Report and Recommendations on the UMass Resource Allocation System
by the Joint Task Force on Resource Allocation (JTFRA)

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Co-Chairs: Elizabeth Chilton (Associate Dean for Research and Programs, College of Social and Behavioral Sciences, Professor, Anthropology) and Tim Anderson (Dean, College of Engineering)

Task Force Members

Laura Briggs (Chair, Women, Gender, Sexuality Studies)
Julie Brigham-Grette (Department Head, Geosciences)
Julie Buehler (Vice Chancellor for Information Services and Strategy, CIO)
D. Anthony Butterfield (Chair, Program and Budget Council, Isenberg School of Management)
Mari Castañeda (Director, Diversity Advancement, CSBS; Communication)
Stephen Cavanagh (Dean, School of Nursing)
Nancy Cohen (Co-Chair, Joint Task Force on Strategic Oversight, Department Head, Nutrition)
Mark Fuller (Dean of Isenberg School of Management)
Bryan Harvey (Co-Chair, Joint Task Force on Strategic Oversight, Associate Provost for Academic and Resource Planning)
A. Yemisi Jimoh (Designee of the Academic Priorities Council, Afro-American Studies)
David R. Evans (Research Council, Professor, Education)
Patrick Kelly (Associate Professor, Electrical and Computer Engineering)
Megan Kingston (Student Trustee, Designee of the Student Government Association)
Mike Malone (Vice Chancellor for Research and Engagement)
Andrew Mangels (Associate Vice Chancellor for Finance and Budget Director)
Ernest May (Secretary of the Faculty Senate, Professor, Music)
Jennifer Normanly (Department Head, Biochemistry and Molecular Biology)
MJ Peterson (Chair of the Rules Committee, Professor, Political Science)
Amilcar Shabazz (Co-Chair, Joint Task Force on Strategic Oversight, and Faculty Advisor to the Chancellor for Diversity and Excellence, Professor, Afro-American Studies)
Timothy Sutton (Designee of the Graduate Student Senate)
Executive Summary

The Phase 1 report of the Joint Task Force on Strategic Oversight underscored the need to promote an “evidence-based resource allocation” and to “adopt practices that reinforce the link between evidence and decisions.” The Joint Task Force on Resource Allocation (JTFRA) was charged with organizing the campus’ consideration of alternative resource allocation models and making recommendations to the Chancellor for moving forward with any proposed improvements. Specific expectations laid out in the charge include: (1) educating and engaging the campus community; (2) identifying key characteristics for an effective resource allocation model, and (3) proposing specific changes for consideration by the campus community (Faculty Senate Document No. 14-010B).

Beginning in November 2013, the JTFRA worked with the assistance of Huron Education to both examine our current resource allocation model and explore alternatives. Using the Phase 1 report of the Strategic Plan as a starting point, the JTFRA developed a set of budgeting values and six budgeting principles. These are high-level principles that were intended to help us to assess how well our current allocation system supports our strategic priorities, and what the attributes of any new model should be. Some of the budgeting values that the JTFRA felt were not currently well met by our current resource allocation model include transparency, alignment of authority with responsibility, flexibility, and appropriate simplicity.

On the basis of this analysis, the JTFRA asked Huron Education to explore a customized UMass Resource Allocation Model (URAM), one that is more decentralized and transparent, but that still maintains a strong holistic view of the University and support for the common good. We recognize that any resource allocation model considered should promote a balance among research, educational opportunity, public service, and support activities that align with the strategic plan and focus on campus success areas including quality, student success, diversity, equity, and inclusiveness. The goal in asking Huron Education to develop a model was for it to serve as a knowledge discovery process for both the JTFRA and the campus.

The JTFRA worked closely with Huron Education on the development of a baseline UMass Resource Allocation Model, and beginning in January, the JTFRA made a series of presentations to campus constituencies to receive feedback on both the process and content of the model as it was being developed (e.g., the Student Government Association, Graduate Student Senate, Faculty Senate, Campus Leadership Council, the Council of Deans, etc.). The major components of the model include: (1) selection of primary units (schools, colleges, and auxiliaries) and administrative & support units, (2) mechanisms for revenue allocation to the primary units, (3) allocation of costs to primary units for central services, and (3) the creation and use of a strategic investment pool—a central pool of resources for strategic initiatives benefits the whole university.

After a consideration of the baseline UMass Resource Allocation Model—both its component parts and the complete model—the JTFRA recommends: (1) The University continue the process started by the JTFRA and further evaluate a more decentralized and transparent UMass Resource Allocation Model and accompanying system; (2) that this evaluation include testing of this UMass Resource Allocation Model in parallel with the existing model. By the end of calendar year 2014, the campus should take stock of what has been learned and determine appropriate subsequent action (e.g., additional study, exploration of further variations, steps towards transition to a different model, etc.). It is important to underscore that the JTFRA is not recommending adoption of any specific model or any specific change to the campus budgeting system at this time. In the following report we outline the process by which we came to these recommendations, the components of the UMass Resource Allocation Model, its role in the UMass Resource Allocation System, and a proposal for next steps.
Background

The Joint Task Force on Resource Allocation (JTFRA) emerged from the first phase of the Strategic Planning process and was established in Faculty Senate Doc. No. 14-010B on October 10, 2013. The Phase 1 report of the Joint Task Force on Strategic Oversight underscored the need to promote an “evidence-based resource allocation” and to “adopt practices that reinforce the link between evidence and decisions.” The Report also highlights the need to set “high standards of transparency, rationality and fairness as we tackle difficult choices.”

The JTFRA takes as a given that any resource allocation system must support and embody the values that are articulated in Phase 1 of the strategic plan: (1) excellence, (2) leadership, (3) responsibility and stewardship, (4) social progress and social justice, (5) innovation, (6) discovery and impact, (7) engagement, (8) diversity, equity, and inclusiveness, (9) opportunity, (10) openness and integrity, and (11) integration and collaboration. Not only are these values that are articulated in the Phase 1 Report of the Strategic Plan, but these are also values that both the JTFRA and Huron heard repeatedly through our campus engagement and in our JTFRA discussions. In this report, we indicate how changes to our resource allocation system can help support all of these values.

In this report we focus primarily on resource allocation models, analytical frameworks for identifying revenues, tracing the flow of funds to the various units on campus, and assigning costs. It is important to note that any resource allocation model is only part of a wider resource allocation system (RAS). This wider system also includes the decision-making processes through which the flows of funds continue to be directed in ways that serve the values of the campus and enhance the ability of the units, individually and collectively, to implement their strategic initiatives and contribute to the university’s overall mission.

Charge

The charge to the JTFRA is as follows: “The Joint Task Force on Resource Allocation (JTFRA) will organize the campus’ consideration of alternative resource allocation models, and make recommendations to the Chancellor for moving forward with any proposed improvements that result from the study.” Specific expectations laid out in the charge include: (1) educating and engaging the campus community; (2) identifying key characteristics for an effective resource allocation model, and (3) proposing specific changes for consideration by the campus community. The JTFRA was charged with developing draft recommendations and presenting them to the campus community for consideration, which we do in this document. Following a period of campus discussions, recommendations will be presented to the Chancellor.

Summary Recommendation

The JTFRA’s recommendation is that the University consider developing and adopting a more decentralized and transparent resource allocation model than it now employs. As we learned more about our current resource allocation model, it became clear that it could be improved to better support many of our strategic priorities. For example, and as discussed below, our current system is both highly centralized and opaque, and there is not a close relationship between who makes decisions about allocating or spending resources and who takes responsibility for those decisions. Based on discussions with the campus community it is clear that our resource allocation system

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2 http://www.umass.edu/senate/fs_docs/2013-2014/731/SEN_DOC_NO_14-010B.pdf
does not adequately support several of our key campus values, particularly responsibility and stewardship, innovation, integration and collaboration, and openness.

The JTFRA explored a variety of resource allocation models that have been adopted by other universities over the past few decades. In fact, most universities do not employ one monolithic model in the way they allocate resources, and we are no different. The current model at UMass Amherst is primarily a highly centralized, incremental budget model with a few areas where units are provided incentives to pursue particular activities. The JTFRA quickly recognized that adopting “true RCM model,” a budgeting model that is highly decentralized, for the campus would seriously restrain a holistic vision for the campus and potentially undermine support for the common good. A highly decentralized model (such as the “every tub on its own bottom” model employed by Harvard and others) appears likely to discourage efforts to attain some of our common core values (i.e., integration and collaboration; social progress and social justice; diversity, equity, and inclusiveness; opportunity; and excellence across the campus as a whole). A more decentralized and transparent resource allocation model than is currently used has the potential to better support values such as innovation, discovery and impact, engagement, and openness and integrity.

Using the Phase 1 report of the Strategic Plan as a starting point, the JTFRA worked with Huron Education to develop a set of budgeting values and six budgeting principles (see Huron Supplement, p. 3). Based on these principles Huron Education created an illustrative example of a customized resource allocation model using FY13 UMass Amherst financial data. This allowed for the presentation of campus data to provide context to the discussion of a more decentralized budget model. *Neither the JTFRA nor Huron is recommending that this specific model be adopted by the campus.* Instead, we recommend that the university test a parallel budget model (described below) beginning in the summer of 2014 to further explore our understanding of the implications of such a model and thus refine it. A semester-long comparison between the model suggested by Huron Education and the model currently in place will allow for further refinements of the model before a final version is considered for adoption by the campus. If a new UMass Resource Allocation System (URAS) is adopted there would be a period of careful refinement to ensure that it is serving the campus as a whole and that it is supporting the campus values outlined in the Phase 1 report. In fact, we expect that any Resource Allocation System should receive regular review and updating to support our campus values and strategies. In this report, we define the potential UMass Resource Allocation System (URAS) as the UMass Resource Allocation Model (URAM) working together with our campus strategy (as developed in the Strategic Plan). While the JTFRA at this point is recommending the development of a URAM, it is the results of the URAS that over time will be tested and may lead to changes in the URAM (or possibly the Strategy).

**Overview of the JTFRA and Huron activities**

The work of the JTFRA proceeded in the following three areas, which are reviewed below:

- Data collection, validation, and analysis
- Selection of a model to examine in more detail
- Review of each component of the model explored and the initial model in total.

Beginning in November, the first phase of the work of the JTFRA consisted of data-gathering. The goal was to understand our current funds flow and resource allocation methodology. During this phase Huron Education (John Curry, Maggie Burger, and Glenn McLaurin) met with JTFRA and also with the executive leadership team, executive financial officers, academic affairs and administrative and finance support team, academic budget managers, and the Joint Task Force
on Strategic Oversight (Huron, p. 4). This was an iterative process where Huron gathered information and then engaged with the groups and individuals listed above to refine their model of our current funds flow—that is, how funds come into campus, how they move within the campus, and where decisions are made for spending campus resources. This led to a good understanding of how funds currently flow to and from academic units (schools and colleges) based on data from FY 13 (Huron, p. 29). It also helped to elucidate the allocation rules for the flow of funds (Huron, p. 30). The JTFRA further examined trends in current higher education with respect to resource allocation as a means to better understand how our current budget model might be improved (Huron, pp. 15-20).

Through this process, the JTFRA has taken seriously the part of the charge that refers to “educating the campus.” A larger part of our work was first educating ourselves about both trends in higher education and the details of our very complex resource allocation system. The JTFRA co-chairs made several presentations to the campus community to share each component of the JTFRA’s discussions, which included: the Student Government Association, the Graduate Student Senate, the Faculty Senate, Open Campus Forums, the Dean’s Council, the Campus Leadership Council, the Academic Priorities Council, the Program and Budget Council, and the Research Council.

The co-chairs also met with some of the A&S Unit Directors and held a forum for Department Heads and Chairs. At each of these presentations we solicited input, and this input significantly informed and impacted our discussions. Huron met one-on-one with Deans and with several of the unit directors, and this feedback also informed the JTFRA discussions. We invited the campus to comment on the JTFRA’s work via a blog and through a dedicated email address. The JTFRA website contains all of the minutes of the JTFRA meetings, the charge, membership, and other materials.3

In the rest of this report we review how we came to select a model option to explore further, and the components of the model that Huron developed for our consideration.

Budget Values and Guiding Principles

The first task for the JTFRA was to catalog our campus values relative to budgeting and capture these in six “guiding principles” for assessing how we allocate resources on campus (Huron, p. 3). The JTFRA first identified preliminary values on the basis of both the Strategic Plan Phase 1 report and interviews with the constituents mentioned above. These were then discussed with the JTFRA members, and co-chairs Elizabeth Chilton and Tim Anderson also presented these for feedback from the Council of Deans, the Student Government Association, the Faculty Senate, the Graduate Student Senate, and an Open Campus Forum, and the Academic Priorities Council and the Program and Budget Council of the Faculty Senate. An email was also sent to the campus community on January 21st. At that time we also set up a blog for campus community members to submit comments on our draft guiding principles. We also received emails from individuals with comments on both the budgeting values and the guiding principles. As a result, the guiding principles were modified significantly to reflect campus input (Huron, pp. 4-14).

