Budget Model Transformation Report and Recommendations

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1Deb Allen, Assistant Provost for Institutional Research & Assessment, and Jessie Daniels, Director of Finance and Operations for the Division of Lifelong Learning, made substantial and important contributions to this report, particularly the development of the proposed budget model.
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Executive Summary

Following a comprehensive investigation of the University of Maine's current budget model processes, study of models used at other universities, and extensive engagement with the university community, a proposed new budget model is described in this report. The budget model, informed by the experiences of early adopters of responsibility center management (RCM), integrates incremental and RCM budgeting practices. The proposed hybrid approach is less centralized than UMaine's current budget model, but the President and her leadership team maintain ultimate budget authority and continue to direct significant resources, assuring investment in university-wide strategic priorities. At the same time, the proposed model more closely aligns budget responsibility with implementation authority at appropriate levels. Key features of the proposed budget model include:

Categorization of Units. All units within the university are categorized into one of three types: Central Administration, Responsibility Centers, and Support Centers. The base budgets of the units are developed according to the category into which they fall.

Distribution of Revenues. Revenues from different sources (e.g., state appropriation, tuition, fees) are distributed to the Central Administration and Responsibility Centers via transparent formula and in such a manner as to allow for tracing the connections between revenue sources and expenses. Similarly, the base budgets of the Support Centers are funded via predictable formula such that the cost of operating these Centers is shared among the Responsibility Centers in a rational manner.

Responsibility Centers. Responsibility Centers are the prime revenue generators and their budgets are determined by the revenues they produce. The colleges are the largest Responsibility Centers and their budgets are determined by the tuition, fees, F&A Recovery, sales/service revenue, and private gifts they generate. Cooperative Extension, Athletics, Auxiliaries, Research Centers, the Office of Innovation & Economic Development, and the Division of Lifelong Learning are the other Responsibility Centers and are funded by their revenue-generating activities. State appropriation and MEIF funds are also used to support the Responsibility Centers.

Support Centers. For the most part, Support Centers do not generate revenue directly from sources external to the university. They function to support the Responsibility Centers and in so doing support revenue generation. The Support Centers’ budgets are funded by the Responsibility Centers. In the proposed model, the Support Centers are Student Affairs, Academic Support Services, Library, Facilities & Services, Enrollment Management, the Graduate School, Research Administration, and the University of Maine System Shared Services.

Governance. In the proposed model, revenues and expenses are distributed through transparent and predictable formula. The report includes a proposed governance structure to provide accountability and strategic direction for budgeting decisions. The governance model includes appropriate roles for faculty, staff, students, and administrators.

This report describes the proposed budget model generally and then in some detail. It includes plans for implementation as well as evaluation of the impact of the model.
Background

The University of Maine, including its regional campus the University of Maine at Machias, developed the Strategic Vision and Values: A Framework for the University’s Future as a guide to strategic decision-making. The framework lays out three broad goals and initial strategies to achieve them. Goal 2, We will continue to provide accessible education, research, and service through processes that ensure effectiveness, efficiency and quality, includes sub-goal 2.2.3:

We will develop a budgeting process that is responsive and transparent, aligns resources with strategic priorities, and creates incentive/reward structures that support advancement toward university goals.

President Ferrini-Mundy charged Jeffrey Hecker, Senior Advisor to the President, with leading “a process to transform UMaine's budget model so that it is more transparent and better aligns resources with strategic goals.” See Appendix A for the full text of the president’s charge.

The University of Maine and the University of Maine at Machias operate independent budgets. This report focuses on the University of Maine. There were no analyses of UMM's budget and no UMM-specific recommendations are offered. Nonetheless, should UMaine move forward to adopt the model proposed in this report, it is recommended that UMM adopt a budget model based upon the same principles, and utilizing analogous practices (see Implementation, page 32, for recommended steps for UMM to develop a revised budget model).

Process

The process of developing a revised budget model consistent with the goals laid out in the Strategic Vision and Values Framework proceeded through three phases: Preparation, Organization, and Engagement.

Preparation

In order to prepare to develop an alternative budget model for the university, it was essential to fully understand how the current budget model works as well as the alternative approaches that might be adapted for the University of Maine.

To understand UMaine's current budget model, the Senior Advisor interviewed a dozen university administrators about their experiences working with the university's current processes, the strengths and challenges of these processes, and their ideas about ways to improve them. The following administrators were interviewed individually between September 23, 2019 and October 17, 2019.

Hannah Carter, Dean, Cooperative Extension
Habib Dagher, Executive Director, Advanced Structures & Composites Center
Mary Gresham, Interim Dean, College of Education & Human Development
Emily Haddad, Dean, College of Liberal Arts & Sciences
David Hart, Director, Senator George J. Mitchell Center for Sustainability Solutions
Dana Humphrey, Dean of the College of Engineering  
Monique LaRocque, Associate Provost, Division of Lifelong Learning  
Susan McKay, Founding Director, Maine Center for Research in STEM Education  
Hemantd Pendse, Director, Forest Bioproducts Research Institute, Chair, Department of Chemical and Biomedical Engineering  
Fred Servello, Dean, College of Natural Sciences Forestry & Agriculture  
Jake Ward, Vice President for Innovation & Economic Development  
Michael Weber, Dean, Graduate School of Business

In addition to these formal interviews, there were several less-formal conversations with Director of Financial Aid Connie Smith, Chief Business Officer Claire Strickland, Interim Provost Faye Gilbert, and President Ferrini-Mundy about the university's budget processes. Finally, having served as provost, dean, department chair and clinic director at UMaine, the Senior Advisor was able to draw upon his experience with the university's budget processes.

A description of the University of Maine Budget Model (The University of Maine Budget Model Primer) was drafted based upon the information gathered from these sources.

To develop a better understanding of budgeting models in higher education, the Senior Advisor gathered publicly accessible information from universities' websites and reviewed published materials. Resources that proved particularly helpful included three reports prepared by the higher education consulting company Education Advisory Board (EAB): Aligning the Budget Model to Strategic Goals (2016), Optimizing Institutional Budget Models (2016), and Compendium of Budget Model Profiles (2017) as well as two books: Barr, M.J. & McClellan, G.S. (2018) Budget and Financial Management in Higher Education (3rd ed.), Jossey-Bass and Curry, J.R., Laws, A.L., & Strauss (2013) Responsibility Center Management: A Guide to Balancing Academic Entrepreneurship with Fiscal Responsibility, National Association of College and University Budget Officers. Finally, the Senior Advisor attended the two-day conference Using Decentralized Budget Principles to Enhance Operational Effectiveness, December 4-5, San Antonio, TX, offered by Academic Impressions and had follow-up consultation with the conference's lead presenters Larry Goldstein, President of Campus Strategies, LLC, Mike Holbeck, Associate Vice President of Finance and Budget, South Dakota State University, and Darin Wohlgemuth, former Vice President for Budget and Planning, Iowa State University.

Organization

A steering committee to advise and guide the development of a revised budget model was formed and held its initial meeting on December 2, 2019. Committee membership included

Senior Advisor to the President, Jeffrey Hecker (Committee Chair)  
Chief Business Officer, Claire Strickland  
VP Innovation and Economic Development, Jake Ward  
VP for Research and Dean of the Graduate School, Kody Varahramyan  
VP for Student Life and Dean of Students, Robert Dana  
Dean of College of Liberal Arts & Sciences, Emily Haddad  
Dean of College of Engineering, Dana Humphrey  
Dean of College of Natural Sciences, Forestry, and Agriculture (NSFA), Fred Servello  
Associate Provost for the Division of Lifelong Learning (DLL), Monique LaRocque
Assistant Provost for Institutional Research and Assessment, Deb Allen
Faculty member chosen by Faculty Senate, Mike Scott (Lecturer, New Media)
Faculty member chosen by Faculty Senate, Alice Bruce (Professor, Chemistry)
Faculty member chosen by Administration, Jim McConnon (Prof., Economics/Coop. Ext.)
Faculty member chosen by Administration, Eric Landis (Professor, Civil Engineering)
Professional staff member working in budget area, Jessie Daniels (DLL)
Professional staff member working in budget area, Susan Gallant (NSFA)

The committee met monthly through May 2020. The committee provided feedback on the draft budget model primer and the penultimate version was released to the university community in January, 2020. The final version of The University of Maine Budget Model Primer was released in March.

The Steering Committee developed draft goals for the revised budget model and draft principles to guide the development of the new model. These goals and principles were later endorsed by the university community through a series of public meetings.

Goals

• Incentivize mission- and vision-driven decision making.
• Promote and support entrepreneurship.
• Create funds for strategic investments.
• Build resilience to revenue and expense fluctuations.
• Enhance quality of education, research, public service, and workplace.
• Enhance collaboration.

Principles

• Revenues and costs are distributed via predictable, transparent, understandable, and time-efficient processes.
• Decision-making authority is aligned with implementation responsibility.
• Quality and efficiency of services are supported at every level of university operations.
• Budget-related administrative costs, including people and time, are minimized.
• Faculty and staff are engaged in annual and long-term budget planning process.
• Accountability is enhanced.

The Principles were used to guide decision-making in the development of a revised budget model. The Goals served a similar purpose. Additionally, the Goals can be used to evaluate the impact of the revised model after it has been operating for a reasonable period of time (e.g., five years).

Engagement

Guided by the goals and principles drafted by the Steering Committee, a DRAFT revision of the university’s budget model was developed. Consistent with the university’s commitment to transparency and shared governance, the university community was engaged in a campus-wide dialogue about the draft model. A series of public presentation and guided

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2 The March meeting was cancelled.
3 The Primer was revised in March, 2020 to include information about how funds from private sources are distributed in the budget model.
discussions were held with constituencies across campus between January 29, 2020 and April 28, 2020. Twenty-four to forty-eight hours after each presentation/discussion, those in attendance were sent a follow-up survey consisting of two to three open-ended questions and invited to reply. In total, 228 members of the university community attended one or more of the presentation/discussions and 34 provided written feedback.

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<tr>
<th>Date</th>
<th>Group</th>
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<tbody>
<tr>
<td>1/29/20</td>
<td>President’s Executive Cabinet</td>
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<tr>
<td>2/10/20</td>
<td>Office of Research and Research Centers</td>
<td>20</td>
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<tr>
<td>2/10/20</td>
<td>Division of Lifelong Learning Leadership</td>
<td>6</td>
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<tr>
<td>2/11/20</td>
<td>Financial Managers</td>
<td>26</td>
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<td>2/12/20</td>
<td>Advanced Structures &amp; Composites Center</td>
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<tr>
<td>2/13/20</td>
<td>Cooperative Extension Leadership Team</td>
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<td>2/14/20</td>
<td>Deans Council</td>
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<td>2/18/20</td>
<td>Maine Business School Leadership</td>
<td>6</td>
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<td>2/25/20</td>
<td>College of Engineering Leadership</td>
<td>11</td>
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<tr>
<td>2/25/20</td>
<td>College of Liberal Arts &amp; Sciences Admin. Group (plus other faculty/staff)</td>
<td>41</td>
</tr>
<tr>
<td>2/26/20</td>
<td>Facilities Maintenance</td>
<td>2</td>
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<tr>
<td>2/27/20</td>
<td>Athletics</td>
<td>1</td>
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<tr>
<td>2/28/20</td>
<td>AFUM Leadership</td>
<td>2</td>
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<tr>
<td>3/03/20</td>
<td>College of Education &amp; Human Development Leadership</td>
<td>6</td>
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<td>3/04/20</td>
<td>Auxiliaries</td>
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<td>3/05/20</td>
<td>College of Natural Sciences Forestry &amp; Agriculture Leadership</td>
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<tr>
<td>3/05/20</td>
<td>Campus-wide Open Forum</td>
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<td>4/28/20</td>
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The draft budget model was revised in several ways in light of the feedback received. Furthermore, two working groups were formed to provide recommendations about two areas of concern that were raised with some frequency in the public discussions. The F&A Recovery Distribution Working Group was asked to make recommendations about three issues: 1) distribution of F&A recovery funds to principle investigators; 2) exceptions to the standard distribution of F&A recovery funds to research centers; 3) distribution of F&A recovery funds generated by principle investigators with joint and collaborating appointments in departments and research centers. The Space Expense Working Group was asked to look at how space-related expenses should be allocated. The charges to these working groups as well as their reports and recommendations can be found in Appendix B.
Proposed Budget Model

Overview

In this section the basic structure and processes of the proposed budget model are presented. A more detailed description follows (see Detailed View below).

Structure – what units go where?

In the proposed model every unit within the university is categorized as one of three types: Central Administration, Responsibility Center, or Support Center. How units’ budgets are determined depends upon how they are categorized. A brief description of the three categories of units and their budgets are described below.

Central Administration. The President’s Office, the Office of the Vice President for Academic Affairs & Provost, and the Office of the Vice President for Research & Dean of the Graduate School comprise the Central Administration. The Central Administration is funded directly from certain revenue sources. The Central Administration makes decisions about the distribution of funds from four significant sources: Strategic Investment Fund; Subvention Fund; Financial Aid; and Central Reserves.

