

MEMORANDUM

TO: UNM Campus Community

FROM: Robert G. Frank, President 

DATE: August 28, 2012

SUBJECT: FY14 Budget Development Process and Models

As I continue to learn of the challenges and opportunities presented to the University of New Mexico during my 120-day listening campaign, I am convinced that we must address certain issues sooner rather than later. One such instance involved the need to shore-up the UNM Foundation's operating budget with additional recurring revenues for it to reach its fund-raising potential. Another issue involves the need for the university to move away from its current incremental based budget model to a more strategic based model that will rely upon the basic principles of the following two funding methodologies:

- Responsibility Center Management (RCM)
- Performance Based Budgeting (PBB)

In accordance with a request from my office, attached please find a white paper which discusses these budget methodologies. It includes their pros and cons and how individual elements might be incorporated into the budget development process at UNM in order to build upon the successes achieved during the last several budget cycles. The document is meant to frame and lead the discussion of a steering committee that will develop and recommend budget performance guidelines and metrics. The steering committee will be led by the Provost Academic Affairs and the EVP for Administration and will include Deans, Chairs, Faculty Senate representatives and staff, who will be charged with delivering a recommendation to this office by the end of the calendar year.

Several aspects of the process and deliverable are certain and worth confirming at this time:

- An overarching goal is to increase accountability and transparency
- Strategic planning will inform academic planning
- Academic planning and enrollment management will be integrated with the budget planning and revenue allocation processes
- This will be a highly collaborative, highly consultative process

I look forward to ongoing communication with the campus community as the steering committee formalizes a new budget development plan.

**University of New Mexico – Main Campus
Responsibility Center Management (RCM)
&
Performance Based Budgeting (PBB)**

Introduction: Responsibility Center Management (RCM) systems have been developed and implemented in a variety of forms at institutions of higher education since the early 1990s. The underlying theory is that by assigning revenue and associated expenses directly to the centers that earned the revenue, the centers would become more accountable, work to generate additional revenue, and explore options to reduce expenses where feasible. Schools that have implemented RCM systems indicated overall satisfaction with the model, while also acknowledging that it is often difficult to identify specific metrics that quantify this feeling of success.

Performance Based Budgeting (PBB) is a concept that is once again finding favor with policymakers and thus affecting higher education institutions. It has intuitive appeal--what's not to like about paying for results? The underlying theory of these types of funding models is to tie the allocation of funds to the achievement of certain goals and objectives. Again, there is overall satisfaction with this model. However, research of previous implementations suggests that when systems do fail, it is the result of poor design and implementation rather than the underlying concept related to the goals and objectives.

Context: Why are we doing this? There are numerous reasons/advantages why the University of New Mexico should modify its budgeting and resources allocation processes, including:

- Reduced state appropriations and pressure to minimize tuition and fee increases have added intense focus on the maximization of existing resources and the prioritization of future revenue streams.
- The university's existing budget model is built on historic funding levels, is non-comprehensive at an institutional level (incremental budgeting) and is not well-linked to strategic planning.
- It is often not clear why budget levels are what they are, or how they relate to national, regional, state and/or institutional priorities.
- RCM and PBB budget models enhance transparency and enable better-informed decision-making by relating resources to activity levels, thus creating awareness of how the university receives resources and how they are used.

RCM and PBB Models: Current literature regarding RCM and PBB models point to numerous benefits, but also identify concerns and/or challenges, including:

- **Benefits**
 - Increases incentives for revenue generation and cost effectiveness
 - Improves transparency surrounding decisions
 - Improves accountability and management of resources
 - Clarifies the maze of cross-subsidies
 - More clearly links performance to rewards and thus provides incentives to increase productivity
- **Concerns and/or Challenges**
 - Significant time to implement
 - Considerable commitment of human resources
 - Significant start-up costs
 - Focus is on quantitative measures instead of qualitative measures
 - Cost of instruction differs due to the nature of cost (Engineering vs. English)
 - Centers can lose sight of the big picture
 - Centers sometimes compete with each other for funds and duplicate efforts
 - Challenge in funding institutional common goals and academic priorities
 - Can hamper interdisciplinary programs and research
 - Could negatively impact academic quality (grade inflation, students could be advised in a way that benefits the college – not the student)

Underlying Principles: Given the underlying benefits of RCM and PBB models, namely providing incentives to generate additional revenues while continuously focusing on cost effectiveness, there are many advantages in moving the University of New Mexico towards a new budgeting process. The key to effectively implementing these models will be minimizing their shortcomings by adhering to the following overriding principles:

