

Progress Report on Design and Implementation of the Resource Management Model

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Budget Model Review and Implementation Committee

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I. Introduction

The October report from the Budget Model Review and Implementation Committee recommended that Iowa State University continue to work toward the implementation of the Resource Management Model and provided a multiphase implementation outline to guide that process. Following the release of the report, President Geoffroy asked for final opinions and input from key advisory and decision-making groups. Careful debate and consideration within these groups has occurred in the last several months, along with continued refinement of the model parameters and implementation planning.

The Budget Model Review and Implementation Committee recommendations have not changed since the October report. The purpose of this report is to provide additional clarification of the model parameters, reflect on the opportunities and challenges of leading in a new fiscal environment, and provide a progress report on the implementation planning that has occurred since October 2006.

II. Leading in a New Fiscal Environment

The Resource Management Model has the potential to better align revenues with performance and responsibilities, be more dynamic and responsive to a changing economic environment, and bring more transparency to the budgeting process. In addition, the model enhances strategic planning at the Resource Responsibility Center level through greater control over revenues and expenses, and provides central leadership with the tools necessary to steer the university toward strategic goals and ensure fidelity to the university's mission. Change of this magnitude is difficult, and a number of challenges will have to be addressed successfully to realize the potential benefits of the Resource Management Model. Some of the more technical challenges were addressed in previous reports. The committee's reflections on challenges that are more cultural or environmental are provided in the following three subsections: Culture, Strategic Planning and Budgeting, and Staffing and Skill Development.

Culture

The Budget Model Review and Implementation Committee observed in its October report that the change inherent in the implementation of the Resource Management Model would understandably cause concern and anxiety among faculty and administrators. However, the committee does not believe that the current level of concern is unusual given experiences at other institutions that have adopted similar budget models. Anxiety seems to have decreased as more details of the model have been developed and communicated, and this is a trend that should continue. The committee continues to believe that the model can be implemented successfully; however, it is important to be attentive to the dynamics of the change process in a proactive manner.

Underlying some of the debate about the Resource Management Model are fundamental questions about whether it can be applied successfully and managed within the university culture. With the existing, incremental method of budget planning, colleges and other revenue centers had very limited ability to influence the amount of resources available to achieve their own goals or the goals of the institution. Currently, many resource distribution decisions are

implemented in an across-the-board fashion and the risks, i.e., revenue shortfalls or expense growth, are largely the responsibility of central administrators. Because rewards for innovation, risk-taking, and entrepreneurship are uncertain, these qualities are probably undervalued in our current culture. There will be greater potential rewards for successful innovation and development under the new budgeting process.

The Resource Management Model signifies changes in management processes and variability in budget outcomes at the Resource Responsibility Center level. Decisions at this level will have more budgetary consequences than is currently the case. Decisions at the central level must recognize the differential results of the model and incorporate that into the strategic thinking and planning to achieve institutional objectives, particularly those supporting interdisciplinary initiatives and infrastructures.

Because the Resource Management Model represents a dramatic change to a critically important management process, it would be unrealistic to expect that such a change could be implemented without requiring some adaptation in the culture of the institution. Although changes of this magnitude can cause significant levels of uncertainty and stress, the ability to change and adapt is essential at a time of dramatic change in the external environment.

Examples of changes in culture and adaptations that will facilitate the implementation of a new budget model include:

- More encouragement and tolerance for risk-taking and innovation
- More self-reliance in developing financial plans to support investment and innovation
- Increased formation of long-term partnerships
- Flexibility and timeliness in responding to changes in demand for academic programs, courses, and majors
- Willingness to incorporate concepts of revenue generation and cost effectiveness in resource allocation decisions
- Willingness to reduce or discontinue lower priority programs and services
- Sustained focus on what is important when making resource allocation decisions

Strategic Planning and Budgeting

The Resource Management Model can be an important and useful tool for achieving the goals of the institutional strategic plan. In addition to the formulae that drive the distribution of tuition and indirect cost recovery funds, providing incentives for student recruitment/retention and externally supported research/programs, the Resource Management Model provides at least two other budgetary tools that university leaders can use to steer the university to fulfill its mission and achieve its strategic goals. These are the Institutional Excellence Fund and the Resource Management Fund. Because each of these funds will be distributed based on leadership decisions after the first year of implementation, university leaders must develop methods for linking distributions from these funds to performance and contributions to the achievement of university goals. For example, the University of Minnesota uses formal documents to tie strategic planning goal attainment with resource distribution decisions.