Responsibility Centers. Each college within the university functions as a Responsibility Center. The colleges generate revenue through tuition, fees, facilities and administrative (F&A) cost recovery from grants, and some direct sales/service. In addition to the colleges, the Research Centers, the Division of Lifelong Learning, the Office of Innovation & Economic Development, Cooperative Extension, Auxiliaries, and Athletics are Responsibility Centers. Units within the Responsibility Centers generate revenue from multiple sources and their budgets are funded by these sources through transparent formula. Responsibility Centers are responsible for covering their expenses with their revenues and share in the covering the Support Centers’ expenses based upon transparent formula.

Support Centers. The Support Centers are Student Affairs, Facilities & Services, Library, Academic Support Services, Enrollment Management, Graduate School, Research Administration, and UMS Shared Services. Units within the Support Centers do not generate revenue directly (or when they do it is relatively small in proportion to the size of their budget or the revenues are generated from other units within the university). As the name implies, the Support Centers function to support the revenue-generating units within the university (i.e., the Responsibility Centers). The Support Centers’ base budgets are funded by the Responsibility Centers through transparent formula. Base-level support is funded through the formula to create the base budgets of the Support Centers. In addition, Support Centers may generate additional revenue through service-level agreements with Responsibility Centers. For example, Responsibility Centers receive base level services from Facilities including utilities, custodial services, and snowplowing. For additional services (e.g., office space renovation), a service level agreement is required.

The units included within Central Administration, Responsibility Centers and Support Centers are described in Appendix C.

Revenues and Expenses – how does money flow?

The university’s total budget is funded from a variety of sources:

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4The President is, of course, responsible for every aspect of the university’s budget.
5See University of Maine Budget Model Primer for a more detailed explanation of the university’s revenue sources.
**State Appropriation.** These funds come from the state's budget. They are appropriated by the legislature and are distributed through the University of Maine System. State appropriation accounts for the second largest portion of the university's revenue.

**Tuition.** These are the funds students pay to take credit-bearing courses. Tuition accounts for the largest portion of the university's revenue.

**Unified Fee.** These funds are also paid by students, with the amount being determined by the number of credit hours the student takes.

**MEIF.** The Maine Economic Improvement Fund is provided by the state to support research and development in seven specified areas.

**F&A Recovery.** F&A recovery refers to funds that the university receives from grants and contracts to cover the indirect costs associated with carrying out the grant/contract activities.

**Other Student Fees.** These funds are paid by some students depending on their programs of study. For example, students majoring in any of the Engineering degree programs pay a fee for the Engineering courses they take.

**Sales and Service.** These are non-tuition/fee funds that units generate. Examples include athletic ticket sales, book store revenue, and fees paid by clients of one of the university's training clinics.

**Restricted Federal Funds.** The university receives some non-grant funds from the federal government to fund specific activities. For example, the Smith-Lever act provides funds to operate Cooperative Extension and the Hatch and McIntire-Stennis Acts fund the Maine Agriculture and Forestry Experiment Station.

**Private Support.** The university receives significant financial support every year from private sources. Most of these funds come from donors. Some of these funds are income from endowments paid over annually and some are from one-time and annual gifts. About 98% of these funds are restricted, meaning that they can only be used for the purpose designated by the donor.

In the proposed budget model, the Central Administration and the Responsibility Centers are funded from these sources. The Support Centers are funded by the Responsibility Centers. Figure 1 illustrates the flow of funds in the proposed model.
Governance – who minds the store?

The University of Maine is committed to shared governance and the proposed budget model honors this commitment. Ultimate responsibility for the university’s budget resides with the president. Within the policies and parameters established by the University of Maine System and the Board of Trustees (see University of Maine Budget Model Primer for description of these parameter), the president has final decision-making authority over all budget decisions. Nonetheless, faculty, staff and administrators have important roles to play within the proposed budget model governance plan.

In the proposed budget model, the president is formally advised by the University-Wide Budget Advisory Council. In addition, each of the Support Centers has a formal advisory council. The advisory councils make reports and recommendations to the University-Wide Budget Advisory Council including proposed changes to the Support Centers’ budgets for the coming year. Similarly, the Responsibility Centers report to the University-Wide Budget Advisory Council. The council reports to the president on the performance and financial status of the responsibility centers.

The structure of the governance model is diagrammed in Figure 2.

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*VPRDGS = Vice President for Research and Dean of the Graduate School. There are exceptions to this general illustration of how funds flow in the proposed model which are described below.

*Figures 2 and 8 are identical. A more thorough explanation of the governance model accompanies Figure 8.*
This section provides a detailed description of the proposed budget model.

Revenue Distribution

In the proposed model, revenues are distributed so that there is a clear connection between the revenue source and the purpose for which it is used. Furthermore, the revenue distribution plan is designed to create incentives and support for growth in enrollment, research, and public service.

State Appropriation. The state appropriation is used to fund the Central Administration, the Subvention Pool, and Financial Aid. Within the Central Administration, a portion of the state appropriation is used to fund the personnel and operations of the Offices of the President, the Executive Vice President for Academic Affairs & Provost, and the Vice President for Research & Dean of the Graduate School. Within Financial Aid, scholarship aid for Maine resident students is partially funded by the state appropriation. The bulk of the state appropriation is used to fund the Subvention Fund. The Subvention Fund is used to fund the portion of Responsibility Centers’ expenses that are not covered by their revenue. The Subvention Pool is described in more detail in the Central Administration section below (page 15). Figure 3 illustrates the distribution of state appropriation.
Tuition. Tuition revenue is used to fund Central Reserves, the Strategic Investment Fund, Financial Aid and some of the Responsibility Centers.

Central Administration/Central Reserves. When creating the budget for the next fiscal year, the Central Administration determines how much funding is needed to replenish Central Reserves and how much funding is needed to fund increases in the Central Administration offices (i.e., that portion of increased costs that is not covered by an increase in state appropriation). The total of these to amounts is funded from total tuition revenue (see Central Administration below for more detail about Central Reserves).

Strategic Investment Fund. In the proposed model, the university creates a Strategic Investment Fund with 3% of the tuition revenue from all sources. The Central Administration determines how, and for what purposes, these funds are used.

Financial Aid – Undergraduate. All institution-funded financial aid used to support non-resident undergraduate students and a portion of the aid used to fund resident undergraduate students is provided by the tuition revenue generated by non-resident students. The amount available is determined by the differential between the revenue generated by non-resident undergraduate students and the amount that would have been generated by these students had they been charged the resident rate. For example, in fiscal year 2019, non-resident undergraduate students generated approximately $87M. If the proposed budget model was in effect in fiscal year 2019, then approximately $46M would be available for resident and non-resident undergraduate financial aid. As context for interpreting this number, note that in fiscal year 2019, the university spent approximately $48M on financial aid for undergraduate students.

Financial Aid – Graduate. All financial aid used to support graduate students is funded from graduate tuition revenue. The percentage of graduate tuition revenue used to fund graduate student financial aid varies depending upon the type of graduate program. Sixty percent of Professional Programs tuition

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*“Institution-funded financial aid” refers to aid provided by the university. It does not include aid students receive from federal, state, grants or private sources. In this document, “financial aid” refers to institution-funded financial aid.*
revenue, 40% of Research Masters Programs revenue and 20% of Research Doctoral Programs revenue is used to fund graduate student financial aid (see Figure 5 and accompanying explanation).

Responsibility Centers. The remaining portion of the tuition revenue (i.e., the net revenue after Central Reserves, the Strategic Investment Fund, and Financial Aid are funded) is distributed to the Responsibility Centers. Tuition is distributed to the Responsibility Centers based upon their role in generating the tuition. The Responsibility Center that teaches the course receives 80% of the revenue generated by the students taking that course. For the most part this instructional revenue goes to colleges. However, the Office of Innovation and Economic Development offers the Innovation Engineering curriculum and the Division of Lifelong Learning offers some non-degree programs. Therefore, a portion of the teaching portion of the tuition goes to those Responsibility Centers. The remaining 20% of the revenue is distributed to the colleges that house the students’ majors.

The distribution of undergraduate tuition is illustrated in Figure 4.

![Diagram of undergraduate tuition distribution]

Working from left to right of Figure 4, undergraduate tuition revenue flows as follows. A portion is used to fund Central Reserves and the Central Administration. The Central Administration determines how much tuition revenue is needed to replenish Central Reserves and how much is needed for the Central Administrative offices. Three percent of the resident and non-resident tuition is used to fund the Strategic Investment Fund. From this point on, resident and non-resident tuition are treated differently:

Resident students: 80% of the tuition revenue goes to the Responsibility Center that houses the program teaching the course and 20% of the tuition revenue goes to the colleges that house the students’ majors.
Non-resident students: 20% of the non-resident rate tuition goes to the colleges that house the students’ majors. For the remaining 80% of the non-resident tuition, the Responsibility Center’s tuition allocation is calculated by multiplying the remaining 80% of the credit hours by the in-state rate. The resident to non-resident differential is then used to fund undergraduate financial aid.

Comments about Undergraduate Tuition Distribution: The proposed plan for distributing undergraduate tuition revenue is designed to create incentives for colleges to increase the number of students majoring in its programs and to increase the production of student credit hours taught. Providing colleges with 20% of the credit hour revenue generated by non-resident students at the non-resident rate creates an incentive for programs to recruit these students and provides resources for them to do so. Furthermore, the model creates a sustainable, rational, and defensible approach to funding of financial aid. In the model, all financial aid provided to non-resident students is funded by revenue generated by non-resident students. Furthermore, a portion of the funds used to support Maine students is provided by non-resident student tuition revenue.

The distribution of graduate tuition is diagrammed in Figure 5.

In the proposed model, graduate degree programs are categorized as one of three types: Professional Programs\(^9\), Research Masters Programs, and Research Doctoral Programs. The list of graduate degree programs in each category can be found in Appendix D. Three percent of the tuition revenue generated by each program is used to fund the Strategic Investment Fund. A percentage of the tuition generated by each program is used to fund Graduate Student Financial Aid. As described above, those percentages are 60%, 40% and 20% respectively for Professional, Research Masters and Research Doctoral programs. The balance of the tuition revenue generated goes to the college that houses the programs.

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\(^9\)Professional programs include non-thesis masters programs, certificate programs, Ed.D. degree, and non-degree programs. See Appendix D for a listing of these programs.
Unlike undergraduate tuition revenue, there is no splitting of graduate tuition revenue between the college that teaches the course and the college of the major. In most instances, graduate students take 100% of their courses from programs within the college offering the degree program. For those instances in which students take courses from a college other than the one that houses their degree program, the revenue sharing will follow the undergraduate model with 80% going to the college teaching the course and 20% to the college that houses the graduate degree program. This revenue sharing will be managed at the college level.

Comments on Graduate Tuition Distribution. The proposed plan for distribution of graduate tuition revenue is designed to create incentives for growth of professional and research programs. Program level incentives for growing enrollment in professional programs are created with the UMaine GOLD and UMaine TOPS programs. These programs, which are less expensive to deliver than research-intensive graduate programs, contribute a larger percent of the revenue they generate to Graduate Student Financial Aid. In this way, the Professional Masters program support overall growth of graduate education. The Research Masters and Research Doctoral programs contribute less to Graduate Student Financial aid and consequently more revenues go to the colleges, providing the colleges with an incentive to grow research and with resources to manage these relatively expensive programs.

DLL Tuition Revenue. The distribution of undergraduate and graduate tuition is handled differently for courses taught through DLL. For DLL courses taught by adjunct faculty or as overload, 40% of the revenue goes to the Responsibility Center housing the program teaching the course, 40% goes to DLL, and 20% goes to the college that houses the students' majors. For courses taught by regular faculty members as part of their normal work load (i.e., not-overload), 10% of the tuition is distributed to the Division of Lifelong Learning (DLL) to provide support for online teaching and learning, 70% goes to the college teaching the course and 20% to the colleges that house the students' majors.

Unified Fee. In the proposed model, the Unified Fee is distributed to Athletics and to the college that generated the fee (i.e., the college that teaches the course). Thirty-five percent of the Unified Fee revenues goes to support Athletics and the balance (65%) is distributed to the colleges.

F&A Recovery. The standard distribution of funds secured through F&A recovery are as follows. Fifty percent goes to the office of the Vice President for Research to support Research Administration. The remaining 50% is distributed to the Responsibility Center that produced the grant (see Figure 6).
The college or Cooperative Extension dean decides how to distributed the F&A Recovery funds received by their college. It is recommended that a portion go to principle investigators and a portion goes to the PIs’ home units (see Working Group on F&A Recovery Distribution report in Appendix B). Similarly, the VPRDGS determines the distribution of the F&A Recovery funds going to the Research Centers and the VP for Innovation and Economic Development determines distribution for the OIED.

Large research centers may apply for an exception to the standard F&A recovery distribution plan. Centers become eligible for a separate F&A recovery distribution plan if the research center has significant facilities and F&A costs (e.g., more than 20,000 square feet of laboratory facilities space; more than $3 million/year of external research funding; more than 20 FTE soft-funded personnel to manage - see Working Group on F&A Recovery Distribution report in Appendix B).

**MEIF**, Most of the Maine Economic Improvement Funds have been invested in salary and benefits as well as base operating budgets. The proposed budget model does not include changes to the current distribution of MEIF funds.

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11For more information about MEIF, Sales & Services, Other Student Fees, and Private Support, see University of [University of Maine Budget Model Primer](#).
Sales & Services. Revenues generated through sales and services will continue to go to the units that generated the revenue. No change to the distribution of sales and services revenue is recommended.

