

**DRAFT Report of the Budget Model Undergraduate Tuition Subcommittee**  
**March 26, 2018**

**Subcommittee Members**

Michael Vaughan, Assoc. Dean, Academic Affairs, COE (Co-Chair)  
John Sawyer, Assoc. Provost, IRE (Co-Chair)  
John Pelesko, Assoc. Dean, CAS  
Rick Andrews, Senior Assoc. Dean, LCBE  
Peggy Bottorff, Assoc. Provost, Chief of Staff  
Susan Hall, Deputy Dean, CHS  
Chris Lucier, VP, Enrollment Management  
Jacob Bowman, Chair, Entomology & Wildlife Ecology, CANR  
Louis Rossi, Chair, Mathematical Sciences, CAS  
Del Levia, Chair, Geography, CEOE  
Edmund Nowak, Chair, Physics & Astronomy, CAS  
John Ernest, Chair, English, CAS

**Staff Support**

Ron Huggins, Director, Budget Office  
Melissa Stone, Director, Student Financial Services  
Katie Holden, Financial Analyst II, Provost Office  
Chuan Cai, Sr. Business Intel Analyst  
Tom Eleuterio, Manager, DE Study-IR, Higher Ed Consortia  
Mike Matthews, Sr. CBO, COE  
Kawkab Rasheed, CBO, CANR

**Table of Contents**

- I. Executive Summary**
- II. Presentation of Recommendations**
- III. Conclusion**
- IV. List of References and Additional Resources**
- V. Appendices**
  - A. Background: Past UD Budget Models and Higher Education Budgeting Background**
  - B. Committee Charge**
  - C. Current UD Approval Process for New Programs/Majors**

## I. Executive Summary

The primary goal for our subcommittee was to develop a budgeting process that incentivizes the creation of new or enhanced undergraduate programs that address the instructional needs of 21st century undergraduate students. We first reviewed the recent budget history of the University of Delaware and the literature on higher education budget models (See **Appendix A** for a summary of this background). Using this background research and the charge to the Undergraduate Tuition Subcommittee (See **Appendix B**) we addressed each of the five deliverables summarized below:

**Define the parameters of allocation of UG tuition:** The committee has developed a flexible algorithm for distributing incentives among stakeholders to achieve the primary goal and makes a series of recommendations addressing the issues surrounding the allocation of incentives.

**Recommend formulaic allocations to the units which address several parameters:** We propose a formulaic model for the allocation of tuition revenue each year above the base of the prior year utilizing the best of the prior RCM model. The formulaic model allocates the majority of increased tuition revenue to the college in recognition that the majority of the cost of instructional delivery is provided by the college through its base budgeting process; a small proportion of the increased tuition revenue is allocated to the departments, schools, or other similar units the basis of ICOR and home school, borrowing from the prior RBB model.

**Recommend related and complementary adjustments to current strategies and policies in the departments/colleges/centers:** We offer a number of recommendations to the Academic Program Approval process, for new and enhanced programs, the Permanent Status Review process and the Academic Program Review processed focused on 1) providing greater budget analysis prior to program approval and review, and 2) providing guidelines for quality planning for new programs and quality assessment for ongoing programs.

**Recommend principles and process to deal with negative externalities, including state budget cuts, changing market demand for majors, etc.:** We suggest that negative externalities that directly impact the enrollments in programs and SCH delivered will adjust the incentive proceeds in accordance with the formulaic model. Additional externalities may impact the university-wide average tuition per credit used to determine tuition income in the formulaic model. Other impact of negative externalities will need to be addressed in the annual base budgeting process.

**Recommend campus reporting plan to enhance transparency regarding tuition allocation process, assign accountability for goal realization and analyze return on investments:** We suggest enhanced ICOR reporting to provide transparent detail to the department/school/similar unit level with transparency in access to ICOR reports across the University. We further suggest that colleges be held responsible for transparently assuring that departments have appropriate teaching resources and demonstrate effective utilization of those resources.

We conclude our detailed report of recommendations with questions for further consideration that go beyond the initial charge and will need to be addressed by the steering committee and/or University leadership.

### III. Presentation of Recommendations

#### 1. Define the parameters of allocation of UG tuition

How does this relate to strategic pool allocations?

The proposed model for incremental revenue sharing returns the largest percentage of increased revenue to the Colleges and to the [central] University, with a small portion going directly to departments. The proposed model directs 20% of marginal undergraduate tuition revenue to the central university where it can be used for strategic priorities.

How do we establish the baseline from which to determine increases in UG enrollments/tuition revenue generated?

The proposed model generates incentives on an annual basis. Thus, the incentives are based on changes in student credit hours and enrollments from the prior year. We recommend exploration of options to limit the fluctuations in incentives due to short-term variations in student credit hours and enrollments.

Although differential pricing strategy will be implemented as a fee, how does this relate to UG tuition allocation?

The proposed model does not include revenues generated by differential pricing. Differential revenue is expected to go to the colleges to support the differential cost of education and planned improvements in those units.

How does cost of instructional delivery factor into UG tuition allocation?

Because most costs of instructional delivery are born by the colleges, the largest percentage of incremental tuition revenue will go to the colleges. We note that colleges' base budget allocations are reflective of differential operating costs.

How do we balance revenue generation with increasing academic excellence where these goals appear to be at odds?

Many indicators of academic excellence are lagging indicators. If incentives are to provide a clear line-of-sight between action and incentive, the incentives must be timely. We therefore recommend not including quality indicators in the annual incentive model, but we do recommend in section 3 (below) several mechanisms to focus on academic quality in the Academic Program Approval, Permanent Status Review, and Academic Program Review processes.

How do we balance operational excellence with incentives for increased UG program growth?