The guiding principles address the values that should be explicitly addressed in a resource allocation model. They are a way for us to think through how our current budget model helps us to achieve our strategic priorities and in what ways it does not. But the guiding principles do not prescribe how funds should be expended. The campus strategic plan expresses the campus priorities clearly, and it is these strategic priorities that will guide decisions about how to spend resources

3 https://www.umass.edu/provost/strategic-planning/joint-taskforce-resource-allocation
going forward. A new resource allocation model would not change the campus priorities, nor would it remove the importance of decision-making. Instead, we hope it actually makes it clear what decisions are being made and provides the mechanism for funding our strategic priorities.

Model Options

Once we had a sense of the key guiding principles that the campus considered necessary for a successful resource allocation system for the campus, we began to examine the range of models currently employed by university campuses across the U.S. We also explored the trends in higher education with respect to resource allocation (Huron, pp. 15-20) and examined each of the main types of resource allocation models and considered their pros and cons (Huron, p. 22).

The models we explored ranged from a variety of centralized budget models (incremental, formula-based, and performance-based) to more decentralized models (incentive-based or Responsibility Center Management [RCM], and an “every tub on its own bottom” [ETOB] model). We recognized that most campuses have resource allocation models that are a hybrid of these different model attributes. At UMass we currently have, for the most part, an incremental budgeting model. In incremental budgeting the current budget forms a base, with increments added or taken away each year as circumstances allow or require, leading to modest changes. Incremental budget models do not easily allow for rapid changes in either revenues or costs, and decisions are made centrally for the most part. UMass also has defined some areas where colleges are encouraged to develop initiatives that result in new revenues, which they keep and have discretion over spending (e.g., Continuing and Professional Education revenues, out-of-state student tuition and fee growth, and net graduate tuition and fee growth). However, these are only small parts of a large and complex system, and there is currently little transparency in how all the revenues and costs fit together.

Two key attributes that came out of the evaluation of our guiding principles were: (1) transparency, and (2) appropriate level of decentralization. In terms of the latter, it was recognized that a strong degree of central control in the budget process can ensure the maintenance of the common good. However, too much central control can limit the degree of transparency and responsibility at the college or academic unit level that leads to more effective decision-making.

Huron guided us through a process of assessing how well our current budget model aligns with our stated guiding principles (Huron, pp. 31-33). Identifying the points of alignment or misalignment with our guiding principles allowed us to then consider how other model options might better align in important ways. The JTFRA asked Huron to help us to explore a more decentralized, customized model in more detail (Huron, p. 22), hereafter referred to as the UMass Resource Allocation Model (URAM). The key attributes that were identified for a model to explore further included:

- Better align costs with revenues and provide greater transparency in measuring both throughout the system
- More decentralized than our current incremental system, but with enough centralized control so as to ensure the support for campus-level priorities
- Utilizes a central pool of fund or a “strategic investment pool” to address strategic priorities
- Incorporates features that emphasize strategic needs and promote entrepreneurship.

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4 Strong support for this position can also be found in Michigan’s “Budgeting with the UB Model” p. 2-3 elaborates on the difference between a model and a system, with a system extending beyond the mechanistic elements and including the discretionary elements (http://www.provost.umich.edu/budgeting/ub_model.pdf).
• Provide more transparency and formality for the basis of resource allocations on campus.

As stated in the “Recommendations” section above, these are the attributes that the JTFRA felt would best support the values expressed in the Phase 1 report of the Strategic Plan.

It is important to underscore that the JTFRA did not “select” a model, especially given that a customized model by definition is one that is tailored specifically for our campus. Instead, we worked with Huron to select attributes that when combined in a model would allow us to better understand what a more decentralized and more transparent budgeting model would look like at UMass. The JTFRA took on the exploration of a UMass Resource Allocation Model as a process of knowledge discovery, where we could examine all the components of a potential model and then assess the implications of both the component parts and the whole model.

UMass Resource Allocation Model: Key Model Attributes

To create a preliminary version of a customized resource allocation model, Huron worked with the JTFRA on each of the key model attributes. We began with an assessment of our current state of funds flow and the various funds types, which currently have different allocation rules associated with them (Huron, p. 29). Huron suggested that for the purpose of this modeling exercise that we model an “all funds” system in which all funds are discussed, regardless of their source or use; ideally this will simplify and make it easier to identify costs associated with revenues (Huron, p. 34). Of course if a model such as this is implemented, the University would still need to ensure full compliance with laws and universities policies.

After agreeing to explore a model with an all-funds approach, over several meetings we worked through the other major components of the model: (1) the selection of the primary units that would be responsible for both revenues and costs, (2) the major types of revenues that come to campus and how they are allocated to primary units, (3) how indirect costs (costs of central services) are attributed to those primary units, and (4) how we should manage the size and allocation of the strategic investment pool (Huron, pp. 23-24). We review each of these in turn.

Selection of Primary and of Administrative and Support Units in the Model

The first step in building a model was to identify the primary units. For the purpose of building this type of resource allocation model, primary units are those units that have the ability to influence revenue generation and are able to cover all or most of the associated costs. In models such as this, these are typically the schools and colleges and the auxiliaries, as is the case for UMass (Huron, pp. 25-26).

Administrative and Support Units (A&S) were also identified for the purpose of building this model. These units have limited or no ability to influence revenues and they provide services to the primary academic units. Information about these A&S units was taken from our University’s general ledger (Huron, p. 27). In many universities there are often what are termed “hybrid units” that do influence a significant portion of their revenues, but for consistency and simplicity, we considered these all as A&S units in this initial model; essentially any unit that serves the university as a whole and is considered a common good is included as an A&S unit.

It is important to note that nothing in this model recommends or necessitates a change in how A&S units are currently funded, how they function, or where they report; it does, however, indicate a changes in the reporting of revenues and expenses.

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5 See Huron Supplement p. 74 for a glossary of terms used in this report and in their supplement.
Revenues

The two primary sources of revenues to our campus include (1) tuition and fees, and (2) the State Appropriation (Huron, p. 36). Based on FY13 data, Huron estimates that about $385M would be allocable to the schools and colleges from gross tuition and fees including the curriculum fees, in-state and out-of-state tuition revenues (Huron, p. 40). The State Appropriation in FY 13 was $256.9 M (Huron, p. 50). JTFRA spent considerable time discussing how to model the revenue allocation for tuition & fees and the state appropriation, and each is discussed below.

Tuition and Fees. Universities that have moved towards a more decentralized resource allocation model such as the one we are exploring allocate revenues from tuition and fees based on the instruction offered in the schools and colleges. This is most often a ratio that includes both total instruction (measured by student credit hours) and enrollment in the major (full-time equivalents or FTEs; Huron, p. 37). In deciding what proportion to allocate based on total amount of instruction vs. enrollment in the major, there needs to be a balance between promoting recruitment, retention, and quality in the major and supporting both our general education priorities and the holistic view of students’ education. Most schools that have moved towards an activity-based allocation model in recent years have allocated 70-80% of the revenues based on overall instruction and 30-20% based on enrollment in the major (Huron, p. 38). One notable exception is Michigan, which began in 1999 with 100% allocation in the major, but has slowly now moved to 50/50%. The JTFRA felt that a good starting point for the purpose of this initial model was 75% overall instruction (based on student credit hours) and 25% major FTE. We based this starting point on (1) looking at peer institutions and how it has worked out for them thus far, and (2) our own assessment of the data from our general ledger on what portion of our instructional costs are based on academic support and advising vs. direct instruction (Huron, p. 39). From their analysis of the general ledger, Huron estimates that our ratio of expenses for instruction vs. academic support and advising is 16% academic support and 84% instruction. Recognizing that faculty and instructors are involved in academic support that is not likely to be fully represented in academic support expenses, the JTFRA believes that a 75/25% split is a good starting point. One of the ways that we tried to assess the impact of choosing a particular proportion of overall instruction/major FTE was to note the differential impact on our schools and colleges (Huron, pp. 54-55). Given that our schools and colleges vary a great deal in both the costs and types of instruction, we will need to find an appropriate balance for our starting point in the instruction/major split. We explored the sensitivity of this split on the unit margins of the primary units and discovered the margin for most units was sensitive to its value.

One issue we did not examine in detail is our general education instruction as a proportion of total student credit hours. Given the priority that we place on general education and its importance to students, the JTFRA recommends that the impact of general education instruction as a proportion of total instruction be examined further.

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6 The allocable gross tuition includes all tuition and fees; the in-state tuition remission is deducted from the State Appropriations.
7 This includes the value of the state-funded fringe benefits.
8 “Unit margin” is all the revenues that are allocated to a primary unit minus all direct and indirect cost allocations
State Appropriation. The other major source of funding to our campus comes from the state appropriation. Of course the use of the state appropriation should—like tuition and fees—support the academic mission of the University, particularly teaching and learning. However, as a Research University, a portion of the state allocation must support the research mission of the University. While we expect faculty to engage in a wide variety of research activities on our campus, we are also well aware that sponsored research requires an investment by the University, especially since—as in all research universities—the indirect costs (also called “overhead” or Facilities and Administration [F&A] recovery) recovered from grants and contracts does not cover the actual costs of undertaking such research. For example, the Office of Financial and Cost Analysis at UMass calculates that the actual indirect costs of sponsored research at UMass is 72%, meaning that for every dollar spent on external grant or contract it costs the University an additional $0.72 to carry out that research (Huron, p. 47). While our federally negotiated rate is 59%, our actual or effective rate (that is, the rate that we actually recover on average after waivers or indirect cost reductions) is 30%. This is common at all research universities since many granting agencies limit the amount of overhead recovery allowed. It means that 42% of the actual costs of conducting sponsored research are not visible in our current resource allocation model, even though these costs are covered in various ways. In the model scenario that we explored, a portion of the State Appropriation would be used to help cover this differential. While 5% of the differential would be expected to be covered by the primary units, the remaining 37% would be covered by allocating a portion of the state appropriation to the primary units based on sponsored research expenditures. Thus, in the model that we explored with Huron, 85% of the State Appropriation would be allocated on the basis of overall instruction and major FTE (the same 75/25% proportion as tuition and fees) and 15% would be allocated based on research expenditures. This proportion reflects the strategic importance of sponsored research activity as the flagship R1 Research University for the Commonwealth along with the value of research to the quality of cutting edge instruction. At the same time, it allocates the bulk of the state appropriations explicitly on instruction and academic support for our students (Huron, p. 48).

One other way that the model reflects both the desire to maintain strong support for sponsored research and to better align costs with revenues is that 100% of the indirect costs charged directly to a sponsor will be allocated to the college in which the research was conducted. In the current system, typically 10% of the F&A is returned to the Colleges, 10% to the Department, and 10% to the PI, so this represents a substantial change. The JTFRA is not recommending a change to the 10% allocation of recovered F&A to the faculty investigator, nor is it recommending how the remainder of the F&A be allocated within the primary unit. Given that all indirect costs from sponsored research would be allocated to the schools and college, we recommend that a full examination of the indirect costs allocated to PIs, departments, and Centers and Institutes be included in any further testing and development of a new resource allocation model.

Another attribute of this model related to research is that at our request, Huron modeled a distribution of both the direct and indirect costs of grants based on a Co-PI split (Huron, p. 51-52). Many sponsored research grants have multiple Principal Investigators (PIs). Initially Huron had allocated both the revenues and costs associate with sponsored research on the basis of the primary PI. While a Co-PI split does not change the financial picture in a significant way, and while it is not currently reflected in the general ledger, the JTFRA felt it was important to model our principle of collaboration and desire for interdisciplinary and cross-college research, and recommends that the implications of the Co-PI split be something that is examined further, so that we do not create barriers to collaboration.

Other attributes of the UMass Resource Allocation model are intended to promote campus priorities. These include:
(1) Differentiation between in-state and out-of-state students in the allocation of tuition and fees to primary units; this would be in alignment with the strategic plan and existing incentive programs (Huron, p. 41-42). Given that out-of-state undergraduate tuition and fees constitute ~43% of the net undergraduate tuition and fees (Huron, p. 41), this would ensure that careful attention is paid to financial reality for planning purposes. Note that the portion of the State Appropriation that would be allocated back to schools and colleges would be based on their proportion of in-state students (Huron, p. 46) consistent with the state’s expectations about the use of the State Appropriation.

(2) Scholarships and Waivers. The JTFRA felt that it was important for the campus to recognize scholarships and waivers as a campus good, and to ensure that student financial needs do not become a decision point for colleges. Thus, in the model that we have considered, scholarships and waivers are applied to primary units on the basis of that unit’s proportion of in-state and out-of-state tuition and fees (Huron, pp. 43-45).

(3) A&S Waivers. After a general review of scholarships and waivers, the JTFRA began to discuss how to allocate waivers for graduate students who are employed by A&S units (e.g., the Graduate School and Undergraduate Advising). In the model that we’ve reviewed, the waivers follow the unit of employment, not the unit of enrollment. However, we did not want to create disincentives for A&S units to employ graduate students. Thus, in the scenario modeled by Huron, the hiring of a Graduate Student by an A&S unit is treated as a common good by allocating that portion of scholarships and waivers (17%) on the basis of each unit’s total graduate tuition and fees generated (Huron, p. 46).

The discussion above provides a broad overview of several of the variables that we examined and discussed as components of the allocation of revenues to primary units. It is important to note that all of these—and more—would need to be examined carefully to ensure that there are not unintended consequences of any particular attribute in the model. This would need to be examined carefully in a model-vetting phase if a decision is made to move forward.

