Leading Institutional Transformation with NACUBO’s Economic Models Framework
What is CIMA?

The Commission on Information, Measurement, and Analysis (CIMA) is a space for APLU institutions to come together to create communities of practice around effective and efficient use of data and fiscal resources to guide campus planning and decision making.

Given the dispersion of activities and responsibilities within our institutions that rely on the vast array of data, CIMA provides opportunities for cross-functional discussions on how to systematically create and improve the data infrastructure, the strategic analysis capacity, and the fiscal and administrative management on campuses.
Project Team Speakers

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NACUBO

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University of South Carolina

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Vice Chancellor for Finance & Operations
Washington State University Vancouver

Joe Sobieralski
University Budget Director
University of South Carolina
Our Challenge

Focusing on the opportunities of the future instead of the legacies of the past

"A college's greatest enemies are complacency and nostalgia."

- Larry Ladd, Grant Thornton LLP
Why New Models? Why Transformation?

- Questions of access and affordability: increasing tuition
- Declining public support/philanthropy
- Changing expectations for outcomes
- Changing delivery modalities
- Increasing and changing costs
- Globalization
- Disappearing institutions and new competition
- Losing strategic conversation debate
Forecast of Institutional Financial Health

**Presidents**
63% strongly agree or agree their institution will be financially sustainable next 5 years;
53% over the next 10 years

**CBOs**
63% strongly agree or agree their institution will be financially sustainable next 5 years;
48% over the next 10 years

Source: Inside Higher Ed/Gallup
2018 Survey of College and University Presidents and 2018 Survey of Business Officers
Forecast of Industry Financial Health

Judging by sector, % of presidents who agree/strongly agree those institutions will be sustainable over the next decade:

- **Privates**
  - Elite universities: 93%
  - Elite liberal arts colleges: 79%
  - Other four-year institutions: 11%

- **Publics**
  - Flagships: 67%
  - Non-flagship four-year institutions: 25%
  - Community Colleges: 43%

- **For-Profits**: 9%

Source: Inside Higher Ed/Gallup 2018 Survey of College and University Presidents
Overarching Goal:
Ensure that the economic models of higher education continue to enable institutions to fulfill their missions of instruction, research and service

Strategy:
Give members a tool that allows them to have/start the conversation about higher education economic models that are financially sustainable, efficient, and effective
What Is an Institution’s Economic Model?

Summary:

<table>
<thead>
<tr>
<th>Years</th>
<th>Revenues</th>
<th>expenditures</th>
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</thead>
<tbody>
<tr>
<td>2006</td>
<td></td>
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<td>2007</td>
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<td>2008</td>
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<td>2009</td>
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Price

Demand

Supply

Equilibrium

Q*

P*
Discussion Question

- Do key stakeholders have an appropriate understanding of your institution’s economic model?

- Why or why not?
NACUBO Framework for Economic Sustainability
Mission

- What is our college’s purpose, and what should it be five, 10, or 20 years from now?

- What individuals and communities do (will) we serve?

- What outcomes do (will) we produce – for example, certificates, badges, degrees – and in what fields and disciplines?
Structure

- Is the current organizational structure relevant to current needs? Does it create barriers to improvement?

- What opportunities exist for shared services and programs, and partnerships/collaborations within our institution and with others?

- Do institutional policies support or hinder the mission? Are processes underway to abate conflict?

- Is leadership willing to take strategic risks to better position the institution?
Strengths

- What are the unique strengths of the college or university?

- How do these strengths capitalize on local, national, or global trends now and in the future?

- How do we maintain and improve core programs and services?
Resources

- Are resources allocated in ways that support institutional strengths and mission?

- Do we attract and retain necessary human resources and train and deploy them effectively?