We note that it will be important to define, communicate and track progress relative to metrics for operational excellence. The work of the planned committee on operational excellence will inform this matter. We are recommending that the largest proportion of the incentive dollars go to colleges, whose responsibility will be to assure that programs are achieving operational excellence.

How do we incentivize new program growth, including interdisciplinary program growth, but no duplication of programs and no competition between colleges and departments?

- The course and program approval process, which invites input from other colleges, departments and programs, is a safeguard against unhealthy duplication of programs. This process, combined with the central review that is core to the base budget process, provides oversight to limit competition and encourage collaboration.
- The proposed model provides incentives to all departments and colleges that participate in a program through the delivery of courses. The majority of the incentive pool is distributed based on teaching with a small distribution going to the home school. This should incentivize departments to collaborate on program delivery. Additionally, since that largest part of the incentive goes to the college level, the college can work to assure collaboration within the college and to work with other deans to gain collaboration across colleges.
- Finally, the added transparency of making the gains of program delivery clear to departments will motivate collaboration.

What types of expenditures can be made from the funds at all unit levels, i.e. what part of these funds should be used to cover new faculty hires, startups, versus discretionary new resources?

The majority of the incentives go to the colleges where the cost of faculty and start-ups are born. Small incentives go to the departments providing resources for TA and other teaching and faculty support.

How does this relate to summer and winter session allocations? How does this relate to graduate tuition sharing?

If the special revenue subcommittee is addressing tuition revenue from summer and winter sessions, then incremental enrollments in the undergraduate model would not include enrollment in those sessions. If special revenue does not include winter and summer sessions, then incremental enrollments would include all sessions.

## 2. Recommend formulaic allocations to the units which address several parameters

### Hybrid Program Incentive Model

Key questions to describe the model are as follows:

#### What is the pool to distribute?

*Note: "department" means department, school, or other unit offering courses that reports up to a college (there are some special cases, such as programs that are not yet approved as departments).*

- For each college: Calculate incremental tuition generated by each department in that college.
- Define as change in credit hours (this year vs. last year) \* tuition factor, where tuition factor is a UD-wide net-of-aid average. If desired, could calculate as (this year vs. average of 2 or 3 previous years) to smooth annual variations in allocations to departments.
- This results in a pool for each department, which we can call IR(a) (incremental revenue for department "a" - IR(a); IR(b); etc.)
- Change in credit hours can be positive or negative, so IR (incremental revenue) can be positive or negative.

*Note: differential tuition charges should be directed directly to the college that generates them. These funds must be invested in those units. NOTE: there are many existing commitments of investments already which exceed the funds projected to be generated.*

### How is the pool allocated to departments?

- Assume that some percent (A%) of the total incremental revenue across departments (Sum of IRs) is taken off the top to be an incentive pool for change in headcount, and the rest (B%) remains to be allocated based just on change in teaching (student credit hours)

#### Distributing A% based on home school:

Take each department's change in headcount from previous year; prorate A% of the total incentive revenue based on that.

- Notes:
  - split headcount evenly for multiple majors
  - could decide to NOT take revenue away for departments that lose majors; we don't recommend that but include it as an alternate scenario

#### Distributing B% based on SCH:

We've already calculated the incremental tuition as noted above; take all of that pool that is left after distributing A% based on home school, and allocate.

#### Key decision: what percentages used to distribute:

- To department
- To college
- To central (provost?)

**Smoothing: might want to use a multi-year (e.g., 3 year) average, or some other smoothing mechanism.**

### What do we expect departments to do with their share of the incentive money?

- Pay s-contracts and TA's above some level of support?
- Departments are not expected to fund continuing faculty (from incentive money) - this is why we recommend that the majority goes to college.
- Departments and colleges must demonstrate how they use funds to increase academic quality, student success, etc.
- Departments will see what they generate - even the portions that flow to college and central university.
- Colleges will be asked to tabulate how they invest the portions they receive and share that with departments and with the provost's office.

**Must resolve: How do we track this money? Place into identifiable purpose codes which (we suggest) are exempt from sweep which goes to central.**

### Hybrid Program Incentive Model Summary

Analysis is done separately for each of the colleges. For each college:

- Funds are allocated based on department-level analysis. Funds are TRACKED based on departments, but distributed to department, college, and central university.
- Departments will see what they generate - even the portions that flow to college and central university.
- Colleges will be asked to tabulate how they invest the portions they receive and share that with departments and with the provost's office.

All **percentages** below are parameters which can be easily changed (see "example" tab).

Incremental Revenue to be distributed annually =  $IR = \Delta SCH \cdot \text{tuition/credit}$

**90%** of IR is distributed in this way:

- **5%** to Department, **75%** to College, **20%** to University
- Because IR is calculated based on  $\Delta SCH$ , this means that **90%** of it is distributed based on credits taught.

**10%** of IR is allocated proportional to  $\Delta$  home school for Department; that too is distributed in this way:

- **5%** to Department, **75%** to College, **20%** to University

Terms:

Department = department, school, or other unit offering courses that reports up to a college.

IR = incremental revenue to be distributed annually

Tuition/credit = university-wide average tuition per credit, net of aid

SCH = Student Credit Hours

$\Delta SCH$  = SCH in "current" year minus SCH in prior year

HS = Home School (count of majors; students with multiple majors are split)

### Hybrid Program Incentive Model Example:

See attached Excel workbook for computations (images shown below).