Other Student Fees. No change in the way revenue raised through other student fees (i.e., fees not included in the Unified Fee) is recommended.

Private Support. For the most part, how private support is used to support the university is determined by the donors. Therefore, no change in the distribution of private support revenue is recommended.

Restricted Federal Funds. The university receives funds through the federal appropriation. These funds are restricted in that they can only be used for specified purposes. Smith-Lever Acts partially fund Cooperative Extension. Similarly, the Hatch Act and the McIntire-Stennis Act fund the Maine Agriculture and Forestry Experiment Station and are administered through the College of Natural Sciences, Forestry and Agriculture. The use of these funds will not change in the proposed model.

Central Administration

The Central Administration is funded from two sources: State Appropriation and Tuition.

Administrative Offices. The Offices of the President, the Executive Vice President for Academic Affairs & Provost, and the Vice President for Research & Dean of the Graduate School comprise the administrative offices of the Central Administration. These offices are funded from the State Appropriation in year one of implementation (see Appendix C for full description of the units included in these offices). Annual increases in the budgets of these administrative offices in subsequent years is funded first by increases in state appropriation and second (i.e., the remaining balance) by tuition revenue.

Funds. The Central Administration is responsible for management of four significant funds: Central Reserves, the Strategic Investment Fund, Financial Aid, and the Subvention Fund.

Central Reserves. The National Association of College and University Budget Officers (NACUBO) recommends that universities hold at least 25% of their unrestricted operating budget in reserves (i.e., enough to sustain operations for three months). These reserves may be held centrally as well as in units throughout the university. In the proposed model, funding of Central Reserves is given high priority in order to assure that the university has adequate total reserves. Each year, the Central Administration determines the amount needed to replenish the Central Reserves to an appropriate level. Tuition is the revenue source used to replenish Central Reserves.

Strategic Investment Fund. Three percent of all tuition revenue is used to create the Strategic Investment Fund. This fund is used by the Central Administration to make investments to support advancement toward strategic goals. The fund may be used for one-time or base investments, recognizing that the latter will decrease the funds available to invest in future years. For example, if the
Strategic Investment Fund is $4.5M in year one, and the Central Administration makes $1M in base-funded investments and $3.5M in one-time investments that year, then $3.5M will be available to invest in year two (assuming that tuition revenues for year one and year two are equivalent). The Strategic Investment Fund will be evaluated and recalibrated in year five (see Evaluation, page 32).

Financial Aid. Financial Aid provided by UMaine is funded with tuition revenue as described above. Under the leadership of the President, the Provost manages the undergraduate financial aid budget. Working with the Vice President for Enrollment Management, the Director of Student Financial Aid, the Chief Business Officer, and the Assistant Provost for Institutional Research and Assessment, the Provost determines the undergraduate financial aid budget. Similarly, under the President's leadership, the VPRDGS works with the Chief Business Officer and the Assistant Provost for Institutional Research and Assessment to determine the graduate financial aid budget.

Subvention Fund. State Appropriation is used to create the Subvention Fund. This fund is used to invest in Responsibility Centers in order to cover expenses that cannot be met by the Centers’ revenues. These are base-funded investment in year one of implementation. For years two through five, the amount of subvention Responsibility Centers receive will only change if the State Appropriation changes. For example, if UMaine's portion of the State Appropriation increases by one percent, then the Subvention received by the Responsibility Centers will increase by one percent.

Responsibility Centers

The Responsibility Centers' budgets are funded from several revenue sources. The revenue source for each Responsibility Center is described below.

Colleges. Colleges' budgets are funded from all revenue sources.

Tuition. The largest source of revenue for college is student tuition. As described above, undergraduate and graduate tuition are distributed via transparent formula. These formulas are modified for distribution of tuition generated from online instruction.

Undergraduate. Colleges receive 80% of the tuition generated by the courses taught by college faculty and 20% of the tuition generated by the students whose primary majors are within the college, except for online courses (see Online below).

Graduate. Colleges receive 37% of the revenue generated by their Professional Masters Programs, 57% of the tuition revenue generated by their Research Masters Programs, and 77% of the revenue generated by their Doctoral Programs.
Online. For courses taught by adjunct faculty or by regular faculty as overloads, and for which DLL pays the adjunct or overload salary, DLL receives 40% of the tuition revenue, the college housing the program teaching the course receives 40%, and 20% goes to the colleges that house the students’ majors. For courses taught by regular faculty as part of their normal teaching load (i.e., online/onload), 10% of the tuition revenue goes to DLL and the net tuition is distributed according to the standard distribution plan for undergraduate or graduate tuition.

Unified Fee. Colleges receive 65% of the revenue generated by the Unified Fee. Each college receives its share of this amount based upon the percent of total student credit hours it produced.

F&A Recovery. Fifty percent of F&A Recovery is distributed to colleges. Each college receives the percent of this amount based upon the percent of F&A Recovery funds generated by its faculty, staff and students.

Other Revenues. The proposed model recommends no changes in how Other Student Fees (i.e., not Unified Fee), MEIF, Sales & Service, Restricted Federal Funds, or Private Funds are distributed.

Subvention. The amount of base fund from the Subvention Fund each college receives in year one will equal the revenue-expense gap when expenses are larger than total revenue. This amount is held constant in ensuing years with changes occurring only when the state appropriation changes.

The distribution of revenue to the colleges recommended in the proposed budget model is summarized below.

1. Tuition
   a. Undergraduate (80% SCH non-DLL taught (70% if online/onload); 40% of DLL (e.g., overload/adjunct online) SCH taught by college faculty; 20% of SCH taken by students with majors in colleges (DLL or non-DLL))
   b. Graduate (for non-DLL SCHs, 37% of Professional Masters; 57% of Research Masters; 77% of Doctorate; for DLL SCHs 40% of overload/adjunct online SCH taught by college faculty)
2. Unified Fee (% of SCH taught X 65% of total Unified Fee)
3. F&A Recovery (50% of F&A generated by college faculty/staff)
4. Other Student Fees (100% generated by college units)
5. MEIF (continue with current base funds)
6. Sales & Service (100% generated by college units)
7. Restricted Federal Funds (as directed by Federal policies)
8. State Appropriation (subvention)
9. Private funds (as directed by donors)

Research Centers. In the proposed model Research Centers are treated in a way that is analogous to a college with the VPRDGS serving in the role of dean and the research centers analogous to departments. The revenues described below are managed by the VPRDGS, much as the revenues that go to colleges are managed by their deans.
The research centers are funded by a portion of the F&A recovery funds they generate, MEIF funds, revenue from Sales & Service, and State Appropriation through the Subvention Fund. The Research Centers receive 50% of the F&A Recovery generated by the centers. These funds are managed by the Vice President for Research. It is recommended that a portion of these funds are distributed to principal investigators and to individual research centers (see Working Group on F&A Recovery Distribution report in Appendix B). Research Centers will continue to receive the MEIF funds they currently receive and will receive funds generated through contracts with business and industry consistent with current policies and practices. If they receive funds from private donors they will continue to receive these funds. Research Centers will receive Subvention Funds to balance revenues and expenses in year one. The amount of Subvention of they receive is held constant in ensuing years with changes occurring only when the state appropriation changes.

The distribution of revenue to the Research Centers recommended in the proposed budget model is summarized below.

1. F&A Recovery (50% of F&A generated by center faculty)
2. MEIF (continue with current base funds)
3. Sales & Service (100% generated by center)
4. State Appropriation (subvention)

**Division of Lifelong Learning.** DLL is funded through tuition revenue, the Online Fee, and Sales and Service. DLL receives 40% of the tuition revenue generated by adjunct faculty or regular faculty teaching online courses as overload when DLL is responsible to pay the salaries for these courses. DLL receives 10% of the tuition revenue from courses taught online by regular faculty as part of their normal workload. The Division receives 100% of the Online student fee and 100% of the Sales & Service revenue it generates. It is anticipated that DLL will meet all of its expenses with these sources of revenue (i.e., DLL does not receive Subvention Funds in the proposed model).

The distribution of revenue to DLL recommended in the proposed budget model is summarized below.

1. Tuition (40% of tuition for overload/adjunct courses; 10% of on-load/online tuition)
2. Online Fee (100%)
3. Sales & Service (100% generated by unit)

**Cooperative Extension.** Cooperative Extension is funded by federal funds (Smith-Lever), F&A Recovery generated by its faculty and staff, MEIF funds at the current level, and the Sales & Service it generates. Cooperative Extension provides essential and highly valued public service throughout the state. State Appropriation, through the Subvention Fund, will provide a significant portion of its revenue budget. The amount of Subvention is held constant in ensuing years with changes occurring only when the state appropriation changes.

The distribution of revenue to Cooperative Extension in the proposed budget model is summarized below.

1. Federal Funds (100% of restricted funds)
2. F&A Recovery (50% of F&A generated by Extension faculty/staff)
3. MEIF (continue with current base funds)
4. Sales & Service (100% generated by unit)
5. State Appropriation (subvention)
**Athletics.** Athletics is funded by the Unified Fee, its ticket and other sales, private donations, and State Appropriation. In the proposed model Athletics receives 35% of the Unified Fee as well as 100% of its sales revenue and 100% of designated donations. The State Appropriation will support Athletics through the Subvention Fund. The amount of Subvention they receive is held constant in ensuing years with changes occurring only when the state appropriation changes.

The distribution of revenue to Athletics in the proposed budget model is summarized below.

1. Unified Fee (35% of total Unified Fee)
2. Sales & Service (100% generated by Athletic sales)
3. Private Funds (as directed by donors)
4. State Appropriation (subvention)

**Office of Innovation & Economic Development.** OIED will receive 80% of the tuition revenue generated by Innovation Engineering courses. It will receive 50% of the F&A Recovery generated by its staff and 100% of its Sales & Service. Subvention funds will be used to balance the OIED budget in year one. The amount of Subvention is held constant in ensuing years with changes occurring only when the state appropriation changes.

The distribution of revenue to OIED in the proposed budget model is summarized below.

1. Tuition (80% SCH taught)
2. F&A Recovery (50% of F&A generated by OIED staff)
3. MEIF (continue with current base funds)
4. Sales & Service (100% generated by unit)
5. State Appropriation (subvention)

**Auxiliaries.** Auxiliaries operates the residence halls, dining services and university bookstore. In the proposed model, it receives 100% of the revenue that it generates through these operations (i.e., Sales & Service). Sales & Service is Auxiliaries sole source of revenue.

**Support Centers**

The Support Centers’ base budgets are funded by the Responsibility Centers (see Exceptions in the Model, page 27). In the proposed model, the Responsibility Centers that utilize the Support Centers services are responsible for a portion of the base budget of the Support Centers in approximate proportion to their use of the Support Centers’ services. Figure 7 illustrates which Responsibility Centers fund which Support Centers.
The formula used to determine how the base budget of each Support Center is distributed across the Responsibility Centers is described below.

**Academic Support Services (AS).** The Colleges are responsible for the base budget of Academic Support Services. Each college’s portion of the total base budget for Academic Support Services is equal to the average of its proportion of the total student FTE\(^{16}\) and the total faculty FTE. The formula for determining the portion of the Academic Support Services base budget covered by College X is:

\[
\text{College X cost} = 0.5\left(\% \text{ of total student FTE} + \% \text{ of total faculty FTE}\right) \times \text{AS Base Budget}^{17}
\]

**Student Affairs (SA).** The Colleges are responsible for the base budget of Student Affairs. Each college’s portion of the total base budget for Student Affairs is equal to its proportion of the total student FTE. The formula for determining the portion of the Student Affairs base budget covered by College X is:

\[
\text{College X cost} = \% \text{ of total student FTE} \times \text{SA Base Budget}
\]

**Enrollment Management (EM).** The Colleges are responsible for the base budget of Enrollment Management. Each college’s portion of the total base budget for Enrollment Management is equal to its proportion of the total undergraduate student FTE. The formula for determining the portion of the Enrollment Management base budget covered by College X is:

\[
\text{College X cost} = \% \text{ of total UG student FTE} \times \text{EM Base Budget}
\]

\(^{16}\)FTE = full time equivalent

\(^{17}\)In this and subsequent formula "\% of total student FTE" is the percent of UMaine’s total student FTE enrolled in College X and "\% of total Faculty FTE" is the percent of UMaine’s total faculty FTE with appointments in College X.
Graduate School (GS). The Colleges, excepting the Honors College, are responsible for the base budget of the Graduate School. Each college's portion of the total base budget for the Graduate School is equal to its proportion of the total graduate student FTE. The formula for determining the portion of the Graduate School's base budget covered by College X is:

\[
\text{College X cost} = \% \text{ of total graduate student FTE} \times \text{GS Base Budget}
\]