- **Design Considerations**
 - Recognize that all funding models are RCM and/or PBB based
 - Get agreement on goals before putting performance funding in place
 - Construct performance metrics in broad terms, such as
 - Innovations that expand and broaden the state’s economy
 - Productions of graduate and professional degrees in STEMH fields
 - Development of highly skilled graduates
 - Design the funding model to promote mission differentiation
 - Include provisions that reward success with underserved populations
 - Include provisions that reward progress and continuous improvement, as well as ultimate success
 - Limit the categories of outcomes to be rewarded
 - Use metrics that are unambiguous and difficult to “game”
 - Make the performance funding pool large enough to command attention
 - Most importantly – ensure that the incentives in all parts of the funding model align with the institution’s mission, stated goals and objectives
- **Implementation Considerations**
 - Don’t wait for new money

- Include a phase-in provision
- Employ stop-loss, not hold-harmless provisions
- Continue performance funding in both good times and bad

Conclusion and Recommendation: Given the documented shortfalls of a fully implemented RCM model, and some of the clear advantages of PBB models as referenced above, the University of New Mexico would be best served to implement a modified budget model that incorporates components of each model. The over-arching model would thus be a hybrid, incorporating strengths from both RCM and PBB models that would assist the university in achieving its stated goals and objectives. Proposed budget factors and metrics to be used with the models will be discussed more fully later in this document.

Additionally, the literature is clear that the success of the models hinge most directly on the clear connection between an organization’s ability (university/school/college) to determine its destiny – that is, its efficiency in achieving its mission – through its actions and the monetary rewards that would accrue to those organizations. In short, RCM and PPB models are not necessary or effective for all organizations common to institutions of higher education, but rather to those organizations whose primary actions generate revenues.

Guiding Principles for Development and Implementation: This will be a collaborative, highly consultative process led by the Provost/EVP for Academic Affairs and the EVP for Administration. A steering committee comprised of individuals from Academic Affairs, the Administration and representatives from the Dean’s Council and Faculty Senate will guide the process on behalf of all schools/colleges. The overall philosophy for the implementation of the new budget/resource allocation model will be as follows:

Integrate academic planning and enrollment management with the budget planning and revenue allocation processes. Strategic planning informs academic planning, which in turn guides enrollment management and the allocation of existing and future resources.

Responsibility Center (RC) Structure: Before going further it is important to define several terms that will be used throughout this document:

- A Responsibility Center is meant to define all organizational units within the university
- A Revenue Center is an RC for which the majority of activities result in the generation of external revenues
- A Support Center is an RC that generates little or no external revenue but which provides critical services to support the activities of the revenue centers and other support centers

As referenced above, a hybrid model is proposed for the University of New Mexico both in terms of the use of RCM and PBB models and in terms of what organizations the model applies to. More specifically, given that Support Centers (i.e., administrative units) do not directly generate external revenues, their revenue allocations will continue to be based on incremental base funding. These organizations will, however, be challenged to justify current revenue allocations and identify cost effectiveness measures each year that will not adversely affect current service levels.

Revenue Centers, on the other hand, will be required to fully implement the RCM and PBB models, whereby a portion of their funding will be subject to performance metrics. It is important to note that stable base funding will need to be a component of any new model to allow for stability in planning exercises. Conversely, experience at other universities points to the fact that a significant portion of the funding for schools and colleges must be performance driven in order to affect change and progress towards stated goals and objectives.

Current State: Although the University of New Mexico has historically relied on an incremental budget allocation process, there are several areas where RCM and PBB principles are followed:

- Differential Tuition – there are currently six schools that receive differential tuition directly to fund their programs. These schools receive additional tuition funds when enrollments increase but also realize revenue reductions in years of declining enrollments. Schools and Colleges that receive tuition tied to enrollment levels include:
 - The School of Architecture and Planning
 - The School of Public Administration
 - The Anderson School of Management
 - The College of Nursing
 - The School of Pharmacy
 - The School of Law
- Direct Tuition Recapture - Extended University offerings, primarily on-line instruction, receive tuition and fees directly on a per-credit-hour basis and in turn transfer revenues to schools and colleges on the basis of courses offered.
- State Appropriations – FY 2012/2013 - Beginning in FY 2012/2013, the State of New Mexico began to allocate a portion of the overall higher education funding to institutions based on newly developed performance metrics. The metrics were developed as part of phase-one of a reengineering of the state’s higher education funding formula, with an eye towards rewarding performance. The result was the implementation of the following performance metrics:
 - Student credit hours (SCH) for completed courses: Change from the current 21-day census reporting figures of total SCH to the end of the semester enrollment data, which details SCH completed by students
 - Outcome-based performance metrics
 - Total awards: Document the number of students graduating, degrees and/or certificates awarded