Hybrid Program Incentive Model Example		3/13/2018						
Key parameters in yellow (an change)								
First, for each college, calculate the pool to distribute:								
Tuition factor (UD-wide net-of-aid average)		750	Guesstimate; staff please calculate					
College X								
Department	College	Change in SCH, year over year	Incremental Revenue (IR) Generated (not distributed)					
a	X	2,000	1,500,000					
b	X	500	375,000					
c	X	4,000	3,000,000					
d	X	(2,250)	(1,687,500)					
e	X	(500)	(375,000)					
Total		3,750	2,812,500					
Sum of IR (departments "a," "b," "c" ...)		2,812,500	Note: we could smooth at this point, or later.					
A: Allocation based on change in student headcounts		10%	Should be small since costs follow teaching.					
B: Allocation based on change in student credit hours		90%						
Dollars to distribute based on headcounts (HS)		281,250						
Dollars to distribute based on SCH		2,531,250						
Key parameters:								
Allocation to department		5%						
Allocation to college		75%						
Allocation to central (provost?)		20%						
Distributing 46% based on Home School								
Scenario 1: reduce funds for lower headcounts						no smoothing		
Department	Change in HS	% of total	\$\$ impact	Amount to dept	Amount to college	Amount to Central		
a	40	8.9%	250,000	12,500	187,500	50,000		
b	10	2.2%	62,500	3,125	46,875	12,500		
c	5	1.1%	31,250	1,563	23,438	6,250		
d	0	0%	-	-	-	-		
e	-10	-2.2%	(62,500)	(3,125)	(46,875)	(12,500)		
Total	45		281,250	14,063	210,938	56,250		
Scenario 2: don't reduce funds for lower headcounts (alternate; not recommending)								
Department	Change in HS	% of total, force negatives to 0	pre-normalized \$\$ impact	normalized \$\$ impact	Amount to dept	Amount to college	Amount to Central	
a	40	8.9%	250,000	204,545	10,227	153,409	40,909	
b	10	2.2%	62,500	51,136	2,557	38,352	10,227	
c	5	1.1%	31,250	25,588	1,278	19,176	5,114	
d	0	0%	-	-	-	-	-	
e	-10	0%	-	-	-	-	-	
Total	45		343,750	281,250	14,063	210,938	56,250	
Note: Other departments absorb the impact of the reduction in department "e"'s headcounts								
Distributing 8% based on change in SCH								
Amount to be distributed		2,531,250						
Department	Actual distribution	Amount to dept	Amount to college	Amount to Central				
a	1,350,000	67,500	1,012,500	270,000				
b	337,500	16,875	253,125	67,500				
c	2,700,000	135,000	2,025,000	540,000				
d	(1,538,750)	(75,938)	(1,139,063)	(303,750)				
e	(337,500)	(16,875)	(253,125)	(67,500)				
Total	2,531,250	126,563	1,898,438	506,250				
Check	2,812,500	-	should be 0					
Departmental Totals								
Department	Incentive from A (HS) Scenario 1	Incentive from B (SCH)	Total Incentive, this year	Departmental incentive amounts could be smoothed based on last year's incentive amounts if desired.				
a	12,500	67,500	80,000					
b	3,125	16,875	20,000					
c	1,563	135,000	136,563					
d	-	(75,938)	(75,938)					
e	(3,125)	(16,875)	(20,000)					
Total	14,063	126,563	140,625					
College Totals								
College X	Incentive from A (HS) Scenario 1	Incentive from B (SCH)	Total Incentive, this year	College incentive amounts could be smoothed based on last year's incentive amounts if desired.				
College X	210,938	1,898,438	2,109,375					



College Y							
Department	College	Change in SCH, year over year	Incremental Revenue (IR) Generated (not distributed)				
f	Y	(100)	(75,000)				
g	Y	725	543,750				
h	Y	250	187,500				
i	Y	50	37,500				
j	Y	(80)	(60,000)				
Total		845	633,750				
Sum of IR (departments "f," "g," "h," ...)		633,750	Note: we could smooth at this point, or later.				
A: Allocation based on change in student headcounts		10%	Should be small since costs follow teaching.				
B: Allocation based on change in student credit hours		90%					
Dollars to distribute based on headcounts (HS)		63,375					
Dollars to distribute based on SCH		570,375					
<b>Key parameters:</b>							
Allocation to department		5%					
Allocation to college		75%					
Allocation to central (provost?)		20%					
Distributing A% based on Home School							
Scenario 1: reduce funds for lower headcount units						no smoothing	
Department	Change in HS	% of total	\$\$ impact	Amount to dept	Amount to college	Amount to Central	
f	10	33%	21,125.00	1,056	15,844	4,225	
g	3	10%	6,338	317	4,753	1,268	
h	15	50%	31,688	1,584	23,766	6,338	
i	-10	-33%	(21,125)	(1,056)	(15,844)	(4,225)	
j	12	40%	25,350	1,268	19,013	5,070	
Total	30		63,375	3,169	47,531	12,675	
Scenario 2: don't reduce funds for lower headcounts (alternate; not recommending)							
Department	Change in HS	% of total, force negatives to 0	pre-normalized \$\$ impact	normalized \$\$ impact	Amount to dept	Amount to college	Amount to Central
f	10	33%	21,125	15,844	792	11,883	3,169
g	3	10%	6,338	4,753	238	3,565	951
h	15	50%	31,688	23,766	1,188	17,824	4,753
i	-10	0%	-	-	-	-	-
j	12	40%	25,350	19,013	951	14,259	3,803
Total	30		84,500	63,375	3,169	47,531	12,675
Note: Other departments absorb the impact of the reduction in department "i"'s headcounts							
Distributing B% based on change in SCH							
Amount to be distributed		570,375					
Department	Actual distribution	Amount to dept	Amount to college	Amount to Central			
f	(67,500)	(3,375)	(50,625)	(13,500)			
g	489,375	24,469	367,031	97,875			
h	168,750	8,438	126,563	33,750			
i	33,750	1,688	25,313	6,750			
j	(54,000)	(2,700)	(40,500)	(10,800)			
Total	570,375	28,519	427,781	114,075			
Check	633,750	-	should be 0				
<b>Departmental Totals</b>							
Department	Incentive from A (HS) Scenario 1	Incentive from B (SCH)	Total Incentive, this year	Departmental incentive amounts could be smoothed based on last year's incentive amounts if desired.			
f	1,056	(3,375)	(2,319)				
g	317	24,469	24,786				
h	1,584	8,438	10,022				
i	(1,056)	1,688	631				
j	1,268	(2,700)	(1,433)				
Total	14,063	126,563	31,688				
<b>College Totals</b>							
College Y	Incentive from A (HS) Scenario 1	Incentive from B (SCH)	Total Incentive, this year	College incentive amounts could be smoothed based on last year's incentive amounts if desired.			
College Y	47,531	427,781	475,313				