The Resource Management Model, along with the requisite ability to generate Strategic Reserve Funds, will enable a multiyear approach to budget planning, which is a significant change from the annual budget planning focus that has been the norm for decades at Iowa State

University. This change is imperative for successful implementation of the Resource Management Model. Communicating budget decisions in terms of long-term objectives and goals should substantially improve the understanding and acceptance of the budget development process.

The new budget development process will incorporate all funding sources, rather than the General Fund focus of the past. The responsibility for developing the component parts of the institutional budget will be shared between central administration, unit administrators, and advisory committees. For example, revenue forecasts will be made at the Resource Responsibility Center level and will require an iterative collaboration between central administration and administrators of the Resource Responsibility Centers. General Fund budget decisions will be more influenced by the funding that Resource Responsibility Centers receive from sources outside the General Fund. Interdependencies among Resource Responsibility Centers will be more explicitly understood and will have potential budgetary consequences that will require much more communication and collaboration among unit administrators.

Planning in this new environment will require that leaders have timely information from complex data management systems capable of generating critical reports. A data management system will be required regardless of the decision to implement the Resource Management Model. Discussion of the Resource Management Model has highlighted the need and increased the urgency for the development of such a system.

Leaders of administrative and academic support units need to communicate effectively with their advisory committees about the key service and budgetary issues facing their units. Advisory committees of these support units will need to focus on higher level oversight of service levels and costs without micromanaging budgetary details.

Central administrators and their budget advisory committees will need to develop a shared set of principles governing their work. The broad charge to all budget advisory committees will include commitments of time and resources that will involve new participants in the budgeting process. Also, there will be increased challenges for central administrators to ensure that a more decentralized budget planning process conforms to expectations of the Board of Regents, and clearly communicates the nature and impact of key budget planning decisions.

Staffing and Skill Development

The changes outlined above will have an effect on the current structures and capabilities of management and staff throughout the institution. Certainly, in the near term, the Resource Management Model will require more management time and effort than the current budgeting process. In some respects, this represents the continuation of a trend that is independent of the budget model. Increased management attention to complex budgetary issues is inherent in any environment where an institution is transitioning away from a reliance on a relatively straightforward and predictable level of state support and moving toward an increasingly complex dependence on a variety of revenue and funding sources.

Successful implementation of the Resource Management Model needs to address realistic staffing requirements and training needs. Because little additional funding will be available to increase staffing, efforts must be focused on streamlining and standardizing processes,

clarifying and reprioritizing work of existing staff, enhancing skill levels of existing staff, and, in some cases, reallocating funding in order to add staff to changing budgetary functions.

Administrative faculty and staff at all levels of the institution will need to develop new skills or enhance existing skills in order to operate in the new budget environment. The success of the Resource Management Model will depend on a supportive environment that provides developmental opportunities to those who will assume new roles and responsibilities resulting from the budgetary changes. It will be important that a group be given responsibility for identifying needs and promoting effective and efficient faculty and staff development opportunities during the transition period and for the first two years of implementation of the Resource Management Model. Additional details are provided in Appendix A.

III. Refinement of Model Parameters and Implementation Planning

Refinement of Model Parameters

A primary task for the Budget Model Review and Implementation Committee during the past three months was refining the parameters of the Resource Management Model. The committee continues to recommend the parameters that were described in its October report, with the following clarifications and modifications.

Definition and Identification of Budget Units

As the committee worked through the development of policies, procedures, and data systems to support the Resource Management Model, it found the need for more precise definitions and terms to describe the budget units within the model. The primary budget units include 15 Resource Responsibility Centers and seven Administrative Centers. Secondary budget units exist within each primary budget unit. Secondary budget units include departments, programs, centers, institutes, and auxiliary units. As described in the committee's October report, the Resource Management Model is designed to distribute revenues and expenses to the primary budget unit level lead by college deans and vice presidents.

The Resource Responsibility Centers will be considered the primary budget unit to which the budget model distributes revenues and expenses. The table in Appendix B lists the Resource Responsibility Centers and the administrator for each unit. A preliminary list of secondary budget units for each Resource Responsibility Center can be found at <http://www.iastate.edu/~budgetmodel>.