Research Administration (RA). The base budget for Research Administration is partially covered by F&A Recovery. Recall that 50% of the F&A Recovery is directed to Research Administration. The Colleges, the Research Centers, Cooperative Extension, and the Office of Innovation & Economic Development (OEID) are responsible for the portion of the base budget of Research Administration not covered by F&A Recovery. Two factors complicate the determination of the appropriate distribution of the Research Administration base budget. First is the variability in research assignments across faculty. Responsibility Centers are charged the percent of the Research Administration base budget equal to the percent of the total UMaine faculty research appointment in their Responsibility Center. Second is the variability in grant-funded research activity across Responsibility Centers. Responsibility Centers are charged the percent of the Research Administration base budget equal to the percent of UMaine's total research expenditures attributable to their Responsibility Centers. The formula for determining the portion of Research Administration's base budget covered by Responsibility Center X are:

\[
\text{RA Net Base Budget} = \text{RA Base Budget} - 50\% \text{ of total F&A Recovery}
\]

\[
\text{Responsibility Center X cost} = 0.5(\% \text{ of total research appointment time faculty FTE} + \% \text{ of total research expenditures}) \times \text{RA Net Base Budget}
\]

Library. The base budget for the Library is covered by the Colleges, the Research Centers, Cooperative Extension and OIED. Each of these Responsibility Centers' portion of the total base budget for the Library is equal to the average of its proportion of the total student FTE and the total faculty FTE. The formula for determining the portion of the Library base budget covered by Responsibility Center X is:

\[
\text{Responsibility Center X cost} = 0.5(\% \text{ of total student FTE} + \% \text{ of total faculty FTE}) \times \text{Library Base Budget}
\]

Facilities & Services. (F&S). The expenses included in Facilities and Services can be categorized as those driven primarily by space (the Facilities expenses) and those driven by people (the Services expenses). Furthermore, Facilities expenses vary significantly depending upon the type (e.g., storage shed versus teaching laboratory) and location (e.g., on versus off the main campus in Orono) of the space. All space assigned to Responsibility Centers will be categorized as tier 1, tier 2, or tier 3 and the expense associated with each type of space will be adjusted accordingly (see Space Expense Working Group's report and recommendations in Appendix B). All Responsibility Centers share in covering the base budget for Facilities & Services. Budget lines within Facilities & Services are designated as facilities or services. Each Responsibility Center's portion of the total base budget for Facilities & Services is equal to the total of its proportion of student FTE for
services expense plus its proportion of total space\textsuperscript{1} for the facilities expenses. Auxiliaries portion of the Facilities & Services base budget is calculated differently (see Exception in the Model, page 27). The formula for determining the portion of the Facilities & Services base budget covered by Responsibility Center X is:

\[
\text{Responsibility Center X cost} = \%\text{total student FTE} \times (\text{Services total expenses} – \text{Auxiliaries’ portion}) + \%\text{total space} \times \text{Facilities total expenses}
\]

\textit{UMS Shared Services.} (SS). All Responsibility Centers share in covering the base budget for UMS Shared Services. Each Responsibility Center’s portion of the total base budget for UMS Shared Services is equal to its proportion of the total employee FTE. The formula for determining the portion of the UMS Shared Services base budget covered by Responsibility Center X is:

\[
\text{Responsibility Center X cost} = \%\text{ of total employees FTE} \times \text{UMS Shared Services Budget}
\]

\textit{Support Centers: Beyond the Base Budget.} Many of the Support Centers receive additional funds in addition to the base budgets funded by the Responsibility Centers. For example, the Library receives some funds directly from the state and there are some endowed funds that support the operations of Student Affairs. Facilities & Services gets a significant portion of its operating budget from services it provides to Responsibility Centers, Support Centers, and the Central Administration beyond what might be considered base services. The proposed budget model does not recommend changes to these service level agreements. Facilities & Services will continue to fund a significant portion of its operation by the revenue it generates through service level agreements with units throughout the university.

\textbf{Governance}

The University of Maine is committed to shared governance and the proposed budget model honors this commitment. Within the policies and parameters established by the University of Maine System and the Board of Trustees (see \textit{University of Maine Budget Model Primer} for description of these parameter), the President has final decision-making authority over all budget decisions. Nonetheless, faculty, staff and administrators have important roles to play within the proposed budget model governance plan.

In the proposed model, academic responsibility aligns with budget authority. The college deans, and the heads of the other Responsibility Centers are important decision-makers with respect to achieving the university’s strategic goals. In the proposed model, this responsibility is aligned with significant budgetary authority.

The Support Centers support the revenue-generating work of the Responsibility Centers. Hence, the Responsibility Centers are motivated to provide appropriate budgetary support for the Support Centers, since their effectiveness and efficiency is crucial to the success of the Responsibility Centers.

Students, staff, and, to a significant degree, faculty have a formal voice in budget planning in the proposed model. A diagram of the committee structure that provides advice

\textsuperscript{1}Here, and in the formula that follows, the total space is the total square footage occupied by the Responsibility Centers.
and governance of the budget model is provided in Figure 8\textsuperscript{19}.

![Figure 8. Proposed budget model: Governance structure.]

The following description of the governance model starts on right side of Figure 8 and progresses to the left.

**Support Centers**

The support centers are represented in the rectangular box on the right side of the diagram. Each of the Support Centers has an advisory council. The council’s role is to review the center’s: 1) performance against goals for the previous year; 2) goals proposed for the current year; 3) actual expenses against budget for the previous year; 4) changes in operations to align expenses with budget for current year; and 5) proposed budget for the coming year. Annually, the council chair makes a report to the University-Wide Budget Advisory Council about the Support Center’s performance and budget. Based upon the recommendations of the Advisory Council, the chair may propose changes to the support centers’ budgets for the coming year.

The responsibilities and proposed membership of each of the advisory councils is described below.

\textsuperscript{19}Figure 8 and Figure 2 are identical.
Academic Affairs Advisory Council. The council reviews performance and budgets for the Library, Enrollment Management, and Academic Affairs Support Services. The Dean of Libraries, the Vice President for Enrollment Management, and the Senior Associate Provost for Academic Affairs present their respective units to the University-Wide Budget Advisory Committee in September.

Associate Provost for Division of Lifelong Learning (Chair)
Dean CLAS
Dean Engineering
Dean NSFA
Dean MBS
Dean COEHD

Dean Undergraduate School of Business
Dean Graduate School of Business
Dean Honors College
Faculty Senate Academic Affairs
Faculty Senate Library Committee Chair (or rep.)

Student Affairs Advisory Council. The council reviews the performance and budgets of the units included in Student Affairs. The Vice President for Student Life & Dean of Students presents the report to the Support Centers Budget Advisory Committee in September.

Vice President for Enrollment Management (Chair)
Dean CLAS (or designee)
Dean Engineering (or designee)
Dean NSFA (or designee)
Dean COEHD (or designee)

MBS Undergraduate Dean (or designee)
Dean Honors College (or designee)
Graduate Student Government representative
Undergraduate Student Government representative

Research and Graduate Advisory Council. The council reviews the performance and budgets for the Office of Research Administration, the Office of Research Compliance, the Office of Research Development, Maine CORE, and the Graduate School. The three offices are presented by their respective directors, Maine Core by its General Manager, and the Graduate School by the Associate Vice President for Graduate Studies & Senior Associate Dean.

Chief Business Officer (Chair)
Dean CLAS (or designee)
Dean Engineering (or designee)
Dean NSFA (or designee)
Dean COEHD (or designee)
Student Affairs rep. (selected by VP)

MBS Undergraduate Dean (or designee)
Director of Athletics (or designee)
Dean Cooperative Extension (or designee)
Dean Honors College (or designee)
Research Center Directors (n=2, selected by VPRDGS)

Facility Senate University Environment Committee Chair (or rep.)
Vice President for Research and Dean of Graduate School (Chair)
Dean CLAS (or designee)  Dean Graduate School of Business (or designee)
Dean Engineering (or designee)  Dean Cooperative Extension (or designee)
Dean NSFA (or designee)  University Research Council Chair (or rep.)
Dean COEHD (or designee)  Research Center Directors (n=2, selected by VPRDGS)
Graduate Board Faculty rep.  Graduate Student Government rep.
Faculty Senate Research & Faculty reps. (n=2, selected by Scholarship Committee Chair (or rep.)

Responsibility Centers

The Responsibility Centers report to the University-Wide Budget Advisory Council twice a year, in September/October and in March/April. The council reviews the performance of each responsibility center against their respective goals as well as the university’s strategic goals and priorities. Each responsibility center meets with the Council twice a year. The Council reviews: 1) performance against goals for the previous year; 2) goals proposed for the current year; 3) actual revenues and expenses for previous year; 4) anticipated revenues and expenses for the current year; 5) changes in operations to align anticipated revenue and expenses in current year; and 6) proposed budget for the next year. The University-Wide Budget Advisory Council reports to the President on the performance and financial status of the responsibility centers.

Given the diversity of size, structure and mission of the Responsibility Centers, the proposed model does not include a description of the structures for involving faculty and staff in budget decisions within the Responsibility Center. Each Responsibility Center is to develop its own internal budget advisory structure and practices.

University-Wide Budget Advisory Council

The University-Wide Budget Advisory Council advises the President regarding adjustments to the base budgets of the Support Centers, the Strategic Investment Fund, Central Reserves, performance of the Responsibility Centers and other fiscal issues about which the President might seek advice. The council meets formally with the President to make recommendations about the Support Centers base budgets in November/December and additionally as requested by the president.

Annually, the chairs of each of the support center advisory councils meets with the University-Wide Budget Advisory Council to report on the performance of their Support Centers and make recommendations about base budget adjustments for the next fiscal year. Similarly, the heads of each of the Responsibility Centers meets annually with the University Wide Budget Advisory Council to report on the performance and financial status of their respective Responsibility Centers.
Membership in the University-Wide Budget Advisory Council includes:
Executive Vice President for Academic Affairs & Provost (Chair)
Vice President for Research & Dean of the Graduate School
Vice President for Student Affairs & Dean of Students
Chief Business Officer
Chief of Staff
Vice President for Enrollment Management
Vice President for Innovation & Economic Development
Vice President for Human Resources
Deans Council representatives (three with staggered, rotating appointments)
Faculty Senate President
Faculty Senate Finance and Institutional Planning Committee Chair
Faculty Senate Program Creation and Reorganization Review Committee Chair
Undergraduate Student Government President
Graduate Student Government President
Professional Employee Advisory Council Chair
 Classified Employee Advisory Council Chair
Executive Director of Auxiliary Services

Timeline

Budget development occurs throughout the year. The proposed model includes time windows within which the Support Centers’ advisory councils make their annual reports to the University Wide Budget Advisory Council and when the Responsibility Centers make their semi-annual reports to the University Wide Budget Advisory Council. The timeline for the development of the Support Centers’ and Responsibility Centers’ budgets is diagrammed in Figure 9.

Figure 9. Timeline for annual budget development.
Central Administration

The President receives advice on budgetary matters from the University-Wide Budget Advisory Council as described above. In addition, she is advised on the management of the Strategic Investment Fund, and the Central Reserves by her cabinet. The Provost, the Vice President for Enrollment management and the Chief Business Officer are the prime advisors regarding the Financial Aid fund.

The President meets with the Executive Committee of the Faculty Senate on a monthly basis. This committee is comprised of the President and Vice-President of the Senate as well as the chairs of the Senate's standing committees. The Faculty Senate is the faculty's formal voice in the shared governance of the university and the Executive Committee represents the Senate. It is anticipated that the President will seek advice from the Executive Committee on matters relating to the budget throughout the academic year.

The proposed budget model anticipates that the Central Administration will continue the tradition of making public budget presentations to the university community multiple times each year. In addition, the Central administration will meet with the Faculty Senate's Finance and Institutional Planning Committee (FIPC) regularly throughout the academic year. The public presentations, the FIPC meetings and the monthly meetings with the Faculty Senate's Executive Committee provide the fora for sharing information with, seeking advice from, and being accountable to the university community.

The President is, of course, accountable for the university's budget to entities outside of the university including the university's Board of Visitors and the University of Maine System's Board of Trustees. The mission of the Board of Visitors includes review and advice regarding the university's fiscal operations and plans. The Board holds formal meetings quarterly and the President is in contact with Board members throughout the year.

The President is accountable to the University of Maine System Board of Trustees with respect to management of the university's budget. The Board of Trustees has fiduciary responsibility for the System including the University of Maine. Led by the President, the Central Administration presents the university's budget to the Board's Finance, Facilities & Technology committee annually. And, working through the System office, the university's budget is presented to the full board annually.

Exceptions in the Model

There are some exceptions to the standard flow of revenues and expenses diagramed in Figure 1. These are summarized below.

Private Support. Funds that units receive from endowments and annual gifts are managed by the units indicated in the fund descriptions and donors' prescriptions. As we have seen a significant portion of the private support is directed to student financial aid. Most of these funds are administered by the Office of Student Financial Aid which is in the Enrollment Management Support Center. Other Support Centers such as Student Affairs and the Library receive funds directly from private gifts.
Graduate School. In addition to funding from the colleges, the Graduate School is also partially funded by graduate application fees and tuition generated by programs housed in the Graduate School (i.e., Graduate School of Biomedical Sciences & Engineering, Intermedia MFA, Interdisciplinary MA, and Interdisciplinary PhD). The distribution of tuition revenue for these programs follows the formulas diagramed in Figure 5.

Research Administration. Fifty percent of the F&A recovery revenue is used to fund Research Administration and the balance is covered by the Colleges, Research Centers, Cooperative Extension, and OIED. This budget is managed by the Vice President for Research & Dean of the Graduate School.