### 3. Recommend related and complementary adjustments to current strategies and policies in the departments/colleges/centers

We recommend the following improvements to the Academic Program Approval process (See Appendix C for the current APA) to enhance market analysis, budget planning and review, and program quality metrics and quality review.

- Add detailed market demand and benefits analysis to Academic Program Approval process  
See “Conducting-Market-Analysis-for-New-Programs.pdf”  
<https://www.eab.com/research-and-insights/academic-affairs-forum/custom/2014/1/conducting-market-analysis-for-new-programs>
- Add budgetary detailed planning prior to Academic Program Approval process. Proposing Departments and Colleges would be responsible for conducting the analysis and Dean’s would be held responsible for certifying the Faculty Senate that the appropriate budget impact analysis had been conducted.

See “New-Program-Launch-Guidebook.pdf”

<https://www.eab.com/research-and-insights/business-affairs-forum/toolkits/2017/new-program-launch-guidebook>

See example budget planning templates:

UMBC-New-Program-Budget.xls

McMaster-Budget.xls

TJU-Budget-Planning

- Add Specification of learning goals and goal metrics to Academic Program Approval process
  - During Academic Approval Process require new programs to identify Learning Metrics and Learning Goals.
  - To receive incentive for growth in existing programs or improvements in cost savings for existing programs, require units to identify Learning Metrics and Learning Goals.

New Program Permanent Status Review is conducted for undergraduate programs in year 5 of the new program. Permanent Status Review would include review of learning goals and quality metrics, including program demand, retention, graduation and placement rates.

- Mandatory Quality Metrics for New Program 5<sup>th</sup> Year Reviews
  - *Application Volume*
  - *Admission Ratio and Yield*
  - *Retention Rate*
  - *Grad Rate = program 4-year grad rate*
  - *Placement = Graduate placement within 6 months*
  - *Learning Assessment Evidence and Quality Improvement Process*

**Note:** It is expected that all programs are internally reviewed at a mid-point prior to the permanent status review to assure that the program is on track with the stated goals, and to make interim adjustments as needed.

Include above quality metrics in Departmental Academic Program Review.

**4. Recommend principles and process to deal with negative externalities, including state budget cuts, changing market demand for majors, etc.**

- Change in market demand for programs offered within a department will be reflected in the model in one or more of the following ways:

Impact on Incentive:

- The number of SCH taken in the department will drop if demand drops thus impacting any incentives earned within the department.
- The university-wide average tuition per credit, net of aid may decrease if economic conditions make it necessary to increase aid to yield adequate enrollment.

**Note:** Other negative externalities, such as state budget cuts, that do not directly impact the number of student credit hours delivered, demand for enrollment, or university-wide average tuition per credit in majors should be absorbed in the base budgeting process. More extreme negative externalities will require intervention consistent with the university charter and board of trustees processes.

**5. Recommend campus reporting plan to enhance transparency regarding tuition allocation process, assign accountability for goal realization and analyze return on investments**

Enhanced reporting plan

- Enhance ICOR report at the department and program level
- Departments use workload, staffing and resource data along with appropriate benchmarking to provide evidence of effective utilization of resources.
- Transparent reporting of model results at all levels of the model incentive returns

College is accountable to assure that the departments with appropriate teaching resources to departments whose activities that are consistent with the campus goals and can demonstrate effective utilization of resources and return on investments.

**IV. Conclusion**

The formulaic incentive process recommended here incorporates the parameters identified for allocation of undergraduate tuition. The proposed formula is a year-to-year incentive which relies on annual adjustments to base budgets based on actual costs. Because the proposed formulaic model is year-to-year, and most quality indicators are lagged indicators, it is not possible to incorporate quality metrics into the annual incentive. We therefore rely on enhancements to the Academic Program Approval, Permanent Status Review, and Academic Program Review processes to assure that all programs are developed and delivered at the highest achievable quality standards.

We have raised several options within the formulaic model that will need to be modeled by the budget office to determine the best resolutions to those options. The undergraduate tuition subcommittee will need to review the outcomes of modeling to assure that the formula will operate as intended.

Further work and guidance from the steering committee and University senior leadership will be needed to address additional questions that were raised as a result of the subcommittee exploration. These additional questions include:

- How do we handle courses offered by non-college units, like Honors, Community Engagement, or Affinity Programs? Do we want to explicitly Incent them, or are we only incenting college units to offer courses?
- What is the overlap of the undergraduate tuition and special academic revenue group with regard to the above non-college units, special sessions, online programming, etc.
- Operational Excellence needs to be clearly defined.
- Central review at faculty senate and University budget process must rely on effective review of goal metrics and operational excellence.

If the University intends to adopt our recommendations regarding other policies and processes; i.e., Academic Program Approval, Permanent Status Review, and Academic Program Review, future work will be needed to specify these policies and processes.