Indirect Cost Allocations

In the model that is explored here, primary units would be allocated net expenses for the A&S units and other university operating costs. In the campus’s current model, the costs of A&S units and other indirect costs are funded centrally and then the remaining general operating funds are dispersed to the colleges in the form of annual budgets. In the URAM explored here, revenues go directly to the schools and colleges, and then those units are charged back a kind of “tax” for their proportion of the net expenses of central services and facilities. Some of these services may be best allocated on the basis of student headcount (e.g., academic support services, Commonwealth Honors College, the Library) and others may be best allocated on the total expenses of a school or college (e.g., Administration and Finance, University Relations, Chancellor’s Office, etc.). See

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9 Note that these Indirect Costs should not be confused with the F&A Costs (see Huron, p. 4).
10 A&S units that generate fees typically retain those fees (for example, International Programs Office), which offset A&S direct expenses. As such, it is only the net expense that is allocated to the Primary Units in this model.
Huron Supplement (p. 57) for a full listing of the indirect cost allocation principles they’ve used in this initial model.

While all aspects of indirect cost allocation should be explored in greater detail if the campus decides to undertake a parallel process or shadow system in the coming months, the JTFRA identified two aspects of indirect costs that stood out as requiring significant consideration (Huron report, p. 58). First, the campus currently does not have a way to account for deferred maintenance in the allocation of expenses, and the JTFRA suggests that we explore a way to more accurately plan for these significant costs. Secondly, the baseline model treats square footage of each college the same, meaning that there is no differential weighting for lab space, studio space, or space quality in expense allocations (Huron, p. 57). Huron was able to determine that approximately 15% of allocable space on campus is classified as lab space, but the JTFRA concluded that the campus currently lacks the data to model different space costs effectively. There was also some discussion of whether added complexity to the model would work against our desire for reasonable simplicity and transparency. Further exploration of this issue is recommended.

**Strategic Investment Pool**

The Strategic Investment Pool (SIP) is a centrally held pool of revenues that is used to support university priorities. It is a critical model component for two reasons: (1) it allows for the leveling of unit margins, and (2) it provides a fund for strategic investment by the central administration. It provides the “steering wheel” that distinguishes URAM from traditional RCM models. As to the first issue of unit margins, no matter what percentages of revenue are used for instruction, major, and research support, there will always be some colleges with positive unit margins, and some with negative unit margins. It is important to note that our probing of the test model showed that most units could exhibit a positive or negative unit margin depending on the value of the parameters used (e.g., the 75/25% split between student credit hours and major FTE). The SIP then serves the purpose of investing in areas of strategic importance including support to units that show a negative unit margin under a specific model. This is in the nature of higher education, especially in a university that supports both sponsored and unsponsored research, as well as outreach and engagement. Thus, a portion of the campuses revenues must be available to cover negative unit margins. Secondly, supporting University-wide initiatives, such as those outlined in the Strategic Plan, requires maintaining a healthy Strategic Investment Pool. In the baseline model that we explored for FY13 strategic investments were not apparent in the data in the general ledger—meaning that strategic investments are embedded in model for that year, but not called out on a separate line. The key to an appropriate SIP is that it needs to be large enough to make units whole and to allow for sufficient strategic investment centrally (Huron, pp. 60-63). As outlined in the Huron report (p. 63), Huron recommends that, if a new resource allocation model is implemented, there be a “hold harmless” period where all units are made whole while they adapt to a new system, and the JTFRA endorses this recommendation. Huron calculates that a 35% SIP assessment would have been required to incorporate the effects of strategic fund allocations incorporated into the FY13 budget and to make units whole. Over time, the primary units may require lower investments to cover their respective expenditures, and the portion of funding available to “steer” university-wide initiatives would, thus, increase. While the key to the Strategic Investment Pool is that it is centrally controlled to permit the central administration to maintain core strategic priorities, careful analysis of the relationship between the use of the SIP and the other allocation variables will be critical to ensure the transparency of the system and to enable that the rest of the model to achieve its intended goals. This is discussed further in the section on “Next Steps.”
Model Framework and Understanding Unit Margins

After reviewing the major revenues and indirect costs as allocated to primary units, and after a full discussion of the critical role of the strategic investment pool, Huron Education was able to create an initial version of a comprehensive UMass Resource Allocation Model (Huron, p. 75). This model utilizes FY13 data to examine how all these model components would fit together to form a complete model if we were to apply it to FY13. It includes all of the revenue drivers discussed above, all of the indirect cost allocations, and a Strategic Investment assessment of 35% to make all units whole, as was done in FY2013 under our current resource allocation system. It is important to underscore that, as stated above, while some units show a negative unit margin and some a positive unit margin, this should not be used to determine “winners and losers” in the UMass Resource Allocation Model considered here. There are different costs of instruction and research in different units, and there are different student populations being served in those units. The Strategic Investment Pool represents the central “steering wheel” for the campus and is a critical way to insure that core values are supported beyond quantifiable instruction, advising, and sponsored research. For example, this is where values such as excellence, opportunity, social progress and social justice, diversity, equity, and inclusion can be highlighted and supported centrally as part of the holistic view of the university.

Recommendations

After evaluating each of the components considered for model development, adjusting them to better align with campus priorities, and considering how they fit together into a complete resource allocation model, the JTFRA recommends that:

1. The University continue the process started by JTFRA and further evaluate a more decentralized and transparent UMass Resource Allocation Model. **JTFRA is not recommending adoption of any specific model or any change to the campus budgeting system** at this time.

2. This evaluation should include testing of the UMass Resource Allocation Model discussed above in parallel with the existing model. This parallel testing will result in no changes to current budgets or processes and will consist solely of modeling and simulating recent and current data to permit evaluation and comparison of different approaches, and to better understand how an alternative model and system might work.

3. The JTFRA continue to lead the campus engagement throughout the parallel and implementation phases if a decision is made to move forward.

4. The JTFRA address certain immediate challenges prerequisite to a successful exploration, including:
   - Understanding, vetting, and correcting where necessary the financial, instructional, and other data underpinning the model.
   - Assessing the capacity at all levels to investigate and test a new model while simultaneously operating the existing model.
   - Specifying the articulation between deans and departments in the resource allocation system to ensure appropriate levels of transparency and to define the role of faculty in resource allocation.

5. By the end of calendar 2014, the campus should take stock of what has been learned, and determine appropriate subsequent action (e.g., additional study, exploration of further variations, and/or a decision on whether or not to transition to a different model).
The baseline model recommended here requires greater elaboration before it can be usefully evaluated, and many issues need to be explored during a parallel process and beyond. Issues already identified include:

- Insuring no adverse impacts or disincentives for fundraising (e.g., excluding restricted gifts and endowments from the Strategic Investment Pool).
- Enrollment management and enrollment planning policies and practices.
- Staff training and development, and requisite staffing patterns.
- Data accuracy, validity and utility.
- Budget development processes.
- Methods and procedures for understanding, evaluating, and influencing the cost of administrative and support services.
- Ramifications of differential costs, including the potential for differential charges;
- Alternative methods to calculate space and facilities costs, and to attribute those costs to units.
- While the primary units for revenue allocation in the URAM are the schools and colleges, access to data and transparency at the departmental level is critical, since that is where many of the important decisions and unit planning takes place. The coordination of unit planning and decision making at the departmental and college level needs to be further explored in the development of any new Resource Allocation System.

**Next Steps**

In this report, we define the potential UMass Resource Allocation System (URAS) as the UMass Resource Allocation Model (URAM) working together with our campus strategy (as developed in the Strategic Plan). While the JTFRA at this point is recommending the development of a URAM, it is the results of the URAS that will be tested and may lead to changes in the URAM (or possibly the strategy). This is the only way to truly test and refine the URAM over time.

There will need to be a great deal of engagement by the campus community throughout the parallel process and implementation if a decision is made to move forward (Huron, p. 67). In order to undertake a parallel process the campus would need to continue the stakeholder vetting and model refinement, it would need to assess the campus and governance readiness to support the campus in this type of new allocation system, and it would potentially need to outline an implementation plan and systems assessment (Huron, p. 66). The campus would need to set up a variety of new decision processes and adjust existing roles and responsibilities in order to insure effective implementation of any new resource allocation model (Huron report pp. 66-73). Thus, we recommend the continuation of the JTFRA throughout the parallel and implementation phases if a decision is made to move forward. If a decision is ultimately made to change the resource allocation system, the campus should commit to undertaking an iterative process with broad input during the initial years to ensure that the system serves its intended purposes.

If the campus moves forward on a parallel process to further explore the implications of the URAM and to develop refinements to the model for consideration, then the JTFRA noted that there would need to be several other issues to be explicitly assessed during the parallel process. These include: (1) the role of A&S units in the model, (2) campus readiness (Huron, pp. 66-73), and (3) maintaining quality of our research, teaching, and engagement.
The JTFRA formed a subcommittee, chaired by Jennifer Normanly, to make recommendations on the role of the Administrative and Support units in the new Resource Allocation System, and the recommendations of that subcommittee are summarized here. While most of the model scenarios focus on the revenue and cost allocation to primary units, it is clear that the same principles need to be applied to Administrative and Support (A&S) units. There need to be mechanisms to encourage maximizing efficiency while maintaining an appropriate level of quality. Because the current campus model for resource allocation lacks transparency, it is difficult for primary units to be fully aware of the true costs and capacity for A&S services. A collaborative approach to identifying and implementing administrative improvements should be developed. What is needed is an appropriate balance between central and local services. One of the goals of the new resource allocation model is to promote entrepreneurship and greater efficiency—for primary units, A&S units, and auxiliaries. So striking the right balance between local and central services is essential to provide safeguards against inflated administrative costs while ensuring quality. One way to do this is to ensure that the standards and expectations for central services are clear. There are basic services that can be core across all units; some services can be a la carte; and some units will blend core and a la carte services. There may be some services for which outsourcing is advantageous based on campus resources. But this should be part of the discussions and collaborations with A&S unit directors and primary units, so that they are partners in such decisions.

Two fundamental changes would be critical to the successful implementation of any new resource allocation system: (1) a strategic budget planning process undertaken by academic leadership as a whole on at least an annual basis to coincide with the fiscal year budget cycle; and (2) the establishment of a Cost & Service Committee to evaluate A&S units on a regular basis. These conversations might need to occur every six months in initial years of implementing a new budget model.

- **Strategic Budget Planning**: This activity constitutes strategic and collaborative conversations involving Deans and appropriate leadership from central administration (the Provost, Vice Chancellors, and Chancellor, etc) to identify top priorities for the primary academic units and the campus, while also assessing current capabilities and costs of A&S units. The concept of Core Services comes into play here, in which baseline service expectations (core) are established along with the necessary budget to support them. Core services will vary based on A&S units (e.g. OIT requiring and providing anti virus software on all computers versus Facilities’ more a la carte approach). “Additional Services” beyond the Core services would allow ad hoc, specialized, or priority service delivery to unique primary units as well as to coordinated projects requested among multiple deans. A&S units would be included in these annual Strategic Budget hearings, and would be asked to present strategic initiatives and budget projections. Committees for these hearings would require good staffing, and this process should be one that is deliberative.

- **Cost & Service Committee** would be comprised of representatives of A&S units and primary units in which A&S units are reviewed on a rotating basis (e.g. in a given academic year the committee may pick a few key topics for which benchmarking goals would be set). The emphasis here is upon cooperative relationships, not adversarial ones. This committee would have the goal helping A&S units to gain greater insight into the priorities of primary units
and primary units having greater insight into operations and costs, particularly around institutional compliance. Quality assessments of A&S units would be facilitated by establishing baseline service expectations, priorities, and benchmarking of resources. This committee would need to access and analyze financial data, existing performance metrics, service level agreements and other pertinent information. There should be opportunities to discuss whether primary units should assume greater responsibility or whether A&S unit services can or should be outsourced. A&S units may be able to act as brokers in helping the campus obtain additional resources (e.g., IT sub-contracting when central resources are stretched thin/exhausted). In all cases there needs to be a focus on a collaborative approach to optimizing service. The committee would prepare recommendations to senior administration identifying opportunities for efficiency and effectiveness (e&e) within the context of existing rules and regulations. Progress on e&e initiatives would be provided by the A&S units in subsequent reports.

The JTFRA also recommends engaging A&S units in the mission of the primary units and encouraging entrepreneurship on the part of staff in all campus units. Incentives for performance are not just financial compensation but recognition of work, improving the sense of contribution, collaboration, and contribution to mission.

Campus Readiness

There are a host of other issues relating to campus readiness that would need to be assessed and, if a decision is made to adopt a new Resource Allocation system, to implement. The Huron report identifies several areas of campus readiness for exploration: (1) governance and organizational readiness, and (2) process and systems assessment (A&S unit review is included in the latter; see Huron pp. 66-73). Huron recommends that the analysis and consideration of institutional readiness be taken on in careful coordination with other aspects of the model vetting, and they also note that in a more decentralized budgeting system that the roles of key decision makers and campus leaders will change (e.g., Deans, central administration, and unit directors) making a feedback loop of institutional readiness all the more critical. Huron’s report provides a general outline of what would need to be considered for campus readiness at any institution--it is not necessarily a specific set of recommendations for UMASS. In particular, Huron does not address the budget position of departments and schools within colleges and the relations between their heads and the Dean. Overall, as stated above, the JTFRA recommends that if the campus moves forward with a parallel process that the JTFRA continue to serve a key position in the campus feedback loop among the central administration, deans, the Faculty Senate, the JTFSO, and the broader campus community.