- Outcomes: Workforce incentive (STEMH) – In an effort to bolster the New Mexico economy and provide the foundation for the recruitment of companies that offer high wage jobs, focus incentives in Science, Technology, Engineering, Math and Health related fields
- Outcomes: At-risk financial – Provide incentives for schools and colleges to close the achievement gap (retention, graduation) for at-risk students as defined by traditional measures such as remedial course work required, financial status and/or ethnicity

For the University of New Mexico in FY13, the total additional funds associated with the new performance metrics are quantified and attributable to the following schools and colleges:

FY13 Funding Formula Outcomes by College/School						
Institution	FY12 Appropriation	Student Credit Hours for Completed Courses	Outcomes: Total Awards	Outcomes: Workforce Incentive (STEMH)	Outcomes: At-Risk Financial	Total Outcomes
University of New Mexico	\$160,933,600	82.25% \$4,393,564	1.15% \$2,370,446	2.15% \$1,803,471	0.95% \$684,029	\$9,251,510
UNM Main Campus Colleges/Schools						
Anderson School of Management		\$ 501,192	\$ 247,873	\$ -	\$ 66,273	\$ 815,338
College of Arts and Sciences		\$ 1,904,893	\$ 886,722	\$ 577,977	\$ 210,091	\$ 3,579,684
College of Education		\$ 528,170	\$ 273,195	\$ -	\$ 80,617	\$ 881,983
College of Fine Arts		\$ 317,279	\$ 82,688	\$ -	\$ 25,353	\$ 425,320
School of Architecture Planning		\$ 104,078	\$ 50,464	\$ -	\$ 15,044	\$ 169,586
School of Engineering		\$ 212,122	\$ 254,562	\$ 475,921	\$ 43,363	\$ 985,968
School of Law		\$ 122,558	\$ 98,406	\$ -	\$ 60,405	\$ 281,369
School of Public Administration		\$ 74,789	\$ 8,430	\$ -	\$ 176	\$ 83,395
University College		\$ 37,544	\$ 71,926	\$ 8,888	\$ 31,119	\$ 149,477
Total Main Campus		\$ 3,802,624	\$ 1,974,266	\$ 1,062,786	\$ 532,442	\$ 7,372,118
UNM Health Sciences						
College of Nursing		\$ (202,728)	\$ 120,995	\$ 226,208	\$ 28,131	\$ 172,607
College of Pharmacy		\$ 112,042	\$ 124,472	\$ 232,709	\$ 62,765	\$ 531,988
School of Medicine		\$ 681,626	\$ 150,713	\$ 281,768	\$ 60,690	\$ 1,174,797
Total HSC		\$ 590,940	\$ 396,180	\$ 740,685	\$ 151,587	\$ 1,879,392
Total UNM		\$ 4,393,564	\$ 2,370,446	\$ 1,803,471	\$ 684,029	\$ 9,251,510

*Figures based on data submitted to HED.

The current UNM budgeting process folds these incremental funds into the university's pooled revenues, which are then prioritized for distribution during the budget development process. In accordance with the underlying legislative intent, it would be possible to form a more direct link between the schools and colleges that generate the funds and their distribution. It follows that beginning in FY14 a major portion of the incremental state funds could flow directly to the schools and colleges that generate the funds in accordance with the state funding formula, net of any incremental cost increases that were required to generate the additional funds.

State Appropriations – FY 2013/2014: As part of the original plan to reengineer the state higher education formula, it was agreed that phase two of the process would be to develop sector-specific measures that recognize the different roles and missions of Research Universities, Comprehensive Universities, Community Colleges and Branch Campuses. The new sector-specific measures would be developed and implemented as part of the state's FY 2013/2014 budget allocation process. Although not finalized, the metrics for the research universities are likely to include the following:

- Portion of federal expenditures, calculated on a four-year rolling average, which enhances the economic development of New Mexico. The Schedule of Expenditures of Federal Awards (SEFA) is the preferred data source for this measure as it is a statement of federal awards included in each institution's annual external audit report and is accessible by the HED, LFC and DFA
- Increase in the number of provisional patent applications averaged over a three-year period. Patent disclosure activity by the three research universities acknowledges the role of these universities in the economic development of New Mexico
- Individual university measure, with metrics discussed to date as follows:
 - The change in the percent of graduate students as a total of all enrolled students
 - The change in the dollar amount of private grant and contract revenues
 - The percent of graduating students who obtain employment within the field of their degree or continue enrollment into a graduate program
 - The increase in the percent of undergraduate and/or graduate students supported by assistantships

Similar to phase-one of the modified state funding formula, and in accordance with the underlying legislative intent, it is possible that there be a direct link between the schools and colleges that generate the funds as a result of these research metrics and their distribution. It follows that beginning in FY15 a major portion of the incremental state funds could flow directly to the schools and colleges that generate the funds in accordance with the state funding formula.