#### **V. List of References and Additional Resources**

1. K. Maloney (2018), *New Program Launch Guidebook: Planning Resources for Financial and Academic Leaders*, Educational Advisory Board (EAB)
2. C. Auerbach, L. Edmonds (2013), *Exploring Alternative Budget Models: Budget Model Review, Transitions, and Outcomes*, Educational Advisory Board (EAB)

**Background: Past UD Budget Models and Higher Education Budgeting Background**

The budget process for the University of Delaware (UD) is a year-round process that is centered around a fiscal year. UD's fiscal year begins on July 1 and ends on June 30. The Budget Office is responsible for preparing an annual operating budget and, in cooperation with the Executive Vice President's office, the capital budget, with the appropriate revenue and expense inputs from the colleges and administrative units. In the spring, the Budget Office presents the University's financial plan to the Board of Trustees for final approval.

The University of Delaware adopted a Responsibility-based Budget (RBB) model several years ago. This model had the follow perceived strengths and weaknesses:

Strengths

- Allowed units to have more control over their budgets
- Encouraged academic leaders to incorporate business strategies into academic planning
- Tied resources to activities in a predictable way

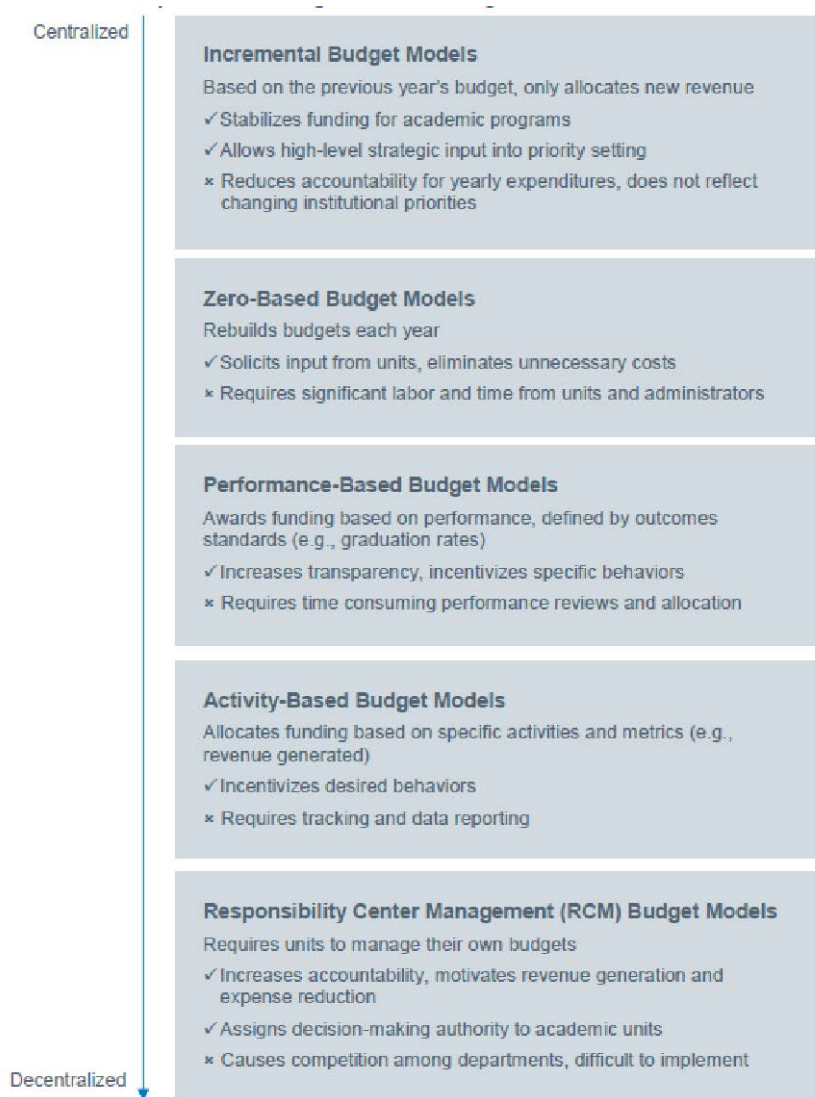
Weaknesses

- Emphasis was on student credit hours and generating tuition revenue for the colleges, but absent was funding mechanism for strategic priorities, including non-revenue generating initiatives that improve quality:
  - inclusive excellence
  - student success
  - graduate school
- Seen as an obstacle to interdisciplinary collaboration
- Insufficient and inconsistent incentives at the PI or department level to encourage new program creation, research, revenue generation
- Insufficient central administrative support, which led colleges to duplicate administrative services, leading to:
  - Inconsistent institutional practices, messaging
  - Inefficiencies
- Allowed units at every level to create reserve balances while priorities remained unfunded, e.g. deferred maintenance

To mitigate some of the perceived weaknesses of the RBB model, the Revised RBB (BUD) model was developed. The BUD budget model proposed by senior leadership in Fall 2016. Although it was widely held that BUD was a step in the right direction, concerns remained that although this model differed from RBB algorithms, many of the issues with prior RBB model still remained. One of the key issues was an insufficient central strategic pool to fund major initiatives, many of which crossed colleges and departments. Attempts to modify existing model further were not sufficient.

There are a wide spectrum of budget models that have been adopted by Institutions of Higher Education. As depicted in the figure 1 below, this broad spectrum of budget models have a diversity of features and vary in

their degree of centralized and decentralized operation. Included in this spectrum of budget models are incremental, zero-based, performance-based, activity-based and responsibility center management models.