Quality

The purpose of any resource allocation system must be to serve the institution’s values and purposes. As noted in the Phase 1 Report of the Campus Strategic Plan, “Whatever we choose to do, we do with excellence. As demands have risen and resources have become constricted, universities have too often spread resources ever more thinly over what was already being done. But controlling costs cannot come at the expense of the quality that produces value and impact.” UMass Amherst is committed to the quality of the student experience and educational opportunities, high quality and high impact research, and community engagement. At the same time it is committed to diversity, equity, inclusion, and opportunity. Thus, any new resource allocation system must work in such a
way as to maintain these core strategic values and priorities. The initial Resource Allocation Model reviewed by the JTFRA does not include quality among the quantifiable *drivers* of either revenues or costs. However, a Resource Allocation System can recognize and promote quality in several ways:

- By sharpening the focus on how resources are invested;
- By clarifying the opportunities to attract resources to support quality;
- By promoting alignment with institutional priorities.

But the commitment to quality is most clearly manifested in the decisions the institution makes. Some decisions relate to investment. The proposed resource allocation system suggests a significant Strategic Investment Pool, available to correct imbalances and move the campus in new directions. Testing the model must therefore include the procedures and standards by which institutional investments will be made. How will quality, effectiveness, and overall return on investment be measured, especially with respect to dimensions of quality for which easy metrics are not available? How will academic units have the opportunity to make their cases and expand their impact?

Other decisions relate to the standards and expectations we set as an intellectual community. In the first analysis dollars may follow student credit hours or research expenditures. But that does not mean that all forms of teaching or sponsored activity advance institutional goals equally. Therefore, there need to be a consideration of long-term value over short-term fiscal advantage. The JTFRA recommends that maintaining and promoting quality in research, teaching, and service/outreach be highlighted as a key strategic priority in the assessment and development of a UMass Resource Allocation System.

Attachment: *Huron Supplement to JTFRA Report*. See JTFRA website for the full Huron Report.\(^\text{11}\)

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\(^{11}\) [https://www.umass.edu/provost/strategic-planning/joint-taskforce-resource-allocation](https://www.umass.edu/provost/strategic-planning/joint-taskforce-resource-allocation)
Budget Model Assessment and Redesign: Huron Supplement to JTFRA Report

April 23rd, 2014
Guiding Principles and Interview Themes
The campus has provided feedback to help the principles accurately reflect what a new budget model should be capable of performing and define what type of budget model should be further explored.

<table>
<thead>
<tr>
<th>JTFRA Budgeting Values</th>
<th>Budget Model Guiding Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountability</td>
<td>Ensure a culture that promotes a balance among research, educational opportunity and public service.</td>
</tr>
<tr>
<td>Accurate and data informed</td>
<td>Promote innovative activities that align with the strategic plan and focus on campus success areas including quality, student success, diversity, equity, and inclusiveness.</td>
</tr>
<tr>
<td>Alignment of authority and responsibility</td>
<td>Enhance visibility, forecasting and planning to promote a culture of evidence, fiscal responsibility, and accountability.</td>
</tr>
<tr>
<td>Appropriate simplicity</td>
<td>Reinforce the common good in immediate and future University goals by balancing local and central roles and responsibilities when evaluating competing values, needs and resources.</td>
</tr>
<tr>
<td>Balanced</td>
<td>Be transparent and use simple, consistent and fair methodologies to allocate resources to facilitate effective decision making at all appropriate levels.</td>
</tr>
<tr>
<td>Collaboration</td>
<td>Demonstrate a deep commitment to inclusiveness through constituent engagement and promote collaboration and a holistic view of the University.</td>
</tr>
<tr>
<td>Respect for the common good</td>
<td></td>
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<tr>
<td>Continual improvement and initiative</td>
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<tr>
<td>Effective decision making</td>
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</tr>
<tr>
<td>Flexible</td>
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<tr>
<td>Holistic view of the University</td>
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<tr>
<td>Promote innovation</td>
<td></td>
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<tr>
<td>Support diversity, equity, and inclusiveness</td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td></td>
</tr>
<tr>
<td>Strategically aligned with the vision of the university</td>
<td></td>
</tr>
<tr>
<td>Transparency</td>
<td></td>
</tr>
</tbody>
</table>
Three primary themes have emerged from our discussions with deans, academic budget officers, executive financial officers and other UMass leadership.

**Empowerment**

- **Entrepreneurship**: Leadership expressed interest in opportunities that return additional revenues and allow them to support their program growth.
- **Accountability**: Units expressed consistent desires to establish an understanding of service quality levels and expectations and hold central administrative units accountable.

**Infrastructure**

- **Budget Process**: Stakeholders report frustration with vague and inconsistent resource allocation methodologies; they do not understand why they have the budgets they do.
- **Data & Systems**: Colleges are generally confident in data integrity, and utilize both PeopleSoft and supplementary shadow systems for all funds management and projections.

**Culture**

- **Strategic Plan Support**: Deans agree that resource allocation should be viewed as a means to achieving strategic goals.
- **Long-Term Planning**: Stakeholders acknowledged that long-term planning is difficult under the current budget process.
Leadership indicated a desire for additional authority, opportunities to hold central units accountable for services, and greater flexibility to invest in profitable initiatives.

- Schools and colleges have invested heavily in revenue-generating incentives like CPE and out-of-state tuition and fees.
- Deans expressed concern for limited capacity to manage rapid, unfunded instructional growth.
- Some units are forced to supplement state-funded program growth with revenue operations earnings.
- Stakeholders demonstrated frustration with expensive and inefficient service delivery and low levels of service quality for some centrally provided services without a mechanism to provide feedback or enforce service level agreements.

“In a model that rewards us for what we do, we would be much better off.”

“The state does not give us enough to run state-funded programs… we must cross-subsidize with CPE funds to keep state programs going.”

“A lot of money is wasted due to inefficient systems.”
Many stakeholders perceive the current budget process as vague and inconsistent, and report significant time dedicated to transferring monies between funds. Financial data are considered reliable, although most units use shadow systems for supplementary analysis.

- Leadership appreciated predictable levels of base funding, however there was little understanding of how base budgets were established.
- Rationale for award of supplemental funding is not well understood and appears at times to be inconsistent with the communicated award criteria.
- Deans and business managers report that restrictions on various funding sources creates time-consuming financial management work.
- Stakeholders trust centrally-provided financial data, but also rely on shadow systems for analysis to assist with projections and complex budget management.

“Lack of transparency in the budget process is not the unavailability of information, it’s the lack of clarity on the rationale of decisions.”

“You never know what you will be rewarded for, so you try a little bit of everything.”

“It is hard to budget with so many different silos for money.”

“We have the opposite of all-funds budgeting.”
Stakeholders agreed that the resource allocation process should support the strategic plan and facilitate long-term planning.

- Deans see the budget as the means to aligning the University with the strategic plan.
- Stakeholders observed a lack of long-term planning with general operating funds, but more entrepreneurial planning with revenue operation earnings and reserves.
- Stakeholders reported a need for rapid year end spend down of General Operating funds without significant strategic planning.
- Fund balances for revenue operations appear to be growing rapidly with the success of CPE programs, but rather than strategically using the funds, some units reported building reserves to hedge against funding shortfalls.

“Let’s design an allocation process to achieve strategic goals.”

“It is very hard to do long-term planning on the general operations side.”

“We need to take a long-term view of money and allow people to keep it if their explanation passes muster.”
**Balance**

- Major administrative priorities need to be clearly defined, agreed-upon through appropriate budget review processes and given campus resource constraints, significant investment trade-offs need to be communicated to allow for appropriate service level expectation setting as well as ongoing service review.

- Balancing values, absolute needs, and resources.

- Immediate versus longer-term... we will be using our collective judgment about what a university needs to be accomplishing over the long term in making decisions each year.

- Ability to handle short-term money crunches

- Ability to take advantage of new opportunities

- Deans should have more flexibility and control of resources at college level in the model, but there needs to be a balance between college and central.

- Part of the balance required is to balance department decisions with college level decisions. I recommend that there continue to be a balance, and that there be some central administration, college, and department authority.

- Preserve while innovating.

- The model should provide a balance where units participate in investment decisions with a contribution of resources (perhaps partially).
Collaboration/Inclusiveness

- The term stakeholders seems to allude to this but it unfortunately falls short as a principle that communicates a deep commitment to inclusiveness.
- Avoiding duplication, which results in the university streaming revenue in multiple locations for a single item
- Cognizance of diversity, equity, and inclusivity
- The model should promote the concept of “things coming together to add something to the whole of the enterprise.”
- Creating financial boundaries can create collaboration barriers and the new model should strive to promote collaboration not create barriers that inhibit it.
- Ability to create financial flows that support collaboration (I think of them as “air bridges between silos.”)
- Build a diverse and engaged campus community
- Forge interdisciplinary alliances

Data Informed/Accuracy

- Insure that there is an equitable, data-informed and values-driven approach to college subsidies.
- Our situation is such that there are programs housed in state-of-the-art facilities, while others are in very poor space... This is going to get a lot of comments to the effect that a single flat rate per square foot is very hard to accept.
- Operate in a culture of evidence
Flexibility

- Ability to handle short-term money crunches
- Ability to take advantage of new opportunities
- Ability to create financial flows that support collaboration (I think of them as “air bridges between silos.”)
- Ability to change allocations incrementally or more quickly as goals, missions, or needs change
Mission/Strategy Alignment

- The resource allocation model and process supports creating a culture that promotes behaviors and actions that enhance fulfillment of the university’s mission.

- We are committed to educating students through our teaching and research and to engaging local communities, the nation, and the world through discovery, knowledge, and social enquiry.

- The model should provide a sufficient amount of strategic fund resources to be used by campus leadership to invest in “common good” strategies such as community outreach, diversity etc.

- A discrete budget without appropriate or supporting subsidy will lead to decisions based on cost.

- Decision making in the interest of UMass’ core values, the central value being education

- Ability to change allocations incrementally or more quickly as goals, missions, or needs change

- Facilitate large-scale research projects with appropriate external partners

- Support increased research opportunities for UG and Graduate students

- Improve institutional support for faculty research initiatives
Quality

- Incentives for high-impact educational practices
- Student success
- Progress towards 80% graduation rate
- Improving our core product, the undergraduate degree
- Quality is hard to quantify and therefore difficult to incentivize. We do not want to settle for a system that incentives only that which is measurable.
- Innovation, student success, excellence, serving the public
- Support cultural institutions on campus
- Extend classroom boundaries and the scholarly laboratory
- Support the intrinsically valuable but not profitable disciplines
- Continuously improve the graduation rates
- Continuously improve the quality of the undergraduate and graduate degrees
- Continuously improve the general education curriculum
- Support the co-curriculum, career development, and appropriate student activities
**Simplicity**

- In our current system we devote considerable staffing resources to shuffling money from one pot to another to avoid paying overhead, fringe, etc., to allow the dollar to go farther. The model may benefit from requesting that fringe benefits and curriculum fee of non-grant-funded personnel be paid centrally. This would alleviate a great deal of staff time that basically goes in circles.

- The new budget model should be simple enough so that investment and strategic options can be assessed and understood fairly quickly and accurately.

- Promote greater ease of financial comparisons for more informed decision making.

**Stewardship**

- UMass Amherst has a unique responsibility to use its resources to promote the well-being of the Commonwealth of Massachusetts.

- Climate of integrity

- Accountability

- Leadership are held accountable as they are responsible for adhering to the core values articulated

- Good financial stewards of the university’s funds and good stewards of the university’s mission
Transparency

- Decisions and decision makers must be governed by transparent rules that also allow human judgment and they must support decisions with relevant documentation.
- The “how” and “why” decisions are made includes knowing the modeling assumptions and the algorithms as well as the decision-making rules and the considerations orienting the decisions.
- There are clear incentives for colleges, departments, and programs to move in directions that help achieve overall university goals.
- It’s instructive to look at the direct cost expenditures for programs (as a proxy for level of research activity). Whether or not there is much sponsored research, there’s a pretty significant resource commitment to faculty effort for research and scholarship, but that’s almost completely hidden.
Higher Education Resource Allocation Trends
The 2013 Moody’s Report listed 5 Critical Factors which contributed to the recent outlook given on the Higher Education industry.

1. Price sensitivity continues to suppress net tuition revenue growth

2. All non-tuition revenue sources are also strained; diversity no longer offers a safe haven

3. Rising student loan burden and defaults, as well as MOOCs, alter the perception of value of a college degree

4. Increased public scrutiny drives escalated risk of more regulation and accreditation sanctions

5. Prospects for long-term sustainability depend upon strong leadership through better governance and management

These critical factors will likely play a role in the direction the Higher Education Industry is headed and in order to prepare for the change UMass Amherst has engaged Huron
An Inside Higher Ed Survey of College & University Business Officers reports that the majority of public institutions utilize incremental models, though adoption rates have dropped materially in the past 3 years.