Administrative Centers are those primary budget units that provide administrative and academic support to the university. The table in Appendix C lists the seven Administrative Centers and the administrator for each unit. A preliminary list of secondary budget units for the Administrative Centers can be found at <http://www.iastate.edu/~budgetmodel>.

Distribution of the Portion of State Appropriation that Supports Instructional Activities

As described in the committee's October report, a portion of state appropriation will be allocated to support instruction at all levels of education. The process for distributing this portion of state appropriations will be a two-step process. In the first step, this portion will be distributed across three levels of education (undergraduate, graduate, and professional) in

proportion to enrollment. For example, if the proportion was based on the Fall 2006 enrollment, the split would have been 80% undergraduate, 18% graduate, and 2% professional. In the second step, these three pools will follow the same methodology for tuition distribution as described in the October report. Thus, all of tuition and state appropriation for graduate and professional enrollments will go to the student's college of enrollment. The tuition and state appropriation pool for undergraduate enrollment will be allocated 25% to the major and 75% on student credit hours.

Allocation of Expense Pools

As recommended in the October report, the expenses associated with Administrative Centers will be aggregated into seven expense pools. These expense pools, with the exception of University Leadership, will be allocated proportionally to the Resource Responsibility Centers using various allocation methods.

During the past three months, the committee used simulation models to test varying levels of complexity in allocation methods. The levels ranged from complex methods (multiple allocation methods for each expense pool) to very basic methods (a single allocation method for multiple expense pools). The committee concluded that an appropriate balance of fairness and simplicity would be met by using a single allocation method for each expense pool. The method selected for each pool is the best proxy usage measure for the expenses in that pool. The methods are listed in the table in Appendix D.

Implementation Planning

An implementation timeline was provided in the committee's October report. Since then, workgroups have identified additional implementation issues, which can be grouped into six components. Details for each of these components are in Appendix A.

1. Policy and Procedure Development
2. System Development
3. Training
4. Budget Conversion
5. Full Implementation of the New Budget Process
6. Review and Evaluation of the New Budget Process

IV. Conclusion

The Budget Model Review and Implementation Committee continues to support the implementation of the Resource Management Model as described in its October report and further refined in this document. The implementation planning has revealed a considerable amount of work to be completed before full implementation of the model. However, no insurmountable obstacles have been identified. The cultural challenges of a transition have also begun to be identified and they will require very thoughtful attention. Acknowledging these facts does not diminish the committee's continued support for the proposed budget model.

Appendix A

Implementation Plan

If the decision is made to move forward with the implementation of the Resource Management Model, a myriad of overlapping tasks will be required to implement the new budgeting process. These are organized in the following areas:

1. Policy and Procedure Development
2. System Development
3. Training
4. Budget Conversion
5. Full Implementation of the New Budget Process
6. Review and Evaluation of the New Budget Process

Policy and Procedure Development

Policy and Procedure Development Phase involves defining budgetary policies and procedures necessary to implement the Resource Management Model. Goals to accomplish these tasks have been established and are listed below.

Allocation of Expenses

Some examples of the primary policy and procedure issues relating to the allocation of expense pools that have been identified to date include:

- Making future changes to expense pools and/or allocation methods
- Defining “elective” central administrative services
- Determining when expenses will be allocated to the Resource Responsibility Centers
- Administering an institutional salary policy
- Administering reserve for merit pay adjustments and sick leave payout
- Phasing out current central administrative fee
- Distributing graduate scholarships currently managed by the Graduate College
- Establishing “strike dates” for each statistic used for allocating expense pools

Distribution of Revenue

Some examples of the primary policy and procedure issues relating to the distribution of revenue that have been identified to date include:

- Distributing tuition revenue generated from intercollegiate programs and courses, second majors, cross-listed courses, and half-semester courses
- Determining procedures to establish assessed tuition for budget development purposes, including whether expenses that currently offset tuition will continue to be managed centrally or will be distributed to the Resource Responsibility Centers (e.g., reserve for tuition bad debt, collection costs, Exchange Program, MBA differential, etc.)
- Establishing “strike dates” for tuition and IDC revenue distribution statistics (student head count, student credit hours, budgeted salaries, research space, etc.)
- Determining how often actual tuition and IDC revenue should be distributed to the colleges
- Distributing state appropriation to the Resource Responsibility Centers, including funds that partially fund the Resource Management Fund and pools for enrollment and student credit hours

Advisory Committees

The process to establish advisory committees will include:

- Submitting a list of committee candidates to the appropriate administrator during March and April 2007
- Appointing members to the University Budget Advisory Committee and the advisory committees for central administrative units during April and May 2007
- Establishing policies and procedures for each committee from June through October 2007

System Development

System Development involves the development of new databases and information systems and the enhancement of existing databases and information systems. The level of complexity and ultimate cost for developing and modifying these systems are being explored.