**Figure 1. Spectrum of Budget Models for Higher Education Institutions [2]**

Given the broad charge of our subcommittee, to develop an incentive mechanism to encourage and reward innovation, we began to deliberate on a hybrid budget model that would combine the best attributes of multiple model structures to incent desired program behaviors and outcomes at various stages of academic program development, maturation and life-cycle. In the recommendation portion of this report, we will describe in detail a hybrid budget model that will combine features of an Activity-based and Performance-Based model; where, funding decisions are allocated based upon specific activities/metrics and performance as defined by outcomes standards, respectively.

*The most common objectives of new budget models are to[2]:*

- **Increase budget transparency.** Finance administrators often struggle to communicate the reality of budget constraints and the urgency of change to the campus community. Alternative budget models are typically designed to illuminate financial realities and increase accountability.

- **Incentivize new revenue generation.** Models that return incremental revenue to the units that generate it can stimulate the launch of new revenue-generating programs or the expansion of existing programs.
- **Reduce non-essential costs.** When units are forced to pay for some or all of their costs, they have an incentive to find their own ways to reduce costs or increase efficiency. Every dollar they save can be reinvested in their priorities.
- **Build strategic funds.** Even (perhaps especially) in decentralized budget models, it is important for the central administration to maintain a pool of funds that can be used to support and direct strategic initiatives. Central funds are essential for subsidizing non-revenue generating activities critical to mission and for incentivizing collaborations across units.

Our subcommittee was asked to focus on incentivizing new revenue generation while encouraging high quality programming.

In light of this situation, it was determined by the Campus leadership that a set of processes was necessary to move the Campus to a new era of strategic and sustainable fiscal management. The Budget Model Undergraduate Tuition Subcommittee, as well as other committees, were charged by the Budget Model Steering Committee. See Appendix B for the goals, guiding principles, assumptions, deliverables and process & timeline that guided our work.

## Charge to the Budget Model Undergraduate Tuition Subcommittee

On January 9, 2018, the Budget Model Undergraduate Tuition Subcommittee Co-Chairs met with the Budget Model Steering Committee and other Subcommittee Co-Chairs. This initial meeting began with a charge by the Budget Model Steering Committee with a document as follows:

### Budget Model Undergraduate Tuition Sub Committee Charge

#### Goals:

To recommend an undergraduate tuition sharing model that achieves the following:

- Incentivizes creation of new or enhanced undergraduate programs that address instructional needs of 21<sup>st</sup> century undergraduate students, increasing enrollments while also increasing quality, and contributing to the strategic mission of the university
- Capitalizes on planned investments in new and replacement faculty, including interdisciplinary cluster hires as well as renewal of campus facilities and new buildings
- Incentivizes interdisciplinary educational initiatives, cross colleges and departments
- Incentivizes complementary development of programs that cross fund types, for instance development of 4+1 and joint programs.
- Increases instructional productivity/efficiency
- Creates a transparent, consistent and predictable formulaic return to all units

#### Guiding Principles:

The development, implementation and continuing assessment of the **new hybrid budget model** will be guided by the following principles:

- Creates incentives at all levels of the University that
  - Limit competition and encourage collaboration
  - Increase academic quality and excellence
  - Promote financial sustainability and fiscal responsibility
  - Promote harmony among
    - Instructional, research and service missions of the University
    - Different levels/units of the University (College/Department/Center; academic/administrative etc.)
- Encourages innovation and entrepreneurship throughout the University
- Provides transparency, clarity and predictability at all levels of the University
- Can be easily understood, is easy to implement and operate and is flexible
- Can adapt to all cycles of the economy whether robust or downturn
- Creates a sufficient strategic pool of resources, above the base, to support new initiatives

#### Assumptions:

- The work of the Budget Model Steering Committee is separate from the anticipated work of the Operational Excellence Steering Committee that will be formed in the spring of 2018, although recommendations of the former will inform the work of the Operational Excellence Steering committee, especially relating to **base budget allocation process**.
- The work of this subcommittee, which is advisory, supplements and informs the work of Steering Committee, which guides the complementary work of the subcommittees to recommend a cohesive budget model.



## Deliverables:

### **6. Define the parameters of allocation of UG tuition.** Some questions to consider include:

- How does this relate to strategic pool allocations, i.e. do strategic pool allocations fund “startup” costs, with tuition from increased UG enrollment funds recurring/ongoing costs? Do we envision a cyclical model in which strategic pool funds start-up costs, the performance of which generates revenue that is used partially to pay back the strategic pool and partly to generate additional funds for the unit. What is the process and timeline in which the additional revenue becomes part of the operational base?
- How do we establish the baseline from which to determine increases in UG enrollments/tuition revenue generated?
  - What is the baseline year from which we are measuring increased enrollment?
  - Does baseline include planned enrollment growth of UG at 1,000+? How much additional growth over the 1,000+ students is possible (recognizing that semester long study abroad, online programs allow for more growth than merely the traditional model).?
  - If overall tuition does not grow, how do we treat individual department/program/college fluctuations to maintain incentives to grow?
- Although differential pricing strategy will be implemented as a fee, how does this relate to UG tuition allocation?
- How does cost of instructional delivery factor into UG tuition allocation?
- How do we balance revenue generation with increasing academic excellence where these goals appear to be at odds?
- How do we balance operational excellence with incentives for increased UG program growth?
  - How do we incentivize units to “sunset” or re-engineer current UG academic programs that no longer serve the needs of UG students, where doing so means less UG tuition revenue for that program/department?
- How do we incentivize new program growth, including interdisciplinary program growth, but no duplication of programs and no competition between colleges and departments?
- What types of expenditures can be made from the funds at all unit levels, i.e. what part of these funds should be used to cover new faculty hires, startups, versus discretionary new resources? Need to make sure first call on new revenue generated is covering the expenses incurred to generate it.
- How does this relate to summer and winter session allocations? How does this relate to graduate tuition sharing?