<table>
<thead>
<tr>
<th>Budget Models*</th>
<th>Incremental</th>
<th>Formula</th>
<th>Performance</th>
<th>Incentive</th>
<th>Zero-Based</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Institutions</td>
<td>60.2%</td>
<td>26.1%</td>
<td>19.6%</td>
<td>14.2%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Public Institutions</td>
<td>59.3%</td>
<td>34.8%</td>
<td>21.0%</td>
<td>11.8%</td>
<td>25.6%</td>
</tr>
<tr>
<td>Doctoral</td>
<td>78.7%</td>
<td>44.7%</td>
<td>25.5%</td>
<td>21.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Private Institutions</td>
<td>62.3%</td>
<td>17.1%</td>
<td>18.2%</td>
<td>17.1%</td>
<td>33.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Changes in Budget Models, FY07-08 vs. FY10-11</th>
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</thead>
<tbody>
<tr>
<td>All Institutions</td>
</tr>
<tr>
<td>Public Institutions</td>
</tr>
<tr>
<td>Doctoral</td>
</tr>
<tr>
<td>Private Institutions</td>
</tr>
</tbody>
</table>

* Numbers may total more than 100% and Institutions may be listed multiple times because some use more than one budget model.

Source: Inside Higher Ed Survey of College & University Business Officers; Huron Consulting Group benchmarking

In many ways, the move away from incremental models is a reflection of the changing perception of budgeting and the proactive attempt to broaden the team of stakeholders focused on resource management.
While not comprehensive, the graphic below illustrates how the number of institutions pursuing budget redesign initiatives has grown in recent years.

While the Great Recession began in 2008, the prevalence of budget redesign initiatives was delayed until 2010, as most institutions spent the 2009 calendar year identifying short-term initiatives with immediate impacts.
Enhancing fiscal responsibility is one of the notable themes that can be seen across recent budget redesign initiatives, though individual motivations and stated rationales vary materially.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Reasons for Redesign</th>
<th>Implementation Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Florida (UF)</td>
<td>• Promote innovative and entrepreneurial activities that are financially viable</td>
<td>July 2010</td>
</tr>
<tr>
<td></td>
<td>• Generate new revenue sources</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Achieve success through decentralized decision making</td>
<td></td>
</tr>
<tr>
<td>University of Oregon (UO)</td>
<td>• Couple authority with financial responsibility</td>
<td>July 2010</td>
</tr>
<tr>
<td></td>
<td>• Associate revenues directly to revenue creating activity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reward good decision makers</td>
<td></td>
</tr>
<tr>
<td>University of Virginia (UV)</td>
<td>• Increase the self-reliance of schools and other major units</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>• Provide greater transparency and awareness of the implications and costs of academic and service choices</td>
<td>(Projected 2013 – 2014)</td>
</tr>
<tr>
<td></td>
<td>• Support the development and pursuit of academic priorities defined by deans and faculty by matching up authority with responsibility</td>
<td></td>
</tr>
<tr>
<td>University of Washington (UW)</td>
<td>• Enable reallocation of resources when necessary</td>
<td>2011</td>
</tr>
<tr>
<td></td>
<td>• Create greater local planning and accountability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Implement policies that serve the best interests of the University</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Support “common good” services, programs, and operations across the entire institution</td>
<td></td>
</tr>
<tr>
<td>Institution</td>
<td>Reasons for Redesign</td>
<td>Implementation Date</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
</tbody>
</table>
| MUSC Medical University of South Carolina | - Institute a fundamental change to the University’s budgeting approach, which had become excessively complex and riddled with rules  
- Develop a philosophy of budgeting and financial management to clarify incentives  
- Enable entrepreneurship and improve financial stewardship | July 2012           |
| Miami University                    | - Identify sources of new revenue  
- Improve the allocation of resources  
- Achieve greater operating efficiencies  
- Provide better information for decision making                                                   | July 2013           |
| Ohio University                     | - Position academic units to rationally compete for resources and discuss the appropriate balance between academic and non-academic resource allocation  
- Encourage decisions based on current & future needs rather than past assumptions             | July 2012           |
| The University of Arizona           | - Align revenue streams to the colleges in support of their instructional mission  
- Direct tuition to colleges based on their teaching activities  
- Implement a cost pool system that assigns colleges the costs for support services           | 2011 - 2012         |
Key Model Attributes
Based on the results of the alignment analysis and review of other budgeting options, the Joint Task Force for Resource Allocation asked Huron to explore a customized model.

### More Centralized Models
- Places focus on expense budgets and dividing the pie.
- Governed by short-term performance measures.
- Does not align revenues with costs.
- Constrained by limited academic authority, reducing impact of incentives.

### More Decentralized Models
- Focuses on growing the pie and improved alignment of the pie.
- Incorporates a devolution of revenue ownership to local units as generated.
- Allocates costs (direct and indirect) to revenue generating units.
- Utilizes a centrally managed “subvention pool” to address strategic priorities.

### Incremental Budgeting
- Centrally driven.
- Current budget acts as “base;” annual budget increments adjust base.
- Alignment of revenues and costs is not clear.
- Treats funds consistently over time.
- Encourages “use-it or lose-it” spending mentality.
- Budgets do not adjust to reflect demand/enrollment change.

### Formula Funding
- Unit-based model focused on providing equitable funding.
- Unit rates are input-based and commonly agreed upon.
- Annual fluctuations are driven primarily by the quantity of production and not from changes to rates.
- Majority of revenues are not aligned with costs.

### Performance Funding
- Unit-based model focused on rewarding mission delivery.
- Unit rates are output-based and commonly agreed upon.
- Annual fluctuations are driven primarily by changing production not for rate changes.
- May sacrifice quality of outputs (gaming).
- Time-lag between decisions and results.

### “Modern” RCM
- More centralized control as compared to RCM.
- Higher tax rate on all unrestricted revenues to fund mission-critical priorities.
- Incentives are tailored to emphasize strategic needs and promote entrepreneurship.
- Aligns revenues with costs.
- The most commonly implemented since 2005.

### RCM
- Less centralized authority as compared to the Customized Model.
- Lower tax rate on all unrestricted revenues.
- Incentives are more “hard-wired” and may inhibit collaboration and/or impede success of institutional priorities.
- These models were most frequently implemented in 1990 to 2004.

### ETOB
- Extremely de-centralized model.
- Academic units effectively operate as their own financial entities.
- Very little strategic control held by the central administration.
- No sympathy for market forces.
- Under-performing units must cut costs or generate more revenue to cover any losses incurred.

Recent RCM implementations most commonly resemble this model.
## Key Decision Points: Revenues

To define the model’s devolution of revenues, JTFRA has reviewed and defined the following allocation methodologies for consideration in a new budget model.

<table>
<thead>
<tr>
<th>Element</th>
<th>Current Approach</th>
<th>Huron Recommendation</th>
<th>Guiding Principle</th>
<th>Decision Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope of Revenue Focus</strong></td>
<td>General Operating Funds</td>
<td>General Operating Funds, Auxiliary Funds, Restricted Funds</td>
<td>“Holistic view of the University” “Appropriate simplicity”</td>
<td>Cultural implications, as stakeholders accept/verify model</td>
</tr>
<tr>
<td><strong>Selection of Primary Units</strong></td>
<td>Not applicable</td>
<td>15 Primary Units, Exclude Graduate School, Honors College and Centers &amp; Institutes</td>
<td>“Alignment of responsibility with authority”</td>
<td>Selected units, at a minimum cover their direct costs with revenues</td>
</tr>
<tr>
<td><strong>Distribution of Tuition &amp; Fees Revenues</strong></td>
<td>Centrally held w/ minimal allocations to units</td>
<td>Starting at 25-75% split on FTE Major and Instruction Credit hours In and Out of State Split</td>
<td>“Alignment of authority with responsibility” “Balanced”</td>
<td>Enrollment strategy aligned with the University strategy will refine the allocation methodology</td>
</tr>
<tr>
<td><strong>Distribution of Scholarship Costs</strong></td>
<td>Centrally held w/ minimal allocations to units</td>
<td>Full allocation of local Proportional allocation of central</td>
<td>“Respect for the common good” “Effective decision making”</td>
<td>Implication of enrollment strategy will refine this approach</td>
</tr>
<tr>
<td><strong>Distribution of Appropriations</strong></td>
<td>Centrally held</td>
<td>Research and Instruction / Major starting at 15-85% Instruction / Major support for in-state students</td>
<td>“Strategically aligned with the vision of the University” “Holistic View” “Appropriate simplicity” “Balanced”</td>
<td>Bringing units who invest in sponsored research even Aligning with state definition of appropriations</td>
</tr>
<tr>
<td><strong>Distribution of F&amp;A Recoveries</strong></td>
<td>Split 70-30 between central admin and units</td>
<td>100% to primary units Accounts for Co-PI Split</td>
<td>“Promote innovation” “Collaboration”</td>
<td>Allocation of indirect costs will be covered through associated revenues No impact to 10% to PI</td>
</tr>
</tbody>
</table>
### Key Decision Points: Costs

Through an iterative approach Huron has worked through several decision points with JTFRA, sharing options for these decisions based on an understanding of UMass' current approach and best practices.

<table>
<thead>
<tr>
<th>Element</th>
<th>Current Approach</th>
<th>Huron Recommendation</th>
<th>Guiding Principle</th>
<th>Decision Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Admin. and Support Units</td>
<td>▪ Not applicable</td>
<td>▪ 1 to 10 academic pools&lt;br&gt;▪ 1 to 9 administrative service pools&lt;br&gt;▪ 1 to 8 research and engagement pool&lt;br&gt;▪ 1 to 3 student affairs pools&lt;br&gt;▪ 1 to 5 facilities pools</td>
<td>“Transparency”&lt;br&gt;“Accountability”&lt;br&gt;“Appropriate simplicity”</td>
<td>▪ Determined by need for transparency while allowing for a simple view</td>
</tr>
<tr>
<td>Cost Allocation Step-downs</td>
<td>▪ Not consistently applied</td>
<td>▪ Drivers are allocated only to primary units with some step downs for Auxiliaries around utilities, facilities and campus wide plant</td>
<td>“Transparency”&lt;br&gt;“Accountability”&lt;br&gt;“Appropriate simplicity”</td>
<td>▪ Analysis may lead to more accurate drivers</td>
</tr>
<tr>
<td>Number of Allocation Drivers</td>
<td>▪ Unclear&lt;br&gt;▪ Limited costs allocated to units</td>
<td>▪ 5 simple drivers have been selected; Student Headcount, Expenses, Research Revenue, Square Footage, and CPE Credit Hours&lt;br&gt;▪ Step downs were used for Auxiliaries to allocate Square Footage and Expenses</td>
<td>“Transparency”&lt;br&gt;“Accountability”&lt;br&gt;“Appropriate simplicity”</td>
<td>▪ Analysis may lead to additional allocation drivers</td>
</tr>
<tr>
<td>Strategic Investment Pool</td>
<td>▪ Pool of funds managed centrally&lt;br&gt;▪ Often underfunded with limited transparency</td>
<td>▪ Large enough to support the common good and make all units whole&lt;br&gt;▪ Managed in alignment with the strategic plan by central admin</td>
<td>“Common Good”&lt;br&gt;“Strategically Aligned”&lt;br&gt;“Holistic view”</td>
<td>▪ As the model is refined and evolves, leadership will require more investment into their SIP for strategic initiatives</td>
</tr>
</tbody>
</table>

These key decision points serve as the revised baseline approach Huron recommends UMass take as they continue to refine the model through additional stakeholder input.
Huron’s analysis of UMass’ financial data and its chart of accounts led to the preliminary selection of the following primary units for validation.

<table>
<thead>
<tr>
<th>Schools and Colleges (8)</th>
<th>Auxiliaries (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>Athletics</td>
</tr>
<tr>
<td>Engineering</td>
<td>Auxiliary Enterprises</td>
</tr>
<tr>
<td>Humanities &amp; Fine Arts</td>
<td>Dining Commons</td>
</tr>
<tr>
<td>Management</td>
<td>Residential Life</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>Transportation Services</td>
</tr>
<tr>
<td>Nursing</td>
<td>University Health and Wellness</td>
</tr>
<tr>
<td>Public Health &amp; Health Sciences</td>
<td>WFCR</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences</td>
<td></td>
</tr>
</tbody>
</table>

Note: Direct CPE revenues and expenses have been aligned to schools and colleges.
Below is an outline of the Auxiliary units and a detailed view of constituent departments as they roll up to the larger units Huron has identified for modeling purposes.

<table>
<thead>
<tr>
<th>Preliminary Framework for Primary Units – UMass Amherst</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Auxiliaries (7)</strong></td>
</tr>
<tr>
<td>▪ Athletics</td>
</tr>
<tr>
<td>▪ Auxiliary Enterprises (rolls-up)</td>
</tr>
<tr>
<td>– Auxiliaries Central Administration</td>
</tr>
<tr>
<td>– Conference Services</td>
</tr>
<tr>
<td>– Food Services Retail</td>
</tr>
<tr>
<td>– Hotel</td>
</tr>
<tr>
<td>– Retail Services</td>
</tr>
<tr>
<td>– University Store</td>
</tr>
<tr>
<td>– Vending</td>
</tr>
<tr>
<td>▪ Dining Commons</td>
</tr>
<tr>
<td>▪ Health and Wellness</td>
</tr>
<tr>
<td>▪ Residential Life</td>
</tr>
<tr>
<td>▪ Transportation Services (rolls-up)</td>
</tr>
<tr>
<td>– Parking Services &amp; Garage</td>
</tr>
<tr>
<td>– Transit Services</td>
</tr>
<tr>
<td>▪ WFCR</td>
</tr>
</tbody>
</table>
Below is an outline of the A&S units and a detailed view of constituent MBUs as they roll up to the larger units Huron has identified for modeling purposes.

