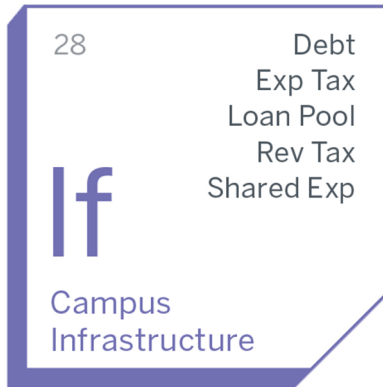


# Element #28: Campus Infrastructure

With the end of the building boom and the steady accumulation of deferred maintenance on many campuses, investing in maintenance and upgrades for critical campus infrastructure is a top priority for nearly every institution.

There are five budget model mechanisms colleges and universities can use to fund investments in campus infrastructure: debt, expense tax, loan pool, revenue tax, and shared expense.

## Financing Campus Infrastructure



Mechanism	Name	Description	Advantage
Debt	<b>Debt</b>	Debt issued to pay for projects	Quickly provides upfront capital for new projects
Exp Tax	<b>Expense Tax</b>	Tax charged on unit expenditures	Charge dependent on expenditure categories included in tax
Loan Pool	<b>Loan Pool</b>	Costs paid from revolving loan pool	Creates self-replenishing startup fund
Rev Tax	<b>Revenue Tax</b>	Tax charged on unit revenues	Charge dependent on revenues included in tax
Shared Exp	<b>Shared Expense</b>	Cost shared equally by all units	Requires strategic reserves

Source: EAB interviews and analysis.

The loan pool mechanism is a common way institutions finance infrastructure upgrades, but many loan pools are underutilized. This is not typically due to a lack of resources, but instead a lack of awareness and capacity on campus.

For example, Harvard University’s first iteration of a loan pool for green campus projects failed to attract broad participation. Despite an initial surge in interest, applications declined precipitously after the first year.

A campus-led study found that facilities administrators misunderstood the program and many believed the application process was too difficult.

The university redesigned the program to address information and resource barriers that prevented stakeholders from participating. Since re-launching, the university has funded 192 projects, returning over \$4.8M in savings from facility retrofits.

For more information on managing campus energy infrastructure, see [Managing University Energy Costs](#)

## Utilizing Loan Pools to Address Campus Infrastructure Needs

*Lessons from Harvard’s Green Revolving Fund*

### Common Pitfalls of Loan Pool Programs

- Funds petition process unclear
- Project qualification guidelines unclear
- First-in-first-funded allocation process
- Money sequestered in administrative center
- Minimal performance reporting required
- No gain sharing for participating units

### Reducing Information and Resource Barriers to Participation at Harvard



#### Information Asymmetries

- Leaders unable to identify projects that meet criteria
- Perception that “low hanging fruit” projects already picked
- Limited awareness of additional project opportunities



#### Raising Campus Awareness

- Online inventory of project best practices
- Standing fund advisory committee
- Detailed campus reporting on project metrics



#### Resource Constraints

- Projects divert attention from immediate facility needs
- Significant skill burdens (e.g., case making, financial modeling)



#### Lowering Application Costs

- Redesigned and clearer application criteria
- Easy-to-access application FAQs
- Dedicated link to support services

### Case in Brief: Harvard University

- 28,147-student private university located in Cambridge, Massachusetts
- \$12M loan pool launched in 1993 to address need for retrofits to campus infrastructure
- Program requires units repay loans through efficiency savings within five to ten year period
- University reports median ROI of funded projects is 29.9%

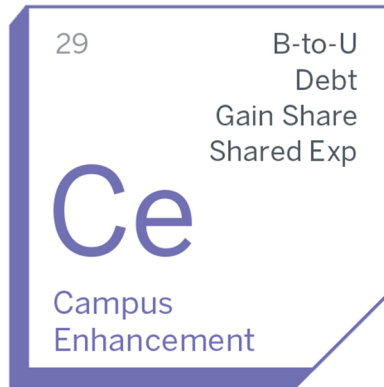
Source: Harvard University, <http://legacy.green.harvard.edu/loan-fund/>; EAB interviews and analysis.

# Element #29: Campus Enhancement

Between 2001 and 2011, many institutions saw 20% to 30% growth in spending on student services, outpacing every other category of college and university costs. With competition for students and faculty increasing across the higher education sector, more institutions are using their campus as a recruiting tool—upgrading dormitories and libraries and planning new student and research facilities.

There are four budget model mechanisms colleges and universities can use to invest in campus enhancements: bill-to-unit, carry forward, debt, and shared expense.