Auxiliaries. As a Responsibility Center, Auxiliaries is responsible for a portion of the cost of some Support Centers. In the proposed model, Auxiliaries contributes to the base budgets of Facilities & Services and the UMS Shared Services. The standard formula is used for UMS Shared Services. However, because Auxiliaries covers its utilities and facilities, it is not charged for items designated facilities within Facilities & Services. The formula for determining Auxiliaries portion of Facilities & Services base budget is:

\[ \text{Auxiliaries cost} = \% \text{students in residence} \times \text{Services total expenses} \]

In addition, Auxiliaries provides funds to the Central Administration to fund a portion (24%) of the funds base budgeted each year to cover the provision of bad debt (i.e., unpaid student bills). Finally, Auxiliaries has helped to support a variety of programs across campus on an annual basis (e.g., Maine Day, Green Campus Initiative, Accepted Students Days). While not part of these programs’ base budgets the units rely on these funds. It is anticipated that Auxiliaries will continue to support these programs as its budget allows and at the discretion of the Executive Director.

Building Base Budgets

In the proposed budget model, the base budgets for Responsibility Centers and Support Centers are determined using the formulas described above. For the Responsibility Centers, the data used to determine base budget funding are from the preceding fiscal year. Using the definitions of FY0, FY1, and FY2 from Figure 9, the FY2 base budgets are determined by FY0 data (e.g., SCHs, F&A Recovery, etc.), excepting Private Support, MEIF, and Subvention funds. MEIF and Subvention funding is projected for FY2 and Private Support is distributed over the course of FY2 as determined by the foundations holding or managing the funds.
For Support Centers the base budgets are determined by the President via the shared governance processes described above. The distribution of the base budget cost across the Responsibility Centers for the next fiscal year is based upon data from the previous fiscal year. Once again using the definitions of FY0, FY1, and FY2 from Figure 9, the FY2 Support Center base budget costs are distributed across Responsibility Centers using FY0 data (e.g., student FTE, employee FTE, square footage etc.).
Implementation

This report was developed in the spring 2020 semester, in the midst of the COVID-19 pandemic crisis when the university's normal operations and planning mechanisms were disrupted. The full impact of the pandemic on the university's short-, mid- and long-term revenues and expenses is unclear at the time this report is being submitted. Given these circumstances, no specific time line for implementation of the proposed budget model is recommended. Rather, FY1 is used to designate the first year of implementation, with FY0 being the year prior to implementation, FY2 the second year of implementation and so on.

Before implementing the proposed budget model, two important factors should be taken into consideration. First, it is recommended that the proposed budget model be implemented in its entirety. The approach to budgeting recommended in this report is an integrated set of practices. Changes to the base budgets of Support Centers, for example, impacts the budgets of the Responsibility Centers. The proposed model seeks to align revenue and expense distributions in such a manner as to create incentives and rewards for decisions and actions that align with the university's mission and vision. To implement selected recommendations only would be a risky strategy that may have unintended consequences. For example, preserving the current approach to budgeting while implementing financial incentives for colleges to grow credit hours would require reallocating resources from other, as yet unspecified, areas of the university's budget to cover the increased costs. In the proposed model, by contrast, colleges are rewarded for credit hour growth by increased revenues, but along with the increased revenue comes increased responsibility for Support Centers’ expenses. Second, it is recommended that the university commit to implement the budget model for five years before significant changes to the budget model are made. The incentive/rewards built into the model require time to exert their impact. Increases or decreases in student credit hours, for example, will not impact the colleges’ revenues until the following fiscal year. Frequent changes to revenue and expense formula distributions run the risk of undermining the incentives system built into the model.

Should UMaine adopt the proposed budget model, a phased approach to implementation is recommended. The key tasks for each phase of implementation are described below.

Phase I: Preparation

These tasks need to be completed before implementation of the proposed model:

- **Establish Central Reserve Target.** Charge a working group to determine a target for the university's Central Reserves based on best-practice guidelines (see https://www.nacubo.org/). The working group will need to determine what funds will be carried forward into Central Reserves in FY1 and how much tuition revenue will need to be added to reach the target goal.\(^{20}\) It is estimated that this task can be completed in one month.

- **Identify and Categorize Space.** Charge a working group to identify all spaces assigned to Responsibility Centers and to categorize each space as tier 1, tier 2, or tier 3 following the guidelines described in Appendix B. The working group will recommend the appropriate weighting for each tier to be used in the expense distribution formula. These recommendations should be vetted by the appropriate campus bodies (e.g., Deans Council) before going to the President for final approval. It is estimated that this work can be completed in two months.

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\(^{20}\)Depending upon the gap between the Central Reserves available in FY1 and the target level, a multiyear plan may need to be developed to achieve the target level.
• Build Support Structures for F&A Recovery Distribution. Develop a mechanism for tracking changes in percentage of credit in PARS. For example, if a PI leaves the project or university, then that individual's percentage of credit as of that point in time will need to be reassigned. In addition, working with Human Resources, assure that for faculty with jointly appointed positions (e.g., 50% in a department and 50% in a research center), the appointments are correctly recorded in MaineStreet to facilitate valid distribution of F&A Recovery funds. It is estimated that this work can be completed in one month.

• Test Budget Model. With the information regarding Central Reserves and space categorization integrated into the proposed budget model, it should be tested using extant as well as hypothetical data. The initial test should use revenue and base budget data from the most recently completed fiscal year. Additional tests should "stress" the model by making assumptions about changes in major revenue sources (e.g., 5% tuition revenue reduction). Appendix F describes how budgets would look under the proposed model if built on FY2019 data. It is estimated that this work could be completed in one month.

Phase II: Simulation
The proposed model represents a significant shift in the university's financial operations. In FY0, UMaine will continue its current budget-development processes and will simultaneously track revenue and expense flow as if the proposed model was in operation. During the simulation phase, the university will assure that data are available to those who need it in a timely fashion and that personnel are prepared to understand and use the data for budget building. Finally, the governance structure will be established and the advisory councils will participate in budget planning for FY1. Guided by the principles established for the proposed budget model (see page 4), improvements in structures and processes will be made over the course of FY0 to prepare for FY1 implementation. Key tasks to accomplish include:

• Test and Improve Information Systems. Are the necessary revenue and expense data available to the Central Administration, Responsibility Centers, and Support Centers in usable format and in time for budget preparation? What improvements to information systems and processes are needed?

• Personnel Development. Do the Responsibility Centers have the personnel to analyze and organize revenue and expense data? What are the professional development needs of key people in key financial management positions?

• Build Governance Structure. Develop and charge budget advisory councils. Establish a schedule for reports and advisory council meetings guided by those described in Figure 9. What changes are needed in report formats, committee memberships, timing of meetings, and meeting structures to successfully implement governance model?

The specific tasks described in the Simulation phase would occur over the course of FY0.

Phase III: Implementation
The proposed budget model will be implemented in FY1 and will be the operating model for the ensuing four fiscal years. While some adjustments to the budget building and governance processes will likely occur during these years, it is important that basic revenue and expense distribution rules remain in place. Recall that one of the goals of the proposed model is to “incentivize mission- and vision-driven decision making." For the proposed model to have the incentivizing impact anticipated, units need to experience the financial benefits of increased productivity (e.g., increased majors, student credit hours,

21The model test run described in Appendix F makes assumptions about Central Reserves and space expenses that are not likely to be valid. A new simulation with FY2019 data should be run after the Central Reserve and space weighting work is completed.
and/or funded research) and manage the consequences of decreased productivity. Similarly, one of the guiding principles in the development of the proposed model is that “revenues and expenses are distributed via predictable, transparent, understandable, and time-efficient processes.” If frequent adjustments are made to revenue and expense distributions, then revenues and expenses are no longer predictable, transparent, or understandable.

**Phase IV: Evaluation.**

The impact of the proposed budget model should be formally evaluated. The recommended evaluation should include the following:

- **Evaluation Team.** The President should establish a team to evaluate the budget model in FY4. The team should include a representation of administrators, faculty and staff, perhaps modeled after the Budget Model Steering Committee (see page 3). The Evaluation Team will use data from FY1, FY2 and FY3 to evaluate the impact of the proposed budget model and should engage the broader university community in the evaluation process. The Evaluation Team should present recommendations to the President prior the close of FY4.

- **Goals and Principles.** The goals and principles established at the outset of the budget transformation process should be used as the benchmarks for evaluating the proposed budget model.

- **Model Modifications.** The President, with the appropriate advice from the university community and stakeholders (see Governance, page 22), will have final authority over changes to the budget model. Changes should be implemented in FY6. While the proposed budget model will be in place in FY5, that year will be used for planning to implement the modified budget model.

**University of Maine at Machias**

Currently, the University of Maine's and the University of Maine at Machias's budgets are separate. Assuming that this will be the case going forward, a process should be implemented to migrate UMM to a budget model analogous to the UMaine model described in this report but modified so as to fit the size, scope and culture of UMM. Based on the experience at UMaine, the recommended steps in this process should include:

- Step 1. Develop a clear description of UMM's current budget processes.
- Step 2. Identify goals and principles for the revised budget model.
- Step 3. Organize the units within UMM into Central Administration, Responsibility Centers, and Support Centers.
- Step 4. Develop and test draft formula for distribution of revenue and expenses.
- Step 5. Run the new budget model in parallel with the current budget model for one year as described in the Simulation Phase for UMaine above.
- Step 6. Implement the revised model.
- Step 7. Evaluate the model against the goals and principles.

As occurred at the University of Maine, it is recommended that the UMM community be engaged in each step of the development of the budget model.
List of Appendices

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Appendix A

President Ferrini-Mundy’s charge

October 31, 2019

Jeffrey Hecker
Senior Advisor to the President
Alumni Hall
University of Maine

Dear Jeff:

I write to follow-up on our conversations regarding the university’s budgeting processes and to formally charge you to lead a process to transform UMaine’s budget model so that it is more transparent and better aligns resources with strategic goals. The proposed model should facilitate accountability at every level of decision making.

The transformation process should start with a description of the status-quo: UMaine’s current budget model including its strengths and weaknesses. Gather and synthesize information about alternative models for university budgets including strengths, weaknesses, opportunities, and risks associated with different budget models. Provide information and guidance to support strategic decisions regarding budget model transition. Based on information gathered and analyzed, develop and recommend a budget model for UMaine including a timeline and benchmarks for transition from the current to the new budget model.

This work should be carried out in an inclusive and transparent fashion so that university stakeholders are informed and have ample opportunities to contribute. The University of Maine System’s Office of Finance and Administration should be kept informed about the work and provide input as appropriate.

Please consider the followings tasks and approximate timeline for this work.

- Define the status-quo: Write a primer on UMaine’s current budget model. (October 31, 2019)
- Gather qualitative information about current budget model from key budget decision-makers and other stakeholders (e.g., VPs, deans, research directors) (October 18, 2019)
- Form a steering committee with appropriate representation of university stakeholders to provide input and advice. (October 31, 2019)
- Gather information on alternative budget models used in higher education. (December 15, 2019)
- Present/discuss preliminary findings and recommendations with President’s Cabinet and establish goals for UMaine budget model. (November, 2019)
- Propose draft budget model. (February 28, 2020)

- Model proposed budget model with historic data. (March 31, 2020)
- Develop timeline and benchmarks for transition. (May 15, 2020)
- Develop communication plan for internal and external stakeholders. (June 30, 2019)

Thank you for agreeing to lead this important work.

Sincerely,

Joan Ferrini-Mundy
Appendix B
Budget Model Working Groups

F&A Distribution Working Group: Charge

Members
Kody Varahramyan, Vice President for Research & Dean of the Graduate School (Chair)
Chris Boynton, Director, Office of Research Administration
Habbib Dagher, Executive Director, Advance Structures & Composites Center
Emily Haddad, Dean, College of Liberal Arts & Sciences
Deborah Bouchard, Director, Aquaculture Research Institute

Background
In the DRAFT budget model, F&A Recovery funds (sometimes called Indirect Cost Return or IDC) will be distributed so that 50% goes to support Research Administration (administered by the VPRDGS) and 50% goes to the Responsibility Centers that produced it. The F&A Recovery funds that go to colleges and Cooperative Extension will be administered by the deans, those going to Research Centers will be administered by the VPRDGS.

Issues and Questions

1) At most research universities, a portion of the F&A Recovery funds are returned to the PI for reinvestment in his/her research program. In the DRAFT model, F&A Recovery funds are administered by the deans and the VPRDGS. Should UMaine develop a policy that requires the deans/VPRDGS to return a percentage of the F&A Recovery funds to PIs? If yes, please recommend a draft policy statement.

2) The administrative and operational expenses of UMaine’s research centers vary widely. The draft F&A Recovery distribution formula provides considerable latitude to the VPRDGS to manage the funds so that the needs of most research centers can be met. However, for larger centers with significant safety, security, equipment, and other operational expenses, the distribution formula may not be appropriate to support the center. One approach that research universities take to address this challenge is to develop special agreements with some research centers for the distribution of F&A Recovery. If UMaine allowed for development of special agreements, what should be the criteria to determine that a research center qualifies for a special agreement for F&A Recovery funds?