<table>
<thead>
<tr>
<th>Preliminary Framework for Administrative &amp; Support Units – UMass Amherst</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Affairs</strong></td>
</tr>
<tr>
<td>- Academic Administration</td>
</tr>
<tr>
<td>- Academic Support Services</td>
</tr>
<tr>
<td>- Commonwealth Honors College</td>
</tr>
<tr>
<td>- Continuing and Prof. Education</td>
</tr>
<tr>
<td>- Enrollment Management</td>
</tr>
<tr>
<td>- Graduate School</td>
</tr>
<tr>
<td>- Undergraduate Affairs</td>
</tr>
<tr>
<td>- University Library</td>
</tr>
<tr>
<td><strong>Administrative Services</strong></td>
</tr>
<tr>
<td>- Administration and Finance</td>
</tr>
<tr>
<td>- Campus Wide Plant</td>
</tr>
<tr>
<td>- Chancellor’s Office</td>
</tr>
<tr>
<td>- Development &amp; Alumni Relations</td>
</tr>
<tr>
<td>- Information Technologies</td>
</tr>
<tr>
<td>- UMass System Office</td>
</tr>
<tr>
<td>- University Police Department</td>
</tr>
<tr>
<td>- University Relations</td>
</tr>
<tr>
<td>- Utilities Commodities</td>
</tr>
</tbody>
</table>

* The reporting for these expenses sits within Administration and Finance but have been identified as needing to be called out separately.
Funds Flow and Alignment Analysis
Based on an in depth review of the UMass’ general ledger Huron was able to identify how funds were actually flowing FY13 to and from units.

---

**Revenue Sources**

- State/Federal Appropriations $205.5M
- Investment Income $4.2M
- Gross Tuition & Fees $113.2M
- Grants & Contracts $136.9M
- Gifts $12.5M
- Endowment Income $5.4M
- Sales & Services $208.3M
- Other Revenues $46.6M

**Allocation Recipients**

- Administrative & Support Units $702.1M
- Schools/Colleges/CPE $187.2M
- Auxiliaries $193.0M

**Expenses**

- Administrative & Support Units
- Schools/Colleges/CPE
- Auxiliaries

**Note:** Diagram above does not include internal transfers, agency funds, accruals, recharges, fund deductions (excluding Plant and Endowment), Plant Funds. Not all rules were clearly identifiable in the GL data.
A detailed review of the UMass General Ledger (FY13) and numerous meetings with budget office stakeholders resulted in this illustrated high-level funds flow.

*Profits = Revenues – 10% Tax – ($65/course) – Course Expenses*
Our alignment analysis will compare the future state to our current state assessment to identify gaps that may be addressed by a new budget model.

**Introduction to Alignment Analysis**

- The detailed review of specific factors of the budget model show varying degrees of alignment with the guiding principles developed by JTFRA.
- A model that more closely aligns the analysis factors with the guiding principles will provide UMass with the foundation to meet its strategic goals while maintaining the current strengths of the University.

**Connection to Desired Future State:**

- The gaps between the current and desired future states help lay out where a new model may be able to provide value and meet UMass’ needs.

**Alignment Analysis Key**

- Low Alignment
- Moderate Alignment
- High Alignment

*The gaps between the current and desired future states help lay out where a new model may be able to provide value and meet UMass’ needs.*
Huron conducted an alignment analysis to compare the guiding principles to UMass’ current state and identify gaps that may be addressed by a new budget model.

**Revenue Sources**
- State/federal Appropriations ~$205M
- Investment Income ~$40M
- Gross Tuition & Fees ~$415M
- Grants & Contracts ~$1.35M
- Gifts ~$32M
- Endowment Income ~$5M
- Sales & Services ~$21M
- Other Revenues ~$45M

**Initial Recipients**
- State ~$700M
- Administrative & Support Units ~$460M
- Schools/Colleges/CPE ~$410M
- Auxiliaries ~$195M

**Allocation Recipients**
- Administrative & Support Units
- Schools/Colleges/CPE
- Auxiliaries

**Expenses**
- Flow lacks simplicity due to complex rules redistributing funds.

Base budgets are defined and rarely reevaluated to fluctuate for internal / external changes.

Note: Diagram above does not include Internal transfers, Agency funds, Accruals, Recharges, Fund deductions (excluding Plant and Endowment), Plant Funds

*Includes approximately $165M in scholarships and waivers. Operating expenses are closer to $285M.
UMass has created several incentives that allocate revenues back to units in an accurate and simple manner and align authority with responsibility; expanding these practices across all revenues would expand incentives.

<table>
<thead>
<tr>
<th>Incentive</th>
<th>Unit Portion</th>
<th>Calculation</th>
<th>Alignment Analysis</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuing Education Incentive</td>
<td>100% of Unit CPE Profits</td>
<td>Unit CPE revenues – (10% CPE tax - $65/credit - and Unit’s direct expenses)</td>
<td>Consistent and fair methodology that is transparent and appropriately simple.</td>
<td>⬤</td>
</tr>
<tr>
<td>Graduate Tuition Growth (In and Out of State)</td>
<td>50% of Unit’s Graduate Tuition Growth &amp; central admin will cover any loses</td>
<td>Unit’s Graduate Tuition Growth – (50% for admin support) – Unit’s waivers</td>
<td>The amount of waivers reduces this incentive’s dollar value but it is aligned with the University’s strategy and promotes collaboration.</td>
<td>⬤</td>
</tr>
<tr>
<td>Private Giving</td>
<td>91% of Unit’s Gift Revenue</td>
<td>Unit’s Gift Revenue – 9 to 9.5% for admin support</td>
<td>Promotes alignment of authority with responsibility, provides the units a mechanism to support quality and support initiative.</td>
<td>⬤</td>
</tr>
<tr>
<td>Out of State Undergraduate Tuition Growth</td>
<td>50% of Unit’s Out of State Graduate Tuition Growth</td>
<td>Unit’s Out of State UG Tuition Growth – 50% for admin support</td>
<td>Focused on only out of state students and not aligning all funds with the unit that generated it limits the alignment of authority with responsibility.</td>
<td>〇</td>
</tr>
<tr>
<td>Indirect Cost Recovery</td>
<td>30% of Unit’s IDC</td>
<td>Unit’s IDC – 70% for admin support</td>
<td>Aligns revenues with cross collaborators but does not distribute enough to cover the full costs of research and limits unit level accountability.</td>
<td>〇</td>
</tr>
<tr>
<td>Carry forwards</td>
<td>7% of Unit’s Gen Ops</td>
<td>Unit carry forward ≤ 7% of Units Budget</td>
<td>Gen Ops funds are often the primary focus of fund balance analysis which is at most 24% of the carry forward funds a unit has. This limits the alignment with the strategy and unit’s accountability for making effective decisions.</td>
<td>〇</td>
</tr>
<tr>
<td>College of Engineering Course Fees</td>
<td>100% of Fee to College of Engineering</td>
<td>College of Engineering only $160/semester/student</td>
<td>Course instruction fees rarely cover the true differential costs and are limited to only Engineering. Does not appear to be accurate or data informed.</td>
<td>〇</td>
</tr>
<tr>
<td>Strategic Investment Pools</td>
<td>Unknown</td>
<td>Determined by leadership</td>
<td>This does provide an opportunity to align with the strategic plan of the university but there is limited transparency into how priorities for subsidy are defined.</td>
<td>〇</td>
</tr>
</tbody>
</table>
The new model will change the way funds flow throughout the institution, streamlining and simplifying distributions and connecting revenues with their associated costs.

**Current State Funds Flow Model**
- Majority of revenues, including all Appropriations and non-restricted Investment & Endowment Income, are pooled into a non-departmental unit for allocation on an as-needed basis
- Only select revenues such as a portion of indirect cost recoveries and recoveries are directly allocated to Schools & Colleges
- Actual dollar amounts received by Colleges and Administrative & Support units are often not associated with performance drivers

**Updated Funds Flow Model**
- Majority of revenues are allocated to Primary Units
- Indirect cost recoveries are allocated to Primary Units in their entirety
- Primary Units are allocated a share of the budgetary needs for the Administrative & Support Units
- Deferred Maintenance and Strategic Initiatives Fund (Subvention) pools are created

See funds flow analysis for more details.
Revenue Allocations
Of the variety of revenues sources considered, two of the most critical are tuition and state appropriations.

<table>
<thead>
<tr>
<th>Component</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tuition and Fees</strong></td>
<td>- Allocation a portion of tuition and fees on “home department” creates a focus on growing enrollment and increasing recruitment and retention.</td>
</tr>
<tr>
<td></td>
<td>- Methodologies using credit hour to the department of instruction better match costs with the internal economy.</td>
</tr>
<tr>
<td><strong>State Appropriations</strong></td>
<td>- State appropriations are often intended to support the academic mission of the university.</td>
</tr>
<tr>
<td></td>
<td>- Appropriations oftentimes also support non-self-sustaining activities like sponsored research.</td>
</tr>
<tr>
<td></td>
<td>- Appropriations distributed to colleges/schools may result in a larger assessment to funds the strategic investment pool.</td>
</tr>
</tbody>
</table>

Several methods can be employed for depicting revenues in a model and should be based on the strategic direction of the University.
To align the costs incurred with the revenues generated, Huron recommends splitting general tuition and fee revenues into two buckets: instruction and major.

**Direct Tuition & Fee Revenue**
- Tuition and fee revenues for programs tracked specifically within academic units are identified within the general ledger.
- Those revenues are directly assigned to the appropriate academic unit.

**General Tuition & Fee Revenue**
- The general tuition and fee revenue pool is divided according to the proposed instruction-major split.
- Each sub-grouping is allocated according to the academic unit’s share of either instructed credit hours or enrolled (major) FTE.

*Examples of direct fee revenue includes Engineering Fee and CPE revenue.*
Benchmarking revenue sharing agreements between the college of instruction and the major college generally yields splits between 0/100 and 80/20.

**Distribution of Tuition and Fees Revenue**

**Tuition and Fees Allocated to College of Instruction**
- Recognizes direct costs of instruction
- Misaligned incentives for academic advising

**Tuition and Fees Allocated to College of Major**
- Promotes recruitment
- Does not recognize direct costs of instruction

University of Michigan’s instruction/major split is detailed at: [http://www.provost.umich.edu/budgeting/ub_model.pdf](http://www.provost.umich.edu/budgeting/ub_model.pdf)
The guiding principle of “alignment of authority with responsibility” suggests using a proxy to show the cost of generating tuition and fees by academic units.

Using the reported average ratio of expenses for instruction versus academic support, Huron can establish a starting place for the split of allocable tuition and fee revenues.
Based on analysis of the FY13 General Ledger, student data and several reviews with the Budget Office, Huron has mapped out the following gross tuition and fees to be allocated.

### Tuition and Fee Distribution

- **Gross Tuition and Fees**: $564.6MM
- **Schools/Colleges/CPE Tuition and Fees**: $385.4MM
- **Graduate Tuition and Fees**: $53.7MM
- **Other Fees**: $35.6MM
- **Auxiliaries Fees**: $156.3MM
- **Administrative and Support Fees***: $23.0MM

*Wherever possible Huron recommends allocating revenues as they are generated and the tuition and fees that are not currently already allocated this way, using a proxy to align the costs with the revenues.*
Three years ago, UMass instituted a program to increase the growth of out of state students. This was done through a two-prong approach; a tuition discounting program and a revenue allocation program to units.

In alignment with the strategic plan and existing incentives, UMass may want to consider differentiating between in and out of state students in the allocation of tuition and fees back to the primary units.
Scenario Impact: Tuition & Fees Allocation

A focus on in and out of state tuition and fee generation aligns with the strategic incentives already established to help grow out of state students and has led to enrollment growth.

**Risk:** Allocating tuition and fees on in and out of state splits will penalize schools and colleges that have a proportionally higher enrollment of in state students than other schools or colleges.

Aligning in and out of state tuition and fees with the revenue-generating units will have impacts on other revenue allocations, including scholarships & waivers and state appropriations.
In the originally discussed model, Huron recommended allocating Scholarships and Waivers in proportion to tuition and fees wherever possible.

Moving towards an in and out of state split of tuition and fees will require that scholarships and waivers follow a similar split.
In order to allocate scholarships and waivers in relation to in and out of state tuition and fees, they must first be organized into undergraduate and graduate pools wherever possible.

**Undergraduate**
- The largest impact of the shift to in and out of state is focused at the undergraduate level as the vast majority of scholarships and waivers align with the undergraduate scholarships that were previously allocated on proportion of total tuition and fees revenue. Now they will be allocated on the proportion of in and out of state undergraduate tuition and fees.
- The tuition discounting program for out of state students also found in this pool of funds.

**Graduate**
- Graduate fellowships are shifted to align with the Graduate pool and the fellowships and would be allocated on a proportion of graduate tuition and fees as they are a common good.
- Graduate waivers were already defined as being allocated based on employee FTE, which has no bearing on the in and out of state status of the student.

**Direct**
- Direct Scholarships and Waivers represents the gifts, endowment income and grants and contracts that are already controlled at the school and college level.