- Are we progressing in using data resources to analyze problems, predict outcomes and prescribe solutions?
Putting the Economic Models Project Framework into Practice at the University of South Carolina
Founded in 1801, the University of South Carolina is eight campuses with 12 locations across the state including a flagship research institution, three comprehensive universities and four two-year associate degree granting institutions.
University of South Carolina at a Glance

More than 51,000 students

350+ Degree Programs

$1.6B Annual System Budget

Sponsored Research $250M

Endowment $810M

21 Member Board of Trustees
USC Challenges and Opportunities

**Strong Financial Position**
- Consistent growth in Net Tuition Revenue
- Moderate growth in operating expenditures
- Healthy URNP - Prior to implementation of Pension and OPEB Liabilities
- Moderate tuition increases since 2012
- Solid debt ratings
  - Moody’s Aa2
  - Fitch AA
- Strong CFI and other ratios
- Core Financial Staff
USC First Steps

- Catalogue our financial information and develop a Finance dashboard
- Create new policies for Cash Reporting and Reserves
- Develop a systematic process for review of financial data
- Enhance financial training

Future Steps

- Plan for the implementation of a forecasting tool
- Integrate forecasting tool with new budget model
How Does the Budget Model Relate to EMP?
USC Challenges and Opportunities

**Budget Concerns**
- Affordability
- Capacity
- Reduced State Support (Price)
- Academic Unit Incentives (Demand)

**Board Concerns**
- “All Funds” Budget Approach (Price)
- Cost Containment & Efficiency
- Additional College-Level Information (Price)

**Legislative Concerns**
- Cost of Attendance (Price)
- Non-Resident Enrollments (Supply)
- Oversight and Accountability
History of Budget Models at the University of South Carolina

- Prior to 2004 - Incremental Budget
- 2004-2012 Value Centered Management (VCM)
- Hybrid Approach 2012-2018
  - Base Budget with summer tuition incentive
  - Academic Fees convey to units
  - “Net New”
- Modified Responsibility Centered Management (RCM)
  - Partnership year underway for 2019
Steering Committee – Roles and Membership

Steering Committee Charge

- Provide guidance surrounding the development of a new incentive-based budget model
- Monitor and review project progress
- Validate key decisions by providing constructive feedback on budget model developments
- Engage with the campus community, acting as a liaison between the steering committee and various constituent groups

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
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</thead>
<tbody>
<tr>
<td>Provost, Co-Chair</td>
<td>Chief of Staff, Assistant Provost</td>
</tr>
<tr>
<td>CFO, Co-Chair</td>
<td>AVP, Student Affairs</td>
</tr>
<tr>
<td>Dean, Business</td>
<td>AVP, Finance</td>
</tr>
<tr>
<td>Dean, Arts and Sciences</td>
<td>Chair, Faculty Budget Committee</td>
</tr>
<tr>
<td>Dean, Engineering and Computing</td>
<td>CFO, Athletics</td>
</tr>
<tr>
<td>Associate Provost</td>
<td>External and Internal Auditors</td>
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<tr>
<td>Budget Director, Working Group Staff Lead</td>
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Key Collaborators

- Office of Institutional Research, Assessment and Analytics
- Facilities, Space Management
Budget Model Guiding Principles

Steering Committee members developed a set of guiding principles, which are summarized below. These principles will be used to inform decisions surrounding the development of the new budget model.

1. Create a model that seeks to advance the University’s mission as an institution for excellence and remains flexible enough to adapt to changing priorities over time.

2. Feature incentives that promote balanced growth by rewarding entrepreneurship, innovation, and collaboration within and across disciplines.

3. Develop a highly collaborative and sustainable budgeting process that promotes transparency and accountability across all units.

4. Reflect a shared commitment to the fiscal health of the campus ensuring optimal efficiencies and that institutional priorities can be funded.

5. Provide a consistent and fair methodology for revenue and cost allocation that is relatively simple and easy to understand.