3) The University of Maine seeks to support collaboration among researchers regardless of their disciplinary or organizational affiliation within the institution. For example, many faculty members are jointly appointed in a college and a research center (i.e., salary and benefits expenses are shared by the college and the center) and many others have collaborating appointments in research centers (i.e., their salary lines are fully funded within their college, but they collaborate with one or more research centers). Please recommend how F&A Recovery Funds should be shared between colleges and research centers for jointly appointed faculty members as well as faculty member with collaborating appointments.
UMaine Budget Model Steering Committee  
Report by Working Group on F&A Recovery Distribution  
May 6, 2020

Members  
Kody Varahramyan, Vice President for Research & Dean of the Graduate School (Chair)  
Chris Boynton, Director, Office of Research Administration  
Habbib Dagher, Executive Director, Advance Structures & Composites Center  
Emily Haddad, Dean, College of Liberal Arts & Sciences  
Deborah Bouchard, Director, Aquaculture Research Institute

Charge  
In the DRAFT budget model, F&A Return will be distributed so that 50% goes to support Research Administration (administered by the VPRDGS) including university-wide research operations and 50% goes to the Responsibility Centers that produced it. The F&A Recovery funds that go to colleges and Cooperative Extension will be administered by the deans, those going to Research Centers will be administered by the VPRDGS. The university is establishing research and development goals and metrics. The university is seeking recommendations on how to address the following issues and questions and how those recommendations will support achievement of established research and development goals and metrics.

Issues and Questions

1) Should UMaine develop a policy that requires the deans/VPRDGS to return a percentage of the F&A Recovery funds to PI’s? If yes, please recommend a draft policy statement.

2) If UMaine allowed for development of special F&A recovery agreements, what should be the criteria to determine that a research center qualifies for a special agreement for F&A Recovery funds?

3) Please recommend how F&A Recovery Funds should be shared between colleges and research centers for jointly appointed faculty members as well as faculty member with associate appointments.

Working Group Responses

1) UMaine should develop a policy that returns a percentage of the F&A Recovery funds to PI’s.

*Draft Policy Statement:* Ten percent (10%) of the annual F&A generated from sponsored activity (net any central cost share contributions and waived indirects) will be returned to the PI’s based on the percentage of credit assigned in PARS.
2) UMaine should allow for the development of special F&A recovery agreements with qualified research centers. Appendix I provides the criteria to be used as a starting point, modeled after the University of Illinois at Urbana-Champaign: https://provost.illinois.edu/policies/policies/indirect-cost-recovery-distribution-policy-special-policy/

3) Twenty percent (20%) of the annual F&A generated from sponsored activity (net any central cost share contributions and waived indirects) will be returned to the PI's home units. For PI's with split appointments, the allocation is based on their split appointment. The allocation split between local units and Colleges are predetermined annually by the college and local unit with at least a minimum of 50% going to the local unit. This allocation approach gives colleges and local units greater flexibility to allocate F&A based on varying levels of support provided between the colleges and local units.

The F&A Recovery Distribution Working Group also recommends returning 20% of the F&A generated from sponsored activity (net any central cost share contributions and waived indirects) to the Administrative Unit supporting the sponsored activity.

These recommendations support the following basic principle:
- Provides a financial incentive for those individuals responsible for generating the indirects
- Provides a financial incentive for those units most directly supporting the sponsored activity

**Proposed F&A Distribution Approach**
Notes

1. Most likely will be a percentage of F&A recovered by the specific Center or Institute.
2. Distribution will be net any central cost share contributions and waived indirects.
3. Unit that is administering the funds and majority of activity.
4. Based on percentage of credit allocated in PARS.
5. If a PI leaves the university, then their accrued F&A return goes back to the College or is split between the College and OVPRDGS according to their split appointment. Ideally, these funds would go towards new faculty startup packages.
6. Recommended that PI distributions are administered at the local units so that there are not hundreds of F&A recovery accounts in the accounting system.
7. Any agreements to Centers & Institutes should include a distribution to the PI’s Home Unit(s) and PI’s.
8. The amount is first allocated to local units based on percentage of credit allocated in PARS to each PI. Then, for PI’s with split appointments, the allocation is based on their split appointment (should be recorded in HR). The allocation split between local units and Colleges are predetermined annually by the college and local unit (see examples below) with at least a minimum of 50% going to the local unit. These predetermined allocations are recorded in OVPRDGS RIM data systems.

General Notes

• There is need to develop a dynamic way to track changes in percentage of credit in PARS. For example, if a PI leaves the project or university, then we will need to reassign that individual’s percentage of credit as of that point of time.
• There is need to work with HR to officially record split appointments so that F&A distribution to PI Units are fairly allocated.

Guidelines for How Returned F&A Funds should be Spent

These guidelines provide examples of how funds should be spent.

• Administrative Unit: The returned funds should be spent on directly supporting the sponsored activities, including:
  o Administrative support
  o Cover unallowable costs and overruns
  o Maintenance of lab facilities
  o Communications & reporting
• PI Home Units
  o Professional development of PIs
• Colleges & OVPRDGS
  o Startup packages
  o Strategic Investments
  o General sponsored activities support
• PI's
  o Bridge funds
  o Internally funded research projects
  o Professional development
PI Home Unit Allocation Examples

Example 1:
• Givens
  o PI in Chemical Engineering has a 50%/50% split appointment between Chemical Engineering and FIRST
  o F&A return portion to the PI's Home Unit(s) is $10,000
  o Chemical Engineering and the College of Engineering have the following predetermined split: Chemical 70%; college 30%
• Allocation of $10,000
  o $5,000 to FIRST ($10,000*.5)
  o $3,500 to Chemical Engineering ($10,000*0.5*0.7)
  o $1,500 to College of Engineering ($10,000*0.5*0.3)

Example 2:
• Givens
  o PI has a 100% appointment in School of Learning and Teaching
  o F&A return portion to PI's Home Unit is $10,000
  o The School of Learning and Teaching and the College of Education and Human Development have the following predetermined split: STL 60%; college 40%
• Allocation of $10,000
  o $6,000 to School of Learning and Teaching ($10,000*.6)
  o $4,000 to College of Education and Human Development ($10,000*0.4)

Example 3:
• Givens
  o PI has a 100% appointment in the School of Marine Sciences
  o F&A return portion to PI's Home Unit is $10,000
  o The School of Marine Science and the College of NSFA have the following predetermined split: SMS 80%; college 20%
• Allocation of $10,000
  o $8,000 to SMS ($10,000*.2)
  o $2,000 to College of NSFA ($10,000*0.8)

This allocation approach gives colleges and local units greater flexibility to allocate F&A based on varying levels of support provided between the colleges and local units.
Appendix I
Special ICR Policy Recommendations for Selected Major Centers and Institutes

Modeled after the University of Illinois at Urbana-Champaign
https://provost.illinois.edu/policies/policies/indirect-cost-recovery-distribution-policy-special-policy/

The goal is to hold these units harmless financially, while providing a fair distribution of returned F&A. The special ICR policy applies to large research centers and institutes (Units) with significant facilities and F&A costs (such as >20,000 ft² of laboratory facilities space, more than $3 million/year of external research funding, >20 FTE soft-funded personnel to manage.

1) Each of these Units prepares an actual F&A cost report and submits to the VPR, with a proposed ICR based on actual F&A costs incurred.
2) The VPR creates a 5-member F&A policy committee (with understanding of F&A costs) to review the F&A reports and validate the ICR recommendation to the VPR for each unit.
3) The VPR and the Unit sign an ICR MOU with the percentage of the Unit’s indirect cost generated to be returned to the Unit. Every 5 years, the F&A distribution formula will be re-assessed. Any changes in distribution should recognize additional administrative costs borne within the Unit that may or may not be typically provided for by campus.
4) The funds returned to these units are a percentage of what they budgeted for in indirect costs for projects awarded to the Unit in the prior fiscal year. These funds will be added to the Unit’s budget on July 1 for the next fiscal year. For example:
   a. If the Unit’s MOU with the VPR calls for 60% ICR return to the Unit
   b. If the Unit is awarded $5 million in external funds in FY20 of which $1.5 million are indirect costs.
   c. On July 1, 2020, the Unit receives 0.6*$1.5 million = $0.9 million ICR
5) For work conceived, managed, administered, and conducted in the Center and Institute, it is not anticipated that F&A would be distributed to Academic units. The possible exception is research conducted in academic units’ facilities by faculty and students in support of the Unit. In those instances, the Center or Institute should set up a separate fund for that unit. Then returned F&A would be returned to the home unit of the PI.
6) Over time, the Unit may have its own federally-negotiated indirect cost rate and, in general, the Center or Institute will necessarily retain the recovered F&A. Part of the Center/Institute F&A may be transferred to the campus and/or VPR commensurate with the costs of providing business office, payroll, legal services, and facilities support, etc.

For example, the Applied Research Institute (ARI) at the University of Illinois Urbana-Champaign. The current Memorandum of Understanding (MOU) establishes the following F&A distribution for ARI: 50% ARI; 10% VCR; 32% Campus; 8% UA.
**Space Expenses Working Group: Charge**

**Members**
Jessie Daniels, Director of Finance & Operations, Division of Lifelong Learning (Chair)  
Chris Gerbi, Associate Dean for Research, College of Natural Sciences, Forestry, & Agriculture and Associate Director, Maine Agricultural and Forest Experiment Station  
Mark Hutton, Associate Dean for Research, College of Natural Sciences, Forestry, & Agriculture and Associate Director, Maine Agricultural and Forest Experiment Station  
Justin Wolff, Chair, Department of Art  
Emily Haddad, Dean, College of Liberal Arts & Sciences  
Dennis Harrington, Assistant Director & Finance Manager, Cooperative Extension  
Chris Boynton, Director, Office of Research Administration  
Jake Ward, Vice President for Innovation & Economic Development  
Ken Ralph, Director of Athletics

**Background**
In the revised model, the Responsibility Centers and Auxiliary Services are responsible for the base costs of *Facilities and Services*. The following services, and their FY2020 base expenses, are included in *Facilities and Services*:

- Facilities ($14,580,079)  
- Campus Utilities ($10,159,244)  
- Environmental Health & Safety ($830,420)  
- Classroom Equipment Replacement Fund ($150,000)  
- Parking Lots ($211,445)  
- Health Center ($104,463)  
- Volunteer Amb. Corps ($148,133)  
- MaineCard ($141,994)  
- Mail Services ($383,459)  
- Police & Safety ($1,752,085)

In the DRAFT model, the Facilities and Services base expenses are charged to the Responsibility Centers and Auxiliaries, where they are responsible for a portion of the base Facilities and Services expenses that is equal to the average of their portion of the total square footage and total employees.

The DRAFT formula for covering the *Facilities and Services* (FS) base expenses is:

\[
\text{Responsibility Centers (RCs) or Auxiliaries (AUX) cost} = 0.5\% (\text{RC total employee FTE}) + % (\text{AUX total employee FTE}) + % (\text{RC total space} + \text{AUX total space}) \times \text{Total FS cost}
\]

---

1Total square footage is the sum of space occupied by the Responsibility Centers and Auxiliaries. Total employee FTE is the sum of all employees in the Responsibility Centers and Auxiliaries.
Issues

1) Some university areas cover all or a portion of some of the expenses included in the Facilities and Services area (e.g., facility maintenance) because they are located at a distance from the main campus in Orono (e.g., university farms) or because they budget is separate from the E&G budget (e.g., Auxiliaries). What adjustments should be made to the Facilities and Services expense distribution formula to assure that these areas are not charged for services they do not receive?

2) The question has arisen as to whether all space should be treated the same way in the expense formula. For example, should office space and laboratory spaces be charged at the same rate, as they are in the DRAFT formula?

Charge
Develop a set of recommendation about how Facilities and Services expenses should be charged taking into consideration the issues described above. Recommendations should include responses to the following questions:

1) Should all space be treated as the same in the expense distribution formula?
2) If not, how should differential charges be handled?
**Space Expense Working Group: Report**

UMaine Budget Model Steering Committee

*Working Group: `Space Expenses`*

**Members**

Jessie Daniels, Director of Finance & Operations, Division of Lifelong Learning (Chair)

Chris Gerbi, Associate Dean for Research, College of Natural Sciences, Forestry, & Agriculture and Associate Director, Maine Agricultural and Forest Experiment Station

Mark Hutton, Associate Dean for Research, College of Natural Sciences, Forestry, & Agriculture and Associate Director, Maine Agricultural and Forest Experiment Station

Justin Wolff, Chair, Department of Art

Emily Haddad, Dean, College of Liberal Arts & Sciences

Dennis Harrington, Assistant Director & Finance Manager, Cooperative Extension

Chris Boynton, Director, Office of Research Administration

Jake Ward, Vice President for Innovation & Economic Development

Ken Ralph, Director of Athletics

**Charge**

Develop a set of recommendations about how Facilities and Services expenses should be charged taking into consideration the issues described below.