Data Warehouse

The primary goal of a data warehouse is to provide summarized and easily understood data on a timely basis that will assist users make more informed management decisions. The Budget Model Review and Implementation Committee has established a data warehouse workgroup and has been charged with the task of identifying the data needs of the Resource Management Model and how the data warehouse will support those data needs. Generally, the subcommittee has been charged with:

- Identifying the datasets that are necessary to support the budget, including data for staff, space, enrollment, student credit hours, and funding
- Establishing a common budget unit schematic designed around the primary and secondary budget unit structure, as described earlier in this report. The budget unit schematic will be reviewed by a broad campus audience, including data stewards, IT staff, the Office of Institutional Research, and fiscal officers
- Incorporating the budget data into the data warehouse

This Budget Model Review and Implementation Committee workgroup coordinates with a university committee sponsored by IT Services, which has been working on the concept of a data warehouse for Iowa State for several years. A “proof of concept” has been developed and is being tested. Ultimately, this conceptual tool can be a foundation for a more robust management tool.

Information Systems

Through the work of the Budget Model Review and Implementation Committee workgroups, the committee is identifying the systems needed to implement the Resource Management Model. Systems need to be developed to facilitate the allocation of expense pools and the distribution of revenue to the Resource Responsibility Centers. Also, the university's existing information systems will need some minor modifications in order to manage the financial results of applying the parameters of the Resource Management Model. Specific areas of the model that will need system support include tuition revenue distribution, IDC revenue distribution, allocation of expenses, and revenue and expense projections.

- **Tuition Revenue Distribution.** The data for enrollment and student credit hours needed to distribute tuition revenue currently exists. However, the data will need to be organized and a system will need to be developed in order to calculate the tuition revenue distribution.

The accounting and budgeting system will need to be modified to record the distribution of tuition revenue to the Resource Responsibility Centers.

- **IDC Revenue Distribution.** Much of the data needed to distribute IDC recovery revenue will be generated from a revised GoldSheet database. The GoldSheet database already contains the unit administering the grant, all of the co-Principle Investigators, and the distribution of their incentive. Two fields will need to be added. One for the percent of effort from each co-Principle Investigator on the grant, and one for the location of the sponsored activity, including the percent of activity at each location. In addition, a modification to the sponsored funding accounting system will be needed to tie grant expenditure account information to a specific grant. The accounting and budgeting system will also need to be modified to record the distribution of IDC revenue to the Resource Responsibility Centers.
- **Allocation of Expenses.** The data for the allocation of expense pools includes the funding data for the expense pools, as well as the allocation measures that will be used to allocate the expense pools. A system will need to be developed to systematically compile this data and calculate the allocation to the Resource Responsibility Centers. The accounting and budgeting system will also need to be modified to record the distribution of IDC revenue to the Resource Responsibility Centers.
- **Revenue and Expense Projections.** The university will need to develop systems to assist Resource Responsibility Center and Service Center administrators in their projections of revenue and expenses. This process will need to be supported by databases that contain historical data, such as enrollment, student credit hours, research expenditures, and IDC rate by agency, at the secondary budget unit level. Projecting revenue at this level is a concept new to the university and will most likely be a continual evolving process. Once the databases have been established, processes and modeling tools will need to be developed to project tuition and IDC revenue. The processes will most likely be an iterative collaboration between central administration and the Resource Responsibility Center administrators. The tools for revenue projections are currently being developed.

Training

Training tasks involve both conducting informational meetings to communicate the progress of the budget implementation process and providing training sessions for administrators, faculty, and staff to enhance their skills to manage in the new fiscal environment. These tasks will begin in January 2007 and continue throughout the budget model implementation process.

Topics to address include:

- Data and methods for revenue forecasting at the Resource Responsibility Center level
- Negotiating skills and intercollegiate communication issues
- Successfully working with Advisory Committees
- Orientation for Advisory Committee members—role and decision-making process
- Budgeting, simulations, and forecasting skills for Resource Responsibility Center and central leaders
- Techniques for dealing with anxiety and stress in a period of change
- Communication in a period of change

Development efforts should be both formal and informal and should draw on the significant expertise and talent already available at Iowa State University. Panel discussions, brown-bag

luncheon exchanges, and mentoring relationships should be used extensively. External consultants and peers from other institutions should be used if needed.