## Financing Campus Development



Mechanism	Name	Description	Advantage
B-to-U	<b>Bill-to-Unit</b>	Unit billed directly for costs	Creates incentive to conserve resource use
Debt	<b>Debt</b>	Debt issued to pay for projects	Quickly provides upfront capital for new projects
Gain Share	<b>Gain Share</b>	A portion of surplus funding reverts back to central control	Creates incentive for units to reduce costs or increase revenues
Shared Exp	<b>Shared Expense</b>	Cost shared equally by all units	Requires strategic reserves

Source: Scott Carlson, "Spending Shifts as Colleges Compete for Students' Comfort," 2014; EAB interviews and analysis.

Since 2006, the University of Chicago has embarked on an ambitious (and expensive) campaign to transform the institution's south-side campus.

Financed largely by debt, UChicago has built a new arts building, expanded the campus's hospital and Lab School, and launched the university's first engineering program.

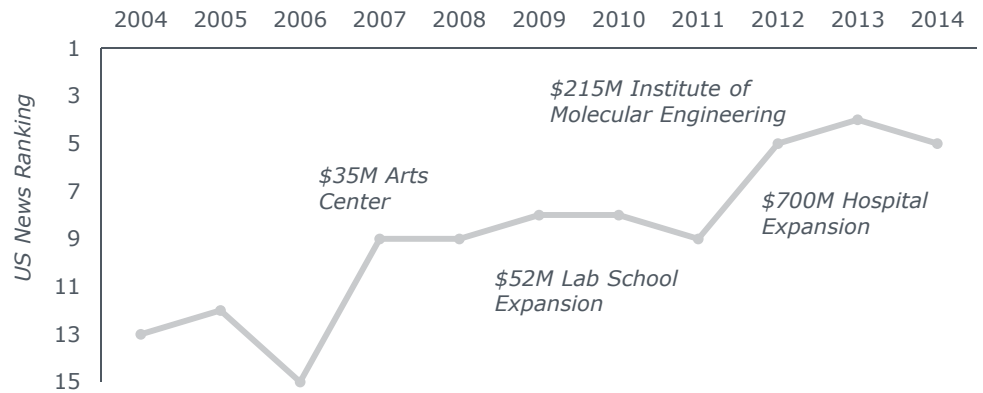
The impact of UChicago's strategy on the school's national rankings has been impressive. Since 2006, the university has climbed from 15<sup>th</sup> to 5<sup>th</sup> in the *US News* rankings. However, debt has increased as well. In 2013, outstanding debt equaled just over half of the university's endowment value, making UChicago the most highly leveraged wealthy institution in the United States.

However, university administrators believe the strategy is worth the risk. As stated by President Zimmer, "We cannot... scale back our academic and programmatic ambitions in a way that risks our future excellence as a university."

## High Risk, High Reward

### Major Investments Drive UChicago's Rankings Surge

*US News Rankings and Major Campus Projects at University of Chicago*

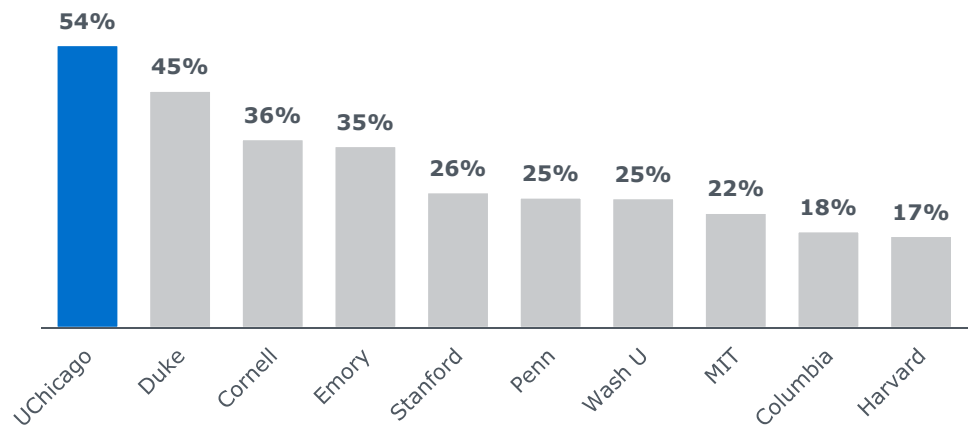


"We well understand that borrowing for some of these investments entails risk... **We cannot, however, scale back our academic and programmatic ambitions in a way that risks our future excellence** as a university."

*Robert Zimmer, President*

### Maxing Out?

*Ratio of Campus Debt to Endowment Among Wealthiest Institutions, 2013*



Source: Chronicle of Higher Education, "U.S. News Rankings Through the Years," 2007; McDonald M, Chappatta B, "University of Chicago is Outlier with Growing Debt Load." *Bloomberg Business News*, 2014; EAB interviews and analysis.



# Advisors to our Work

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# Advisors to Our Work

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The Education Advisory Board is deeply grateful to the individuals and organizations that shared their insights, analysis, and time with us. We would especially like to recognize the following individuals and institutions for being particularly generous with their time and expertise.

## With Sincere Appreciation

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