### **7. Recommend formulaic allocations to the units, addressing the following questions:**

- What is the right split between majors, student credit hours, and instructor pay department for tuition distribution? How are multiple majors treated? Are minors included?
- What is the right unit level distribution percentage (college, department) that allows sufficient revenue at the right level to facilitate decision making for best UG instructional delivery?
- How do scholarships and resident status figure into the calculations, i.e. blended rates vs actual? Scholarships required to generate revenue for a new program need to be considered as a cost for the new program; should these scholarship decisions be centralized or local to department or college?
- How should student success measures (e.g. retention and graduate rates) figure into the calculations?
- How can we promote interdisciplinary collaboration across colleges, departments and units that may or may not lead to new program creation; how will these be counted and allocated?

- How do non-academic, non-revenue generating critical support functions like advising, career services, pre-college programs, get funded?
- 8. Recommend related and complementary adjustments to current strategies and policies in the departments/colleges/centers, including, but not limited to:**
  - Standardized definitions for allocation of teaching effort of faculty and teaching assistants; lab, research/internship, other sections
  - Review and enhancement of major declaration policies, as well as intercollege/major transfer policies
  - Make intentional connection to academic program assessment, accreditation decisions as well as to course and program creation to eliminate duplication.
- 9. Recommend principles and process to deal with negative externalities, including state budget cuts, changing market demand for majors etc.**
- 10. Recommend campus reporting plan to enhance transparency regarding tuition allocation process, assign accountability for goal realization and analyze return on investments**
  - What performance metrics indicate success toward goals? E.g.
    - Increasing enrollment in courses, majors (credits, heads, FTE)
    - Increasing degrees produced
    - Increasing net revenue balanced with increase in quality and diversity
    - Increasing interdisciplinary course/major creation with increasing enrollment
    - Increasing academic success of UG – retention and graduation rates
    - Increased national rankings
    - Increased academic efficiency balanced with increased academic quality – increased FT faculty to PT faculty ratio, effective deployment of s-contracts for course delivery
    - Other?
- 11. Subcommittee co-chairs will provide updates to the Steering Committee, as well as final report of recommendations to the President, Provost and EVP.**
  - Relating recommendations and effect on other subcommittee recommendations will be key, to minimize development of incentives promote one goal the expense of another, or that allow obvious opportunities to “game” the system.
- 12. The Budget Office will create a website that will contain the Budget Process updates as well as final report and other related information.**

#### **Process and Timeline:**

- The steering committee will meet bi-weekly.
- December 2017:
  - Steering Committee Charge issued by President, Provost and EVP
  - Subcommittee Support Staff kick off meeting
- January 2018:
  - Steering Committee bi-weekly recurring meetings will commence
  - Subcommittee Charges to be issued
  - Subcommittee weekly recurring meetings will commence
    - written reports are due to the Steering Committee each Friday outlining:
      - 3 main topics of conversation
      - items the steering committee should help direct
- Winter 2018: President’s Executive Council, Roundtable, Senate, other public forum updates monthly or as needed.
- Spring 2018: new budget model recommended to President, Provost and EVP.

- Ongoing:
  - Continue to work to evaluate budget model impact and recommend appropriate refinements to optimize outcomes
  - Continue to work with units to achieve operational efficiencies over 3-year period.
  - Continue to work with units and budget office regarding standardization of budget definitions, procedures, policies and common reports across colleges and units, and creation of budgeting system.

## Current UD Approval Process for New Programs/Majors

The paper-form APA process will no longer be utilized by the Faculty Senate. Faculty and departments will not be able to submit paper-forms and expect their proposals to pass through Faculty Senate. The forms have been moved to Curriculog, a curriculum management application implemented in the 2016-2017 Academic Year. Curriculog will allow for greater transparency, messaging, customization, and efficiency moving forward. The timeline, procedures, and standards of the Faculty Senate Approval Process for Provisional and Permanent Academic Programs have not changed.

To navigate to Curriculog, go to <https://udel.curriculog.com> and use your CAS credentials to login.

For instructions on using Curriculog, see [http://www1.udel.edu/registrar/faculty\\_staff/curriculog.html](http://www1.udel.edu/registrar/faculty_staff/curriculog.html) .

In addition to the APA, requests for new majors and minors require a formal proposal. Proposals should be organized according to the following outline. Topical paragraph headings and sub-headings should be used. Complete all sections as they apply to the specific request. Copies of past program proposals are available from the Faculty Senate Office or Senate Committee on Undergraduate Studies.

### I. DESCRIPTION

A. Briefly describe the new program and state its objectives. The description also should focus on the knowledge, values, skills and other learning outcomes that program graduates will be expected to have acquired.

### II. RATIONALE AND DEMAND

#### A. Institutional factors.

1. Explain how the proposed program is compatible with the University purposes and objectives of General Education
2. Describe the planning process which resulted in the development and submission of this proposal. Describe any significant impact the proposed curricula might have on other instructional, research, or service programs of the University.
3. Describe how the proposed curricula would more fully utilize existing resources.

#### B. Student demand

1. Describe how enrollment projections have been derived. Show anticipated number of new majors and number of program graduates. Indicate the extent to which the new curriculum is expected to attract majors and the extent to which it will provide or electives to other majors. Indicate whether new admissions will be wholly new to the campus or internal transfers.
2. State whether the curriculum is designed to meet the needs of specific student clienteles, e.g., part-time students, currently employed professionals, non-traditional students, those preparing to reenter the job market, etc.

### C. Transferability

1. Document any unique agreements concerning the transfer of students or credits.

### D. Access to graduate and professional programs

1. Please respond to this item only if the proposed course of study will prepare students for entry into graduate or professional schools. Describe briefly the requirements for admission into the appropriate graduate or professional program and the prospects for appropriate employment after completion of the advanced program.