6. Use trusted and reliable data to facilitate strategic decision making and to enable enhanced forecasting and planning.
Using campus stakeholder feedback, the Budget Model Steering Committee guided the development of a model framework that allows for unit-level funds flow statements. A condensed version of the structure, for illustrative purposes, is shown above.
Key Allocation Metrics

- Student FTE
- Tenure-Track FTE
- Faculty FTE
- Undergraduate Student FTE
- Total Employee FTE
- Student Headcount
- Employee Headcount
- Sponsored Revenue
- Total Direct Expenses
Illustrative Allocation: Square Footage (SQFT)

Universities often choose to allocate centrally-managed facilities costs to academic units based on square footage, as it best depicts the fluctuation of expenditures for the given unit (economic reality). In this example, the allocation formula is as follows¹

\[
\text{Allocation}_{PU_n} = \frac{\text{SQFT}_{PU_n}}{\text{SQFT}_{PU\text{sum of all } n}} \times \left(\text{Revenues}_{SU_n} - \text{Expenditures}_{SU_n}\right)
\]

¹ Allocation Formula Notes:
PU = Primary Unit; SU = Support Unit
For PU_n, n represents each individual primary unit (i.e. academic units, centers & institutes, auxiliaries)
Challenges

- Speed of implementation - timeline
- Differences in desired outcomes
- Lack of familiarity with/ access to certain data
- Perspectives on cross subsidization/subvention
- Application of model across the USC System
Benefits Realized to Date

- Incentives created
- Heightened awareness of key financial
- Increased transparency
- Elevated strategic/entrepreneurial thinking within colleges
- Emphasized value on the college level business officer role
- Emphasized value in the IR function and greater interest in data produced
- Improved Data Quality
- More communication
Anticipated Next Steps

- Evaluate Parallel Year
- Enhance reporting and systems support
- Develop governance plan
- Revise budget calendar
- Review and revise decisions regarding subvention and strategic initiative funding
- Consolidate the tuition and fee structure
- Incorporate USC System institutions
Putting the Economic Models Project Framework into Practice at Washington State University
Present Configuration
Future Configuration
WSU VANCOUVER CAMPUS PROFILE

23
BACHELOR’S DEGREES

8
MASTER’S DEGREES

3
DOCTORATE DEGREES

3,577
FALL 2018 ENROLLMENT

26
AVERAGE AGE OF STUDENT

54:46
FEMALE-TO-MALE RATIO

1,014
2018 GRADUATES

43%
OF STUDENTS ARE FIRST IN THEIR FAMILY TO ATTEND COLLEGE

8%
OF STUDENTS ARE VETERANS

28%
OF TOTAL ENROLLMENT

MINORITY STUDENTS REPRESENT
BACHELOR’S DEGREES

Anthropology
Biology
Business Administration
  - Accounting
  - Business Administration
  - Entrepreneurship
  - Finance
  - Management
  - Management Information Systems
  - Marketing
Computer Science
Data Analytics
  - Actuarial
  - Business
Digital Technology and Culture
Earth and Environmental Science
  - Environmental and Ecosystem Sciences
Electrical Engineering
Elementary Education
English
  - Creative Writing
  - Literary Studies
  - Rhetoric and Professional Writing
  - Teaching
History
Hospitality Business Management
Human Development
Humanities
  - Anthropology
  - Communications
  - Digital Technology and Culture
  - English
  - Fine Arts
  - Foreign Languages and Cultures
  - History
  - Spanish
  - Women's Studies
Mathematics
Mechanical Engineering
Neuroscience
Nursing (RN-BSN)
Psychology
Public Affairs
Social Sciences
  - Anthropology
  - Communications
  - Criminal Justice
  - History
  - Personnel Psychology and Human Resources
  - Political Science
  - Psychology
  - Sociology
  - Women's Studies
Sociology
Strategic Communication

MASTER’S DEGREES

Computer Science
Education
Electrical Engineering
Environmental Science
Mechanical Engineering
Nursing
Public Affairs
Teaching

DOCTORATE DEGREES

Education
Nursing
Prevention Science
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When Might **You** Use the EMP Journey?

- Strategic planning
- Accreditation renewal self-study
- Leadership transition
- Financial challenges or opportunities
Discussion Questions

- How might you introduce the EMP Journey at your college or university?
- What challenges do you foresee?
- What questions will be the hardest to ask at your institution?
- How might NACUBO support your efforts?
The NACUBO Higher Education Economic Models Project was initiated to help ensure that the economic models of colleges and universities in the 21st century provide students the opportunity to enrich their minds, their lives and their communities, as well as enable institutions to pursue their missions in research and service.
Questions? Suggestions? Thoughts?

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