Budget Conversion

The conversion to the new budget process involves applying the Resource Management Model parameters to fiscal year 2008 budget. The primary purpose of this is to establish the base-year Resource Management Fund so that all units are “made whole.” Central administration will continue to centrally manage any variations in budgeted and actual revenues and expenses throughout FY08. Generally, this process will involve the following steps.

- Central administrators will develop the FY08 budget using the current incremental budget model.
- Apply the Resource Management Model’s tuition and IDC parameters to calculate and reclassify tuition and IDC revenue based on projected revenue. Simulate the distribution of the revenue to the Resource Responsibility Centers.
- Reclassify central administrative unit expenses into expense pools and simulate the allocation of expense pools to the Resource Responsibility Centers.
- Establish the base-year Resource Management Fund for each Resource Responsibility Center.
- Communicate the results of restating the budget to the Resource Responsibility Center administrators, central senior administrators, and budget advisory committees.

Full Implementation of the New Budget Process

The Resource Management Model parameters will be applied to both the development and employment of the budget for fiscal year 2009. The development process for FY09 will begin in Fall 2007 and will be completed in June 2008. Generally, the development process will involve:

- Developing the FY09 operating budgets for each central administrative unit using the Resource Management Model (Fall 2007)
- Developing the FY09 operating budgets for each Resource Responsibility Center using the Resource Management Model, including its respective tuition revenue, IDC revenue, direct expenses, allocated expenses, and its share of the Resource Management Fund from the base year (Spring 2008)
- Finalizing the FY09 budget developed from the Resource Management Model and submitting it to the President for approval (May 2008)

The model will be fully employed during fiscal year 2009. This will involve:

- Allocating expense pools to the Resource Responsibility Centers
- Distributing funding from the Resource Management Fund to each Resource Responsibility Center
- Distributing actual tuition revenue, IDC revenue, and direct expenses to the Resource Responsibility Centers in “real-time” throughout the fiscal year

Review and Evaluation of the New Budget Process

The proposal for the new budget process incorporates the concept of a regular review and evaluation process every three to five years to ensure that the process supports achieving the mission and strategic goals of the university.

Appendix B

Resource Responsibility Centers

Primary Budget Unit	Administrator
College of Agriculture	Dean of Agriculture
College of Business	Dean of Business
College of Design	Dean of Design
College of Engineering	Dean of Engineering
College of Human Sciences	Dean of Human Sciences
College of Liberal Arts & Sciences	Dean of Liberal Arts & Sciences
College of Veterinary Medicine	Dean of Veterinary Medicine
Interdepartmental Programs	Dean of Graduate College
Office of Research and Economic Development	VP for Research
Office of Extension and Outreach	VP for Extension
Experiment Station	Director of Experiment Station
Office of the President ¹	President
Office of the Provost ¹	Executive VP and Provost
Office of Business and Finance ¹	VP for Business & Finance
Office of Student Affairs ¹	VP for Student Affairs

¹ Revenue-generating service units and auxiliaries

Appendix C

Administrative Centers

Primary Budget Unit	Administrator
University Leadership	President
Facility Services	VP for Business & Finance
Business Services	VP for Business & Finance
Information Technology Services	Chief Information Officer
Library	Dean of Library
Student Services	VP for Student Affairs
Administrative Support Programs	Provost

Appendix D

Expense Allocation Methods

Expense Pools²	Allocation Method
Institutional Excellence Fund	Proportional to budgeted direct expenses within the General Fund
Administrative Support Programs	Proportional to Faculty FTE
Business Services	Proportional to Faculty/Staff FTE
Student Services	Proportional to Student Head Count
Information Technology Services	Proportional to the sum of Faculty FTE, Staff FTE, and Student Head Count
Library	Proportional to a weighted average: 3-Faculty FTE, Graduate/Professional Student Head Count 2-Staff FTE 1-Undergraduate Student Head Count
Facility Services	Proportional to Net Assignable Square Feet (except for utilities, which will be based on actual consumption)

² Allocated expenses are those currently funded by a general fund allocation. Other services will continue to be billed on a fee-for-service basis.