The current DRAFT formula for covering the Facilities and Services (FS) base expenses is:

\[
\text{Responsibility Centers (RCs) or Auxiliaries (AUX) cost} = 0.5\times (\text{RC total employee FTE}) + 0.5\times (\text{AUX total employee FTE}) + \text{other costs}
\]

**Responses to issues in the charge**

1) Some university areas cover all or a portion of some of the expenses included in the Facilities and Services area (e.g., facility maintenance) because they are located at a distance from the main campus in Orono (e.g., university farms) or because they their budget is separate from the E&G budget (e.g., Auxiliaries). What adjustments should be made to the Facilities and Services expense distribution formula to assure that these areas are not charged for services they do not receive?

   a. A thorough accounting must be performed for existing space assignments and differentiation of spaces of on vs. off-campus, leased space, etc, for which “base level” Facilities Management services are not provided. For example, buildings and off-site spaces covered by a budget line within a responsibility center may receive minimal or no base level services. The committee recommends a closer review with Facilities Management and a tiered approach to expense allocation or possible exemption for some space (i.e. if consulting services are the only services being provided to a space, the lowest possible fee would be applied to these spaces, if no services are provided, the space would be exempt).

   b. Auxiliary Services budget review to happen separately from this working group to determine what items are currently paid for directly from the Auxiliary budget to avoid double charging of these budget lines. Given the significant duplication of expenses, and the fact that Auxiliary properties are not serviced by FM without a work order and full billing, the current draft formula would not be easily applied to Auxiliary Services under the current expense allocation process.

2) The question has arisen as to whether all space should be treated the same way in the expense formula. For example, should office space and laboratory spaces be charged at the same rate, as they are in the DRAFT formula?
a. All space should not be treated equally. See recommendations below.

Responses to questions in the charge

1) Should all space be treated as the same in the expense distribution formula?
   No, all space cannot be treated equally in the expense formulas.
2) If not, how should differential charges be handled?
   See Principles & Recommended Formula below.

Principles
- No costs should be double-paid. Those expenses being charged directly to units should not also be counted in a formula.
- The model should allow for adaptability as circumstances change (i.e. occupancy changes).
- Provides a financial incentive for responsible use of space and for good stewardship of space, leveraging resources to improve the values of the facilities.
- Facilities and Services support centers are accountable to the units they provide support for. Governance of this model will need to ensure accountability and a proper feedback loop.
- There should be a better understanding about “base level” facilities and services.
- Parameters included in expense distributions should align with parameters included in revenue allocations as best as possible.
- Should not penalize units for occupying space needing more repairs (e.g., older buildings), over which they have no control.
- The formula should reflect a fair distribution of expenses to the units as accurately, yet simply as possible.

Recommended formula

A hybrid approach should be taken into consideration with the draft formula for Facilities & Services expense allocations. The Facilities & Services total allocation should be further separated prior to any formula to be applied and broken out based upon those expense drivers primarily attributable to square footage allocations and those that are primarily attributable to usage.

Proposed formula for largely area-driven costs
- Facilities ($14,580,079)
- Campus Utilities ($10,159,244)
- Environmental Health & Safety ($830,420)

1. Assign tiered space types to all unit-controlled areas

Consideration should be made for the costs associated with maintaining the type of space (i.e. differential costs for labs, classrooms, storage space, grounds, etc.). This committee requests further investigation with Facilities Management to identify a general cost structure associated with servicing each major category of space that corresponds with their respective maintenance costs. A draft of a possible tier and weighting structure is shared below, but the committee feels that this is simply for illustration purposes only and needs further evaluation with Facilities Management.

a. Tier 1: full base-budget support (most on-campus buildings)

b. Tier 2: partial base-budget support (moderate cost off-campus buildings such as offices/labs, perhaps some on-campus buildings such as storage
sheds)
c. Tier 3: low-cost off-campus buildings (e.g., barns)
d. Grounds: only those controlled by responsibility centers and maintained
   by facilities’ base budget

2. Calculate % contribution of all responsibility-center-controlled space for each
   responsibility center
   a. Tier 1: weighting factor of 1.0
   b. Tier 2: weighting factor of 0.5
   c. Tier 3: weighting factor of 0.25
   d. Grounds: weighting factor of 0.1

3. Distribute facilities-supported UM space outside responsibility centers (library,
   union, admissions, student records classrooms, most grounds) across colleges
   proportionally by SCH and majors just as for revenue.

4. Final % contribution for responsibility centers is the sum of unit-controlled and
   distributed central space.

Proposed formula for largely people-driven costs

- Classroom Equipment Replacement Fund ($150,000)
- Parking Lots ($211,445)
- Health Center ($104,463)
- Volunteer Amb. Corps ($148,133)
- MaineCard ($141,994)
- Mail Services ($383,459)
- Police & Safety ($1,752,085)

   Paid only by teaching responsibility centers
   Proportionally by SCH and majors just as for revenue

Alternative recommendations

One suggestion was for the allocation model to correspond with F&A audit
information and Net Asset Values of the buildings connected with the responsibil-
ity centers. This is a different approach than the draft formula shared above.
This type of approach might provide an opportunity to build in more funded
depreciation by providing units with a financial incentive to improve their space.
However, it does not match up with the recommendations above due to the fact
that most, if not all, units on campus have little to no choice with regard to the
University space they occupy.

A recommendation was made that employee FTE ratios should consider that
some units have many FTE faculty/staff who work off-site from the Orono campus
(i.e. in Cooperative Extension, only 34% of their staff work from the Orono cam-
pus). If there are expenses connected with Orono based support services not being provided to these employees, those should be deducted from the allocation and based only upon Orono based employees. The committee felt that since the revised draft model shifts the FTE from an employee basis to a student basis that this concern would no longer be present.

Ideally, as many expenses that could be tied directly to responsibility centers should be. If buildings or invoices are metered or if charges could be easily allocated directly to buildings and tied back to responsibility centers, those amounts should be directly expensed and then deducted from the balance to be allocated via a formula. However, the current cost model of Facilities does not allow for this to easily occur, so the formula approach is a simpler method to aim to achieve the best results. This approach would also penalize units assigned to high cost buildings, of which they may have no control.
Appendix C:  
Categorization of Units within Proposed Budget Model

Central Administration

President
• President’s Office
• Advancement
• Chief Business Officer
  o Financial Management
  o Bursar
  o Insurance
• Marketing & Communication
• Children’s Center
• Hudson Museum
• Collins Center for the Arts
• Faculty & Staff Recognition
• Faculty Senate

Executive Vice President for Academic Affairs & Provost
• Provost’s Office
  o Senior Associate Provost for Academic Affairs
• Rising Tide Center
• Cohen Institute for Leadership & Public Service
• Office of Sustainability

Vice President for Research & Dean of the Graduate School
• VPR’s Office
• Maine EPSCOR
• Maine Sea Grant
• Center for Undergraduate Research

Responsibility Centers

College of Liberal Arts & Sciences
• Department of Anthropology
• Department of Art
• Department of Chemistry
• Department of Communication & Journalism
• Department of English
  o Center for Poetry & Poetics
• Department of History
• Department of Mathematics & Statistics
• Department of Modern Languages & Classics
• Department of Philosophy
• Department of Physics & Astronomy
  o Emera Astronomy Center
• Department of Political Science
• Department of Psychology
  o Psychological Services Center
• Department of Sociology
• School of Computing & Information Science
  o Virtual Environment & Multimodal Interaction (VEMI) Laboratory
• School of Performing Arts
• School of Policy & International Affairs
• International Affairs Program
• Native American Programs
  o Wabanaki Center
• Women's, Gender, & Sexuality Program
• Canadian American Center
• Franco-American Programs
• Clement & Linda McGillicuddy Humanities Center
• Maine Folklife Center

College of Education & Human Development
• School of Learning & Teaching
  o Katherine Miles Durst Child Development Learning Center
• School of Educational Leadership, Higher Education & Human Development
• School of Kinesiology, Physical Education & Athletic Training
• Maine Education Policy Research Institute
• TRiO Programs
• University Training Center for Reading Recovery & Comprehensive Literacy

College of Engineering
• Department of Chemical & Biomedical Engineering
• Department of Civil & Environmental Engineering
• Department of Electrical & Computer Engineering
• Department of Mechanical Engineering
• School of Engineering Technology
  o Construction Engineering Technology
  o Electrical Engineering Technology
  o Mechanical Engineering Technology
  o Survey Engineering Technology
• Advanced Manufacturing Center

College of Natural Sciences, Forestry, & Agriculture
• Department of Communication Sciences & Disorders
  o Madelyn E. & Albert D. Conley Speech, Language, & Hearing Center
• Department of Molecular & Biomedical Sciences
• Department of Wildlife, Fisheries, and Conservation Biology
• School of Biology & Ecology
• School of Earth & Climate Sciences
• School of Economics
• School of Food & Agriculture
• School of Forest Resources
• School of Marine Sciences
• School of Nursing
• School of Social Work
• Cooperative Forestry Research Unit
• Darling Marine Center
• Lobster Institute
• Maine Agriculture and Forest Experiment Station

Honors College

Maine Business School
• Undergraduate School of Business
• Graduate School of Business
• Professional Development Center

Research Centers
• Aquaculture Research Institute
• Advanced Structures and Composites Center
• Center for Community Inclusion and Disability Studies
• Center for Research on Sustained Forests
• Center on Aging
• Climate Change Institute
• Forest Bioproducts Research Institute
• Frontier Institute for Research in Sensor Technologies
• Innovative Media Research and Commercialization Center
• Maine Center for Research in STEM Education
• Maine Sea Grant
• Margaret Chase Smith Policy Center
• Senator George J. Mitchell Center for Sustainability Solutions

Cooperative Extension
• Maine 4H Camp & Learning Centers
• Diagnostic & Research Laboratory

Division of Lifelong Learning
• Bureau of Labor Relations
• Center for Innovation in Teaching & Learning
• College Success Programs
• Conferences & Institutes
• Frederick E. Hutchinson Center
• UMaine Online

Office of Innovation & Economic Development
• Department of Industrial Cooperation
• Foster Center for Student Innovation
• Innovation Engineering Program
Athletics
- Varsity Athletic Programs
- NCAA Compliance Office
- Athletics Development
- Summer Camp Sports Programs

Auxiliaries
- Dining Services
- Residence Halls
- Bookstore

Support Centers

Academic Support Services
- Office of Institutional Research & Assessment
- Academic Support Services for Student Athletes
- Office of Student Records
- Office of Major Scholarship
- Student Records

Enrollment Management
- Undergraduate Admissions
- Recruitment
- Office of Student Financial Aid
- International Programs

Facilities & Services
- Facilities¹
- Campus Utilities²
- Classroom Equipment Replacement³
- Telephone Operations⁴
- Parking lots⁵
- Campus Safety⁶
- Health Center⁷
- Maine Card⁸
- Mail Services⁹
- Public Safety¹⁰
Graduate School
- Graduate School Administration
- Graduate School of Biomedical Science and Engineering
- Intermedia MFA
- Interdisciplinary masters and doctoral programs

Library
- Acquisitions
- State Research Library
- Databases
- University of Maine Press

Research Administration
- Office of Research Administration
- Office of Research Compliance
- Office of Research Development
- Maine CORE

Student Affairs
- Career Center
- Memorial Union
- Conduct Office
- Counseling Center
- Recreational Athletics

UMS Shared Services
- Information Technology
- Human Resources
- Office of Equal Opportunity
- Procurement
- Capital Planning
- Safety & Environmental Management
- Finance
### Appendix D
#### Graduate Programs

**Professional Programs (Certificate/ED/Masters)**

<table>
<thead>
<tr>
<th>Program</th>
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<td>Business Administration</td>
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<td>Classroom Technology Integrationist</td>
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<tr>
<td>Communication Science and Disorders Disorders</td>
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<td>Digital Curation</td>
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<td>Early Childhood Teacher</td>
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<td>Elementary Education</td>
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<td>Elementary Education (CAI)</td>
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<td>Geographic Information Systems</td>
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<td>Gerontology</td>
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<tr>
<td>High Leverage Practices to Promote Inclusion</td>
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<td>Human Development</td>
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<td>Individualized Program</td>
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<td>Information Systems</td>
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<td>Innovation Engineering</td>
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<td>Instructional Design</td>
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<td>Instructional Technology</td>
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<tr>
<td>Interdisciplinary Climate Studies</td>
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<tr>
<td>Interdisciplinary Disability Studies</td>
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<tr>
<td>Kinesiology &amp; Physical Education</td>
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<td>Literacy Education</td>
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<td>Master of Science in Teaching</td>
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<td>Music Education</td>
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<td>Nursing</td>
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<td>Secondary Education (CAI)</td>
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<td>Social Work</td>
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<td>Special Education</td>
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<td>Student Development in Higher Education</td>
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<td>Survey Engineering</td>
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### Research/Arts Masters Programs

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<th>Animal Sciences</th>
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<td>Anthropology &amp; Environmental Policy</td>
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<td>Aquaculture &amp; Aquatic Resources</td>
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<td>Biological Engineering</td>
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<td>Botany &amp; Plant Pathology</td>
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<td>Chemical Engineering</td>
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<td>Chemistry</td>
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<td>Civil Engineering</td>
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<td>Communication</td>
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<td>Computer Engineering</td>
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<td>Computer Science</td>
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<td>Earth Sciences</td>
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<td>Financial Economics</td>
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<td>Food Science &amp; Human Nutrition</td>
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<td>Forest Resources</td>
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<td>French</td>
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<td>Horticulture</td>
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<td>Information Systems</td>
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<td>Interdisciplinary Studies (MA)</td>
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<td>Intermedia</td>
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<tr>
<td>Marine Policy</td>
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<td>Mathematics</td>
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<td>Mechanical Engineering</td>
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<td>Microbiology</td>
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<tr>
<td>Music Performance</td>
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<tr>
<td>Oceanography</td>
</tr>
<tr>
<td>Physics</td>
</tr>
<tr>
<td>Plant, Soil, &amp; Environmental Sciences</td>
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</tbody>
</table>
Psychology Quaternary & Climate Studies
Resource Economics & Policy
Spanish
Spatial Information Science & Engineering
Wildlife Conservation
Wildlife Ecology
Zoology

Research Doctoral Programs

Anthropology & Environmental Policy
Aquaculture & Aquatic Resources
Biochemistry & Molecular Biology
Biological Sciences
Biomedical Engineering
Biomedical Sciences
Chemical Engineering
Chemistry
Civil Engineering
Communication
Computer Science
Earth Sciences
Ecology & Environmental Sciences
Education (PhD)
Educational Leadership
Electrical & Computer Engineering
Food & Nutrition Sciences
Forest Resources
History
Interdisciplinary Studies (PHD)
Marine Bio-Resources
Marine Biology
Mechanical Engineering
Microbiology
Oceanography
Physics
Plant Science
Psychology
Spatial Information Science & Engineering
Wildlife Ecology
Zoology
Appendix E

UMaine GOLD and UMaine TOPS: Revenue Sharing

As the University of Maine progresses in its development as a world-class research university, it is imperative that nationally and internationally recognized research and graduate programs of global impact and local relevance be developed and expanded. As part of this effort, innovative, relevant, and high-quality graduate professional degree programs are being developed and grown to prepare students for rewarding 21st Century careers, and to support the social and economic needs of Maine and beyond, while also significantly supporting the fiscal vitality and advancement of the institution.