**Scholarships & Waivers: In and Out of State**

- **Undergraduate Scholarships & Waivers** ($73.4MM)
  - Undergraduate Waivers ($15.1MM)
  - Undergraduate Scholarships & Waivers ($58.4MM)
- **Graduate Scholarships & Waivers** ($35.5MM)
  - Graduate Waivers ($29.6MM)
  - Non-GEO Fellowships ($5.9MM)
- **Other Direct Scholarships & Waivers** ($5.3MM)
  - Direct ($5.3MM)
- **Direct** ($0.0MM)
Scholarships and waivers will still be allocated based on a common good approach wherever possible and will continue to be aligned with the methodology by which tuition and fees are distributed.

**Risk:** Scholarship and waiver distribution is managed by central administration as part of an enrollment management strategy used to benefit the university as a whole. These expenses are not directly in the control of the schools and colleges which may create a misalignment between authority and responsibility.

In addition to scholarships and waivers that will need to be adjusted for and in state and out of state split, state appropriations allocations will also need to be adjusted to support only in state students.

*Net of approximately $5M in waivers being directly allocated to grants and contracts.*
After review of the Scholarships and Waivers, JTFRA began a discussion on how to best allocate the costs of Administrative and Support Unit Graduate Waivers.

**Allocation Methodology:** Huron recommended an alternate approach that would deliberately make the hiring of a Graduate Student by central administration a common good by allocating that proportion of scholarships and waivers (17%) on each unit’s total graduate tuition and fees generated rather than Graduate Student Employee FTE.

**Risk:** This creates additional complexity in the model that may limit the ability for schools and colleges to understand the impact of their actions.

**This scenario treats graduate students employed by Administration and Support units as a true common good, allocating their costs based on the school and college’s based on their proportion of graduate tuition and fees.**
State appropriations can be allocated to support sponsored research and instruction in order to provide investments for both mission activities.

- Calculated and target indirect cost recovery rates can be used to set a target sponsored research support rate, which can be used to calculate a targeted sponsored research investment pool from allocable state appropriations.
- Huron recommends a target indirect cost recovery rate set to 60% of the university’s negotiated rate.
- The targeted sponsored research investment pool is captured as an “off-the-top” component of state appropriations.
The proposed model uses state appropriations to create funds to support sponsored programs and instruction and academic support.

- Reflects the strategic importance of sponsored programs activity
- Recognizes the high indirect costs associated with conducting sponsored research
- Serves as an additional revenue source beyond the full allocation of F&A recoveries
- Provides financial support in alignment with the instruction mission expectations of the state
- Leveraged to create an incentive to both instruct and retain students

Based on the analysis performed Huron recommends a split in state appropriations to ensure units who are doing sponsored research are able to continue without concerns of lack of funding.
As schools and colleges are now receiving full tuition for out of state students, it makes sense to now allocate state appropriations back to schools and colleges based on their proportion of in state students.

**Risk Mitigation:** Allocating tuition and fees on an in state basis for state appropriations will allow schools and colleges who focus on in state enrollment to receive revenues (as they were intended) to help cover the costs of teaching and enrolling in state students tuition alone does not.

State Appropriations: In and Out of State

- State Appropriations: $256.9 MM
  - 15.0%: Sponsored Programs Support: $38.5 MM
  - 85.0%: In State Instruction and Academic Support: $218.5 MM

Allocating state appropriations on in-state student activity helps preserve the principle that scholarships and waivers and state appropriations follow comparable tuition and fees allocation methodologies.
Central administration will need to work to ensure that State Appropriations are being used in accordance to any regulations outlined. Below is a breakout of what composes the State Appropriations in the model.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Appropriations</td>
<td>$195.0MM</td>
</tr>
<tr>
<td>State Support for Fringe Benefits</td>
<td>$61.9MM</td>
</tr>
<tr>
<td>UMass System Assessment (Accrual)</td>
<td>$9.6MM</td>
</tr>
<tr>
<td>Special State Appropriation</td>
<td>$(0.1MM)</td>
</tr>
<tr>
<td>Instate Tuition Remission</td>
<td>$(13.3MM)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$256.9MM</strong></td>
</tr>
</tbody>
</table>
Grants and contracts are assigned a single primary PI; this does not represent the collaboration that many grants require. In order to promote collaboration the VC of Research’s has created the Co-PI Report.

**Risk:** The Co-PI report is a management report that is not reflected in the general ledger and only focuses on research revenue allocation and does not consider the impact to research expenses.

**Impact:** The Co-PI Split impacts the model in five ways:
- **Grants and Contracts:** Increase or decrease in alignment with the VC of Research Co-PI report.
- **F&A Recovery:** Increases or decreases in alignment with the VC of Research Co-PI report.
- **State Appropriations:** Increases or decreases 15% of the adjustments indicated in Grants and Contracts.
- **Direct Expenses:** Increases or decreases to counter shifts in Grants and Contracts and Indirect Cost Recovery.
- **Indirect Expenses:** VC of Research Office will have less costs to be distributed. Units with more expenses because of the increases in Co-PI split will have more indirect costs and vice versa for schools who have less.

Under the Co-PI split, increased research activity results in more costs allocated to schools and colleges than they are allocated when grant revenue remains in the VC for Research Office – Centers and Institutes.
Scenario Impact: F&A Recovery

Huron recommends that F&A recovery revenues reflect actual amounts generated to promote research and incentivize the pursuit of higher recovery.

### FY13 Actuals

<table>
<thead>
<tr>
<th>Revenue Source Proxy</th>
<th>Academic Units</th>
<th>Auxiliary Units</th>
<th>A&amp;S Units</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>F&amp;A Recovery Revenues</td>
<td>$ 9,040,715</td>
<td>$ 1,784</td>
<td>$ 22,604,889</td>
<td>$ 31,647,389</td>
</tr>
</tbody>
</table>

### FY13 Modeled (F&A Recovery as Generated)

<table>
<thead>
<tr>
<th>Revenue Source Proxy</th>
<th>Academic Units</th>
<th>Auxiliary Units</th>
<th>A&amp;S Units</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>F&amp;A Expenses</td>
<td>$ 29,169,835</td>
<td>$ 8,939</td>
<td>$ 2,468,615</td>
<td>$ 31,647,389</td>
</tr>
</tbody>
</table>

### FY13 Modeled (F&A Recovery by Co-PI split)

<table>
<thead>
<tr>
<th>Revenue Source Proxy</th>
<th>Academic Units</th>
<th>Auxiliary Units</th>
<th>A&amp;S Units</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-PI Split Distribution</td>
<td>$ 31,186,669</td>
<td>$ 8,939</td>
<td>$ 450,781</td>
<td>$ 31,647,389</td>
</tr>
</tbody>
</table>

### Implications

- Allocating F&A recovery as generated simplifies the existing revenue sharing agreements (currently, 70% of every F&A recovery dollar is retained centrally)
- By distributing F&A recovery as generated, approximately $20MM in funding is redirected from A&S to colleges and schools. The Co-PI split further distributes an additional $2MM to colleges and schools.

Distributing F&A recovery as generated will require a shift in mindset about the purpose of F&A dollars – which is to provide financial resources to cover indirect research costs aligning authority and responsibility.
Sensitivity Analysis
JTFRA has determined that a split between major and instruction is appropriate to incorporate into the model. Below is an indication of the impact of these splits from 50-50% to 100-0% for each school and college.

### Instruction/Major Split Impact on Unit Margins (as % of Total Revenues)

<table>
<thead>
<tr>
<th>Revised Baseline Split</th>
<th>Instruction</th>
<th>Major</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>75.0%</td>
<td>25.0%</td>
</tr>
</tbody>
</table>
Holding constant the split in instruction/major at the revised baseline of 25-75%, we can see the impacts to Schools’ and Colleges’ unit margins as the split moves away from investing in research to not.

### Instruction/Major & Sponsored Research Support Split Impact on Unit Margins (as % of Total Revenues)

**Revised Baseline Split**

- Instr/Major: 85.0%
- Research: 15.0%
Indirect Cost Allocations
Model Overview: Expense Allocations

The allocation of expenses must balance the need for economic reality with the desire to design a simple and easy to understand model. Depicted below are 7 drivers to distribute indirect expenses to primary units.

<table>
<thead>
<tr>
<th>Allocation Driver</th>
<th># of Pools</th>
<th># of Sub Pools</th>
<th>University Academic Resource Pool and Cost Pool</th>
</tr>
</thead>
</table>
| Expenses                | 1          | 8              | - Administration and Finance  
- Chancellor’s Office  
- Information Technology  
- UMass System Office  
- University Police Department  
- University Relations  
- Campus Wide Amherst  
- Utilities Commodities |
| Expenses – Academic Units |            |                | - Campus Wide Plant  
- Development and Alumni Relations  
- Utilities Commodities |
| Student Headcount       | 2          | 10             | - Academic Administration  
- Academic Support Services  
- Commonwealth Honors College  
- Enrollment Management  
- Graduate School  
- University Library  
- Undergraduate Affairs  
- Student Affairs* |
| CPE Credit Hours        | 1          |                | - Continuing and Professional Education |
| Square Footage - Academic Units | 1          | 4              | - AVC Facilities  
- Facilities Planning  
- Custodial  
- Physical Plant |
| Square Footage - Total  |            | 1              | - Grounds |
| Grants & Contracts      | 1          | 8              | - Research and Engagement* |

Total: 5 pools, 35 sub-pools

* Research and Engagement and Student Affairs sub-pools are detailed on in earlier slides.
JTFRA has laid out the principles of “transparency,” “appropriate simplicity” and “accountability” which have been used to govern the selection of the Administrative and Support Unit pools and drivers.

<table>
<thead>
<tr>
<th>Drivers</th>
<th>Current Recommendation</th>
<th>Rationale</th>
<th>Alternate Suggestions</th>
</tr>
</thead>
</table>
| Expenses      | ▪ Overhead that is related to Administration and Finance, the Chancellor’s Office, IT, and the UMass System Office will be allocated based on the proportion of expenses to all of the primary units, including Auxiliaries.  
▪ Debt Service (Campus Wide Plant), a proportion of A&S Utilities, and Development will also be only allocated to Schools and Colleges. | ▪ Expenses can serve as a strong proxy of use for most administrative services.  
▪ This allows other centrally managed expenses that cannot be directly aligned with units to allocated in a simple manner.  
▪ Some expenses like Debt Service and Utilities are already paid for by auxiliary units and differentiating between the two reduced double charging. | ▪ Explore an additional expense, Deferred Maintenance, to more accurately plan for costs. |
| Square Footage| ▪ Overhead that is related to Facilities will be allocated based on space only to Academic Units.  
▪ Auxiliaries have their own facilities costs so will not be charged for anything but Grounds.                                                                 | ▪ Square footage can serve as a good proxy for use of the Facilities services.  
▪ Total square footage does not differentiate between types of space, as the current data has its limitations and would not likely be more accurate if made more complex. | ▪ Approximately 15% of allocable space is lab space. Further exploration into space and the different types of space is recommended. |
Strategic Investment Pool (SIP)
Huron recommends that UMass consider the following characteristics to determine the best source and use of the Strategic Investment Pool.

<table>
<thead>
<tr>
<th>Strategic Investment Pool Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition</strong></td>
</tr>
<tr>
<td>- A centrally-held pool of revenues to address mission-critical needs, University priorities and revenue growth strategies.</td>
</tr>
<tr>
<td><strong>Rationale</strong></td>
</tr>
<tr>
<td>- Sum of the parts is not optimal for the whole; UMass needs the ability to act as one entity to achieve University-wide initiatives, such as those outlined in the vision for UMass’ Strategic Plan.</td>
</tr>
<tr>
<td>- In part, the use of strategic investment pools addresses the economic problem of the commons.</td>
</tr>
<tr>
<td><strong>Illustrative Uses</strong></td>
</tr>
<tr>
<td>- Ensure appropriate investments to meet major institutional goals.</td>
</tr>
<tr>
<td>- Provide start-up funding for high priority academic programs.</td>
</tr>
<tr>
<td>- Underwrite new initiatives which do not naturally fall under one School or College’s care.</td>
</tr>
<tr>
<td>- Address compliance and regulatory issues as they arise.</td>
</tr>
</tbody>
</table>
Huron recommends that UMass consider the following principles to determine the best source and use of the Strategic Investment Pool.

- The Strategic Investment Pool can be a useful management tool to help fund long-term initiatives by advancing capital, to provide critical investments to kick-start initiatives, and support mission critical common goods.

- UMass should draw upon a diverse portfolio of revenues, rather than a single source, to fund the strategic investment pool to ensure relative stability from year to year.

- Investment dollars provided to any unit should never be viewed as an annual entitlement.

- The pool should include funds to enable leadership to “steer” UMass in the direction that will ultimately benefit the University as a whole.

- Investment pools need to ensure “neutral starting points” at implementation; thus the rate needs to be high enough to ensure continued operations.
The current version of the model applies a tax to all major revenue sources, except those related to gifts, endowment and investment income, and grants and contracts, to fill the investment pool. Pass-through monies are excluded from the pool.