### E. Demand and employment factors

1. Please respond to this item only if preparing students for specific employment opportunities is a key objective. In such cases, describe the audience and unique career paths.

### F. Regional, state, and national factors

1. List comparable courses of study in the region or the State, and explain why these existing programs cannot meet the needs of prospective students and/or employers in the geographic area which the curriculum would serve. Describe any significant differences between the proposed course of study and others in the region or State that have some similar characteristics.
2. Describe the regional accrediting, professional association, and licensing requirements that have helped shape the proposed curriculum. Indicate the effects such agencies have had on the length, content or mode of delivery, and on such budgetary requirements as staffing levels, equipment needs, and facilities. Also, describe the participation of any non-campus person or organization in the development of this proposal. Report on timetables that have been established to meet any external requirements.

### G. Describe other strengths

1. Describe any special features which convey the character or personality and make the proposed course of study distinctive. (Examples might include the interest and special expertise of certain faculty members, the location and availability of unique materials or technologies at or near the campus, special relationships to other departments, organizations, or institutions, etc.)
2. Report on any anticipated collaborative arrangements with other parties (for example, inter-institutional arrangements for resource sharing, cooperative programs, clinical affiliations, etc.). The extent of the relationship should be explained and instructional or other resources to be provided by the various parties described. Any written confirmation of the commitment, including drafts of contracts or agreements, should be attached.

## III. ENROLLMENT, ADMISSIONS AND FINANCIAL AID

### A. Enrollment

1. If enrollments are to be limited, e.g., by size, by pre-requisites, or by academic performance, describe the restrictions and the reasons for them. A letter of support from the

Admissions Office for undergraduate programs or Office of Graduate Studies will also be helpful in projecting enrollments for the proposed program.

#### B. Admission Requirements

1. Describe the criteria for selecting among applicants.
2. Distinguish, if necessary, selection criteria between freshman, transfers from other institutions and transfers from within the University.
3. Attach any Retention Policy that might apply and provide rationale for this policy.

#### C. Student Expenses and Financial Aid

1. Indicate the need for any required student expenses beyond the traditional book and supplies, for example, personal computer, extensive laboratory fees, etc. For Graduate and professional courses of study, indicate anticipated levels of student financial support to be provided from (a) institutional and (b) other sources.

### IV. CURRICULUM SPECIFICS

#### A. Institutional Factors

1. State the degree to be awarded to those who complete the program and explain why this is the appropriate form of recognition.

#### B. Describe the curriculum

1. Describe requirements involving total credit hours, credit hour distribution, field experiences, etc.
2. Indicate how the curriculum satisfies University of Delaware, college and departmental requirements, such as ENGL110, multicultural, college core, capstone, breadth, etc.
3. In the Appendices, provide approval letters from affected departments for all required courses that support the proposed curriculum (unless attached to APA).

### V. RESOURCES AVAILABLE

#### A. Learning Resources

1. Describe briefly the scope and quality of available library holdings, audio-visual materials, special equipment and collections, laboratories, clinical facilities, research facilities, etc., that are available and would directly support the proposed course of study. If appropriate, obtain a Library Assessment Statement. This section is not required if a letter of support from the library was attached to the APA.
2. Library Assessment Statement: A formal written assessment from the Director of Libraries of the Library's ability to support a proposal for a new or expanded academic degree or program is required as part of a formal proposal. The assessment statement may include but is not limited to the strength of collections; access to electronic and networked information access to collections not owned by the University of Delaware; library space and library computer requirements; language and subject capabilities of library staff; and nature of

service and increased usage demands resulting from the proposed new degree/program. The request for the library assessment accompanied by details of a proposed degree or program needs to be received by the Library at least one month before the Library's assessment of a proposed degree or program is required. The Library will respond in a timely manner, usually within two weeks in order to allow time for faculty discussion of the library assessment and possible further discussion and/or interaction with the Director of Libraries, if desired.

#### B. Faculty / Administrative Resources

1. Describe the available program administrators and faculty expertise which support the proposed curriculum. List name, rank, specialization, nature of appointment (regular, full-time, adjunct, etc.) and highest academic degree earned by those who would be directly involved, including campus administrators. If appropriate, provide pertinent information about the professional and scholarly accomplishments, including training, courses and workshops taught, publications and projects, and other relevant documentation of the faculty.

#### C. External Funding

1. Indicate any resource or source of funding external to the University which has been garnered to support the curriculum.

### VI. RESOURCES REQUIRED

#### A. Learning Resources

1. Identify needed additional learning resources. Indicate which of these are essential for basic implementation and whose which will produce a premiere program able to compete favorably for the highest caliber of student.

#### B. Personnel Resources

1. Indicate any new faculty positions required and the qualifications and subject matter specialties that will be sought. Give reasons for needing new position.

#### C. Budgetary Needs

1. Attach an accounting of budgetary needs.

### VII. IMPLEMENTATION AND EVALUATION

#### A. Implementation Plan

1. Describe how the curriculum will be implemented.

#### B. Assessment Plan

1. Indicate how the program will be evaluated and assessed. Some measures should be quantitative, other qualitative. Success should be measured against the criteria listed including stated learning outcomes and against whatever objectives have been set forth in the first section of the proposal. Academic units are encouraged to consult with the Center

for Teaching and Assessment of Learning in developing the appropriate learning outcomes, assessment criteria, and benchmarks for success.

VIII. APPENDICES (as appropriate and if not submitted with APA)

- A. Accreditation Criteria (if appropriate)
- B. Letters of Collaborative Agreement
- C. Transfer / Retention Policy
- D. Letters of Approval from Contributing Departments
- E. Other Pertinent Documents

Last Updated: 8/4/17