Revenue Sharing

UMaine GOLD

The UMaine Graduate OnLine Degrees or UMaineGOLD is a partnership between UMaineOnline and the Graduate School. The goal of UMaineGOLD is for UMaine to reach its full potential in distinguishing itself in nationally and internationally recognized online graduate education.

Revenue Sharing

To support growth in high quality, online, graduate programs, tuition revenue generated by online graduate programs that meet the UMaine GOLD criteria is shared with the departments or school that houses the program. In the case of multidisciplinary programs, revenue is shared across participating units in manner that best represents the relative contribution of each unit. Programs that meet GOLD criteria receive $200 for every student enrolled in a three-credit hour course (the amount per student is adjusted accordingly for courses for which students earn more or less than three credit hours). Criteria for meeting GOLD designation has been established by the Division of Lifelong Learning and the Graduate School.

UMaine TOPS

The Transformational Opportunities for Professional Success or UMaineTOPS initiative is designed to create an incentive structure that will support the creation of new, and expansion of existing, professional degree and certificate programs that best address workforce and economic development needs of Maine and beyond.

Currently the largest opportunity for graduate enrollment growth is through graduate professional degree and certificate programs. According to the US Department of Education data, nontraditional students are now 85% of higher education learners, and many of them seek to pursue graduate professional degree and certificate programs. As Maine’s flagship university, UMaine needs to be the leader in offering these programs to serve the workforce and economic development needs of Maine and beyond.
Revenue Sharing

To support growth in professional graduate programs, tuition revenue generated by professional programs that meet the TOPS criteria is shared with the departments or school that houses the program. In the case of multidisciplinary programs, revenue is shared across participating units in manner that best represents the relative contribution of each unit. Units that meet TOPS criteria receive $200 for every student enrolled in a three-credit hour course (the amount per student is adjusted accordingly for courses for which students earn more or less than three credit hours). Criteria for meeting TOPS designation has been established by the Graduate School.
Appendix F

Budget Model Simulation

Overall Methodology

To simulate the application of the budget model, we simulated the development of the FY20 budget. This simulation comprised the following three components: (a) distribution of revenues to central administration, the strategic investment fund, financial aid, central reserves; (b) distribution of revenues to responsibility centers; and (c) flow of funds from responsibility centers to the support centers (i.e., allocation of expense to the responsibility centers). With one exception—the allocation of tuition revenue to the responsibility centers—these simulations were calculated in Excel. We briefly describe the methodology for each.

Distribution of Revenues (Central)

Central Administration: The revenues for central administration and financial aid was pulled off the top from the state appropriation and tuition revenue.

Strategic Investment Fund: 3% of tuition revenue was set aside for the strategic investment fund.

Financial Aid: Undergraduate financial aid is funded by calculating the difference between in-state and out-of-state tuition for the 80% of the nonresident tuition that flows to the colleges offering the course. Graduate financial aid is funded by allocating a proportion of the graduate tuition revenue. The proportions differ by degree level. (Please see Tables G1 and G2 under Responsibility Centers for more specifics on these calculations.)

Central Reserves: No funds were allocated to Central Reserves in this simulation. Two factors will determine how much revenue is needed for Central Reserves in year one: 1) determination of appropriate target reserve level (see Implementation (page 31)); 2) how much Central Reserve funding will be carried forward into the first year of implementation.

Distribution of Revenues (Responsibility Centers)

There are a number of sources of revenues for the responsibility centers: tuition revenue, unified fee, F&A recovery, MEIF funds, other fees, sales and service, and restricted federal funds. The simulation calculated each as follows:

- Sales and Service: Budgeted 19-20 sales & service
- MEIF funds: 19-20 budgeted MEIF funds
- F&A recovery: 50% of 18-19 F&A
- Restricted federal funds: 19-20 funds
- Unified fee: Allocation based on18-19 credit hours

Tuition Revenue: We used the 2018-2019 (summer, fall, spring) credit hour data and 19-20 tuition rates to allocate tuition revenue. Because of the complexities, and the need to capture student-level enrollment patterns, we did these calculations in SPSS and imported the totals into Excel.

- Table G1. Undergraduate tuition revenue calculation

(Percentage of estimated 19-20 tuition revenue, net of 3% Strategic Fund allocation)
<table>
<thead>
<tr>
<th>Recipient of Revenue</th>
<th>In-State Student</th>
<th>Out-of-State Student</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NonDLL Course</td>
<td>DLL Course</td>
</tr>
<tr>
<td>College of Major</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>College of Course</td>
<td>80%</td>
<td>40% (at in-state rate)</td>
</tr>
<tr>
<td>DLL</td>
<td></td>
<td>40% (at in-state rate)</td>
</tr>
<tr>
<td>Financial Aid</td>
<td></td>
<td>(80% at out-of-state rate) - (80% at in-state rate)</td>
</tr>
</tbody>
</table>

Table G2. Graduate tuition revenue calculation (Percentage of estimated 19-20 tuition revenue)

<table>
<thead>
<tr>
<th>Recipient of Revenue</th>
<th>Professional/Other</th>
<th>Research/Arts Masters</th>
<th>Doctoral</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NonDLL Course</td>
<td>DLL Course</td>
<td>NonDLL Course</td>
</tr>
<tr>
<td>Strategic Investment Fund</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>College of Major</td>
<td>37%</td>
<td>18.5%</td>
<td>57%</td>
</tr>
<tr>
<td>DLL</td>
<td></td>
<td>18.5%</td>
<td></td>
</tr>
<tr>
<td>Financial Aid</td>
<td>60%</td>
<td>60%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Support Center Expense Allocation

The responsibility centers fund the expenses for eight support centers. Below are the formulas for each.

- **Academic support services**: \(0.5(\%\text{ of total student FTE} + \%\text{ of total faculty FTE}) \times \text{AS Base Budget}\)
- **Student Affairs**: \% \text{ of total student FTE} \times \text{SA Base Budget}\)
- **Enrollment Management**: \% \text{ of total UG student FTE} \times \text{EM Base Budget}\)
- **Graduate School**: \% \text{ of total graduate student FTE} \times \text{GS Base Budget}\)
- **Research Administration**: 
  - \text{RA Base Budget} - 50\% \text{ of total F&A Recovery} \text{ Responsibility Center X cost} = 0.5(\% \text{ of total research appointment time faculty FTE} + \% \text{ of total research expenditures}) \times \text{RA Net Base Budget}\)
- **Library**: \% \text{ of total student FTE} + \% \text{ of total faculty FTE} \times \text{Library Base Budget}\)
- **Facilities and Services**: \% \text{ of total student FTE} \times (\text{Services total expenses} - \text{Auxiliaries’ portion}) + \% \text{ of total space} \times \text{Facilities total expenses}\)
- **UMS Shared Services**: \% \text{ of total employees FTE} \times \text{UMS Shared Services Budget}\)

The following assumptions underlie the expense allocation calculations:

- **Revenues** - assumes all support centers continue to receive their base budgeted revenues/fees.
- **Space** - used space square footage provided by Facilities Management and allocated all of the Responsibility Center space. All on-campus space was assigned as Tier 1 with a weight of 1.0, and all off-campus space was assigned as Tier 2 with a weight of 0.5. Percentages of responsibility center assigned space equals 100\% after the weighting was taken into effect\(^1\).
• Facilities & Services - Expenses were separated into expenses allocable based on square footage (i.e. Facilities), and expenses allocable based on people (i.e. Services).

  o Facilities includes: campus safety fund, hazard waste disposal, safety mitigation fund, central services, cylinder rental, admin physical plant, FM project administration, FM utility management, FM Safety & Environmental Regulatory Compliance, UMaine Facilities Fleet, custodians, Ground Shop, Resource Conservation & Recovery, utility maintenance, building maintenance, executive facilities maintenance, funded depreciation, grounds maintenance, Carroll Terrell House, Steam Plant operations, Garage, Lockshop, Carpenter Shop, Plumbing Shop, Paint Shop, Steamfitters Shop, roofing system maintenance, and UMaine Net Project (all net of revenues).

  o Services include: Parking Services Office, telephone operations, Student Health Center, UVAC, MaineCard Office, Mail Services/postage, Parking Lots, Classroom Equipment Replacement Fund, Police & Safety (all net of revenues).

  o Auxiliary Services pays their own utility and facilities costs which are not part of the base expenses, so they pay no amount toward the facilities costs, but they do pay 30% toward the services, which is based on the approximate percentage of students who live on campus. Auxiliary’s contribution toward services is deducted before the remainder is allocated based on student FTE to the responsibility centers who have students.

  o The draft formula in the Budget Model Transformation Report does not completely align with the draft recommendations referenced in Appendix C from the Space Expenses Subcommittee. The committee recommended that student FTEs be weighted to reflect credit 80% credit hours vs. 20% majors, and the FTE’s used for the services expenses are based solely on student FTE percentages, unweighted.
Tables G3 and G4 present the simulation calculations by unit. Table G3 displays the revenues and differential to current budget. Table G4 displays the amount of expenses allocated from the responsibility centers to the support centers.

### Table G3. Comparison of Simulated Revenue Flow to Actual Budget

<table>
<thead>
<tr>
<th>Category</th>
<th>Current Budget (E&amp;G, MEIF, Federal Funds)</th>
<th>Total Revenue</th>
<th>Cost for Support Centers</th>
<th>Net Revenue Distribution</th>
<th>Subvention Needed</th>
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</thead>
<tbody>
<tr>
<td>Liberal Arts &amp; Sciences</td>
<td>$12,405,616</td>
<td>$19,541,175</td>
<td>$8,413,440</td>
<td>$11,127,735</td>
<td>$1,089,325</td>
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<tr>
<td>Engineering</td>
<td>$12,084,410</td>
<td>$17,673,616</td>
<td>$9,797,400</td>
<td>$17,916,750</td>
<td>$4,644,940</td>
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<tr>
<td>Education &amp; Human Development</td>
<td>$5,126,547</td>
<td>$9,874,471</td>
<td>$7,108,408</td>
<td>$2,766,063</td>
<td>$1,062,575</td>
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<tr>
<td>Maine Business School</td>
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<td>$6,771,676</td>
<td>$5,871,676</td>
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<td>Honors</td>
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<td>$3,750,314</td>
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<td>Natural Sciences, Forestry, &amp; Agriculture</td>
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<td>$7,691,000</td>
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<td>Division of Lifelong Learning</td>
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<td>Research Centers</td>
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<td>Cooperative Extension</td>
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<td>OIED</td>
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<td>Auxiliary Services</td>
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<tr>
<td>Total Allocable Support Expenses (net of revenues)</td>
<td>$3,887,165</td>
<td>$12,405,616</td>
<td>$8,413,440</td>
<td>$4,092,175</td>
<td>$6,922,345</td>
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</table>

**Discussion**

The above simulation funds all units at their FY20 level and creates a Strategic Investment Fund of about $4.6M, but adds no new funds to Central Reserves. In this simulation, only $82.9M of the total $84M state appropriation is allocated.
# Appendix G

## List of Figures

<table>
<thead>
<tr>
<th>Figure Number</th>
<th>Description</th>
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<td>Figure 1</td>
<td>Proposed budget model: Revenue flow</td>
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</tr>
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<td>Figure 2</td>
<td>Proposed budget model: Governance structure</td>
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<tr>
<td>Figure 3</td>
<td>Distribution of state appropriation</td>
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<td>Figure 4</td>
<td>Distribution of undergraduate tuition revenue</td>
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<td>Figure 5</td>
<td>Distribution of graduate tuition revenue</td>
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<td>Figure 6</td>
<td>Distribution of F&amp;A recovery</td>
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<td>Figure 7</td>
<td>Responsibility Centers sharing</td>
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<td></td>
<td>in Support Centers base budgets</td>
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<td>Figure 8</td>
<td>Proposed budget model: Governance structure</td>
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<td>Figure 9</td>
<td>Timeline for annual budget development</td>
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