<table>
<thead>
<tr>
<th>Included in Strategic Investment Pool</th>
<th>Excluded from Strategic Investment Pool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Tuition &amp; Fees</td>
<td>Grants and Contracts</td>
</tr>
<tr>
<td>State Appropriations</td>
<td>F &amp; A Distribution</td>
</tr>
<tr>
<td>Sales and Services</td>
<td>Pass-through monies (e.g. Pell Grants)</td>
</tr>
<tr>
<td>Other Revenue</td>
<td>Gifts</td>
</tr>
<tr>
<td>Recharge Revenue</td>
<td>Endowment &amp; Investment Income</td>
</tr>
</tbody>
</table>

Including a diverse set of revenues when creating the Strategic Investment Pool will allow for the pool to grow as revenues increase and mitigate volatility.
The strategic investment pool ensures enough funding to invest in all units with negative margins. As the institutional revenues exceed expenditures, funding for strategic initiatives becomes available.

- During the parallel process, primary units should be held harmless so they are not financially burdened, and have time to adjust to the new resource allocation environment.

- After the “hold-harmless” period expires, primary units will receive different investment levels based on institutional priorities, respective net loss or surplus, and revenue generation capabilities.

- Over time, many revenue generating units will require lower investments to cover their respective expenditures, and the portion of funding available to “steer” University-wide initiatives will increase.

- Future investments should be determined through multi-year agreements as units shifts to fully sufficient operations – the point at which the investment approximately equals the participation rate.

- UMass should outline opportunities to reinvest positive net revenues back into the units that generate them.
Implementation Roadmap
Planning for model implementation should focus on identifying process changes, data needs, timelines, and milestones. Cultural change readiness should also be evaluated to assess challenges for model adoption.

**Due Diligence and Consensus Building (FY14)**
- Complete by Jan-2014
- Begin to build consensus on model and create principles

**Build-out and Modeling**
- Complete build-out and begin modeling by April-2014
- JTFRA report to chancellor and presentation to campus

**Model Vetting and Testing with Stakeholders**
- Begins April - 2014
- Chancellor makes a decision as to whether to move ahead.
- Vetting of model with Deans and campus leadership

**Parallel Process (FY15)**
- Begin July-2014
- Model Implemented and shadowing current budget process

**Full Implementation (FY16)**
- Begin Fall-2015

**Full Review of Model and Decision on Implementation**
- January - 2015
- JTFRA full model review
- Decision on implementation

JTFRA will complete their recommendation report on April 1st and share this with the Chancellor and the campus community. Continued vetting and model refinement will be required before UMass can begin a parallel process.
As UMass moves forward it is critical to achieve campus buy-in while identifying specific organizational and infrastructure needs that must be met for successful implementation.

**Budget Assessment and Redesign - Phase 2**

<table>
<thead>
<tr>
<th>Time</th>
<th>Objective</th>
<th>Anticipated Outcomes and Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td>April to July, 2014</td>
<td>Stakeholder Involvement and Model Vetting</td>
<td>▪ Model education retreat for Deans, Department Chairs, VCs, Directors and key campus leadership</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ One-on-one model review sessions with Deans for vetting and verification of respective allocation drivers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Continuous campus engagement beyond leadership</td>
</tr>
<tr>
<td></td>
<td>Governance and Organization Readiness Assessment</td>
<td>▪ Identify and document necessary governance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Assess the A&amp;S organization to determine needed steps for readiness in a new budget model</td>
</tr>
<tr>
<td></td>
<td>Model Refinement</td>
<td>▪ Updated model based on feedback loop</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Stress testing model, vet data, develop FY14 budget to actuals</td>
</tr>
<tr>
<td></td>
<td>Process and Systems Assessment</td>
<td>▪ Define future state processes and work closely with a systems infrastructure committee to assess budget and finance systems, outline an implementation plan, and select vendors</td>
</tr>
</tbody>
</table>

Phase 2 should focus on developing consensus with the Deans and outlining the necessary steps for implementation of the necessary infrastructure to support a new budgeting model.
Successful implementation of a new budget system requires coordination and model vetting with Deans, executive leadership, and the campus in order to mitigate concerns associated with new budgeting approaches.

The model vetting process will be informed by feedback from academic and administrative leadership and the campus, continued leadership by Joint Task Forces, and model exposure exercises.
Under a new budget model, key stakeholders’ roles will change as accountability increases and authority is better aligned with responsibility.

**Changing Roles and Responsibilities**

- **Executive Leadership** - Implementation of a new model and the attendant financial transition initially raises more questions than it answers. The value in the customized model implementation for UMass is in forcing answers to the difficult questions; therefore, it is critical that the University’s leadership team is willing to address these questions.

- **Deans** – In the new, more decentralized model, Deans will have greater decision authority than they have had in the past. Deans must become more strategic and entrepreneurial in their thinking, and will require additional resources to support decision making (e.g., data, analytical tools, decision support, processes that enable efficient and effective management).

- **Service Unit VCs / Directors** – Administrative and Support units role on campus will evolve under a new model, adapting their operating construct to focus on service alignment, service level optimization and efficiency. Creating dialog between administrative and support units and their customers will enable a collaborative environment to develop strategic priorities and initiatives. An increased focus on performance metrics and benchmarking will aid in the development of partnerships with Primary Units.

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To facilitate the further refinement of the budget model and transition to a new way of operating at the University it is critical to engage the above stakeholders and establish a feedback loop.
Establishment of a governance structure should be an ongoing consideration, as it will help provide the guidance to maintain model integrity through implementation, annual modifications and anticipated planned reviews.

- As the transition is made from planning to implementation, governance committees, should be charged with the on-going management of the model. Examples from other institutions are illustrated in the diagram to the right.

- Huron understands there may be existing committees that may meet the needs of the model, like the JTSO/JTFRA, Academic Matters Council and the Capital Asset Board. To prevent redundancy, we propose evaluating those committees to see if they can be utilized in the governance structure.

- Existing budgeting committees will gain a larger role as they begin to focus on strategic planning at the unit level and alignment with the budget. Through this, strong working relationships will be established with the Deans, Business Managers, Budget Office, Enrollment Management Office and Executive Leadership.

- Committee membership will need to be determined, although each committee should include academic and administrative stakeholder representation.
Existing committees may operate in silos, making planning and management difficult. Moving to an integrated governance structure will help to breakdown some of these barriers.

Examples of Integrated Governance Committee Roles:

- **The Budget Planning Council** is charged with linking the activities of the Budget Implementation Committee with the Administrative and Support Unit Alignment Project Implementation Committee. The Budget Planning Council also works closely with the Deans to define their annual budgets and determine the allocations and strategic investment necessary for their operations.

- **The Budget Implementation Committee** includes the Provost, chief financial officer and other key stakeholders. It will refine and implement the model and oversee the eventual planned regular review process. It will also be closely tied to the Administrative and Support Unit Project Implementation Committee and Improvement Committee, helping to define the needs of the campus under the new model and ensure those needs are prioritized to provide the necessary tools for a successful implementation.

- **The Administrative and Support Advisory Committee** will serve multiple functions, helping Administrative & Support Units prepare for the transition to a new allocation system and acting in a performance oversight role for A&S units. This committee will help establish metrics, performance expectations, and Service Level Agreements, and monitor recommended process improvements. This process could leverage the current administration review or ADQAD that is occurring and follow-up on the progress of units to adopt to the new budgeting environment where efficiency and effectiveness are even more closely tied to the Dean’s strategic objectives.

Collaboration among the different committees creates the necessary checks and balances to manage the model, limit unintended negative impacts and ensure focus on the strategic priorities of the University.
Implementation success often depends on efficiency and effectiveness of administrative services, and perceptions of subpar service could lead to excess wrangling over allocation rules and a proliferation of redundant services at the school and college level.

For the model to be successful, administrative and support units need:

- Clear definitions of the services provided
- Responsiveness to customer needs
- Efficient delivery of services
- Accountability for providing services at agreed upon levels and prices

Administrative Readiness Assessment:

- In order to understand current service alignment and take proactive steps to mitigate service proliferation, UMass may need to embark on a capacity analysis to assess readiness for change.
- Conducting this analysis will need to focus on elements of change management, project management, and information technology within the administrative and support units to understand their ability to support and operate in the new model.
- Critical to this process will be a cultural shift to one of collaboration between service providers and customers. For example, if the readiness assessment reveals chronic understaffing or cumbersome work flows, the expectation should be that service providers and customers collaborate to identify solutions.

UMass will need to enhance customer service levels and build both institutional and college-level capacity to successfully manage the new model.
Under the new budget model local units require the authority to impact policies and systems needed to sufficiently connect action with results in order for a new model to work effectively.

**Organizational Readiness**

- A new budget model empowers decision makers with the decision rights, incentives and data to grow revenues.
- Effective models require governance structures or committees who are responsible for ensuring the incentives designed into the model are realized while minimizing unintended consequences.
- Key questions to understand include:
  1. How do financial and operating policies align with the components of the revenue and cost allocation rules?
  2. How would the impact of decisions be understood at the local level?
  3. Are controls in place to ensure the appropriate level of autonomy at the school level?
  4. Is the organization ready for change?

**Implementation Management**

A review should be conducted of the University’s current Implementation Management functions and their processes as well.

An assessment should include the following key questions:

1. What is the common governance of large-scale projects?
2. How are project teams structured?
3. How are plans developed and milestones established?
4. How is project performance measured and communicated?

Assessing the organizational readiness for change requires an evaluation of large-scale project management and institutional planning, local controls and functionality, and governance mechanisms.
Service level and offering assessments are critical to determining the ability of A&S units like Enrollment Management, Finance and Budgeting, HR, Facilities and IT to support primary units.

### Administrative Readiness Assessment

<table>
<thead>
<tr>
<th>Steps</th>
<th>Objective and Description</th>
<th>Deliverables</th>
</tr>
</thead>
</table>
| **Current State Assessment** | Analyze Administrative and Support Units like; Enrollment Management, Finance and Budgeting, Human Resources, Facilities and Information Technology.  
  - What services are offered and how do these services align with customer needs?  
  - Are the services provided in an efficient manner?  
  - How are service units help accountable for delivering services? | Conduct Interviews  
  Review and analyze data  
  Customer survey |
| **Future State Assessment** |  
  - Identify opportunities for improved communication and collaboration within the service unit and among primary unit partners  
  - Evaluate staff skill sets and opportunities for training  
  - Review key business processes and function-specific technology systems and data quality | Conduct Interviews  
  Conduct benchmarking and analyse data |
| **Gap and Outcome Analysis** |  
  - All service units must have a clear definition of the catalog of services provided  
  - Service level agreements must be developed in partnership with Primary Units  
  - Accountability and governance mechanisms must operate at central and local levels | Compare current performance to future vision and benchmarking  
  Develop recommendations, business cases and implementation roadmap |

Appropriately-developed service level agreements will ensure Administrative & Support units receive the resources necessary to fulfill the needs of primary units.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative &amp; Support Unit</td>
<td>Units that have limited or no ability to influence revenues and they provide services to the primary academic units.</td>
</tr>
<tr>
<td>Allocation Drivers</td>
<td>Non-financial metrics (e.g. Student Headcount, Square Footage) used as a variable to allocate costs to Primary Units.</td>
</tr>
<tr>
<td>AVC Facilities</td>
<td>Office of the Associate Vice Chancellor for Facilities, containing many administrative functions related to facilities management.</td>
</tr>
<tr>
<td>Campus Wide Amherst</td>
<td>Organizational unit containing centrally-accruing administrative expenses that are not allocable to a specific Primary or Administrative &amp; Support Unit.</td>
</tr>
<tr>
<td>Campus Wide Plant</td>
<td>Organizational unit containing debt service and central transfers to plant funds.</td>
</tr>
<tr>
<td>F&amp;A Recovery</td>
<td>Revenue received through the Facilities &amp; Administrative Overhead costs charged to sponsored research grants (occasionally called Indirect Cost Recovery).</td>
</tr>
<tr>
<td>Primary Unit</td>
<td>Units that have the ability to influence revenue generation and are able to cover all or most of the associated costs (includes Schools/Colleges and Auxiliary units).</td>
</tr>
<tr>
<td>Recharge Revenue</td>
<td>Revenue received as the result of internal charges between units. For example, Facilities may recharge a Primary Unit for specific maintenance services.</td>
</tr>
<tr>
<td>Strategic Investment Pool</td>
<td>A centrally-held pool of revenues to address mission-critical needs, University priorities and revenue growth strategies.</td>
</tr>
<tr>
<td>Unit Margin</td>
<td>Revenues less direct and indirect cost allocations.</td>
</tr>
<tr>
<td>FY13 Resource Allocation Model Revised Baseline Summary</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Baseline</strong> Column</td>
<td><strong>Revenue</strong> Column</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td><strong>College of Natural Sciences</strong></td>
<td><strong>Education</strong></td>
</tr>
<tr>
<td><strong>Humanities &amp; Fine Arts</strong></td>
<td><strong>Management</strong></td>
</tr>
<tr>
<td><strong>Public Health &amp; Health Science</strong></td>
<td><strong>Social &amp; Behavioral Sciences</strong></td>
</tr>
<tr>
<td><strong>Schools/Colleges Total</strong></td>
<td><strong>Auxiliary Total</strong></td>
</tr>
<tr>
<td><strong>Col legs/Col leges + Pass throughs Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Summary of Assumptions**

- **Tuition & Fees and Undergraduate Scholarships & Waivers**
- **State Appropriations**
- **SIP Assessment**
- **SIP Distribution**

**Note:** Model figures are illustrative and subject to be updated as the UMass Budget Office continues to work with campus leadership to review and refine the model.

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