UNM Metrics: The process of identifying and committing to "sector" specific metrics for the University of New Mexico is most easily accomplished by evaluating areas of weakness and developing goals and objectives to overcome those weaknesses. To do so it is helpful, first and foremost, to restate our mission of teaching, research, public service and health care with an eye towards consistently developing metrics that reflect this commitment. Secondly, it is helpful to reflect on questions faced by most universities in their efforts to strengthen the

undergraduate and graduate student experience. A recent self-study conducted by Stanford University faculty, but no less relevant to our UNM community, qualified these issues, namely:

- How do we appraise, improve and reward undergraduate teaching?
- How can we improve the culture of advising, including the disturbing unevenness in faculty commitment to it?
- Can we design support programs that will foster our students' overall educational experience?

RCM and PBB Revenue Allocation Metrics: In support of these questions, RCM and PBB principles and metrics will be further discussed with the steering committee and university community to determine the individual performance metrics moving forward. In order to provide schools and colleges with some degree of budget certainty, however, it is likely that funding allocations will be calculated by the following two metrics:

- Overall base funding – simply methodologies that support stability
 - Face-to-face SCH completed
 - Extended University SCH completed

Total Unrestricted Credit Hours for Entire Academic Year								
	Actuals				Three Year Average* & Change from FY09			
	2008-09	2009-10	2010-11	2011-12				
Provost Academic Affairs								
Anderson Schools of Management	38,803	41,576	43,601	45,202	43,460	4,657		
College of Arts Sciences	358,641	378,397	402,106	410,565	397,023	38,381		
College of Education	66,295	71,677	74,485	71,103	72,422	6,127		
College of Fine Arts	42,496	47,053	49,424	48,913	48,463	5,967		
Provost Units	-	-	-	6,198	2,066	2,066		
School of Architecture Planning	11,782	13,340	13,451	13,917	13,569	1,787		
School of Engineering	30,183	31,710	32,751	34,350	32,937	2,754		
School of Law	9,554	9,864	10,165	10,001	10,010	457		
School of Public Administration	2,252	2,671	2,928	3,007	2,869	617		
University College	13,330	13,848	14,738	8,007	12,197	(1,132)		
University Libraries	-	-	-	101	34	34		
Total	573,336	610,136	643,648	651,364	635,050	61,714		
VP Health Sciences Center								
College of Nursing	15,583	15,261	13,757	13,100	14,039	(1,544)		
College of Pharmacy	12,009	12,052	12,428	12,458	12,312	303		
School of Medicine	13,073	14,400	16,190	16,150	15,580	2,507		
Total	40,665	41,712	42,375	41,707	41,931	1,267		
Main Campus Total	614,000	651,848	686,023	693,071	676,981	62,981		

*Green if average over past 3 years is greater than FY09, Red if average is less than FY09.

- Productivity Funding – Incentives to supplement incremental budgeting (variable)
 - Upper division/graduate credit hours

Total Unrestricted Graduate Credit Hours for Entire Academic Year						
	Actuals				Three Year Average* & Change from FY09	
	2008-09	2009-10	2010-11	2011-12		
Provost Academic Affairs						
Anderson Schools of Management	9,461	11,054	12,813	14,165	12,677	3,216
College of Arts Sciences	22,992	22,720	23,421	23,141	23,094	102
College of Education	19,249	20,484	22,389	21,307	21,393	2,145
College of Fine Arts	2,838	3,052	3,246	2,884	3,061	223
Provost Units	-	-	-	-	-	-
School of Architecture Planning	4,397	5,125	5,139	5,107	5,124	727
School of Engineering	9,977	10,664	10,378	11,232	10,758	781
School of Law	9,554	9,864	10,165	10,001	10,010	457
School of Public Administration	2,252	2,671	2,928	3,007	2,869	617
University College	200	255	264	242	254	53
University Libraries	-	-	-	20	7	7
Total	80,918	85,891	90,744	91,105	89,246	8,328
VP Health Science Center						
College of Nursing	3,120	3,398	3,310	3,360	3,356	236
College of Pharmacy	12,009	12,051	12,422	12,458	12,310	301
School of Medicine	6,474	7,037	8,512	9,242	8,263	1,790
Total	21,602	22,486	24,244	25,059	23,929	2,327
Main Campus Total	102,521	108,376	114,988	116,163	113,176	10,655

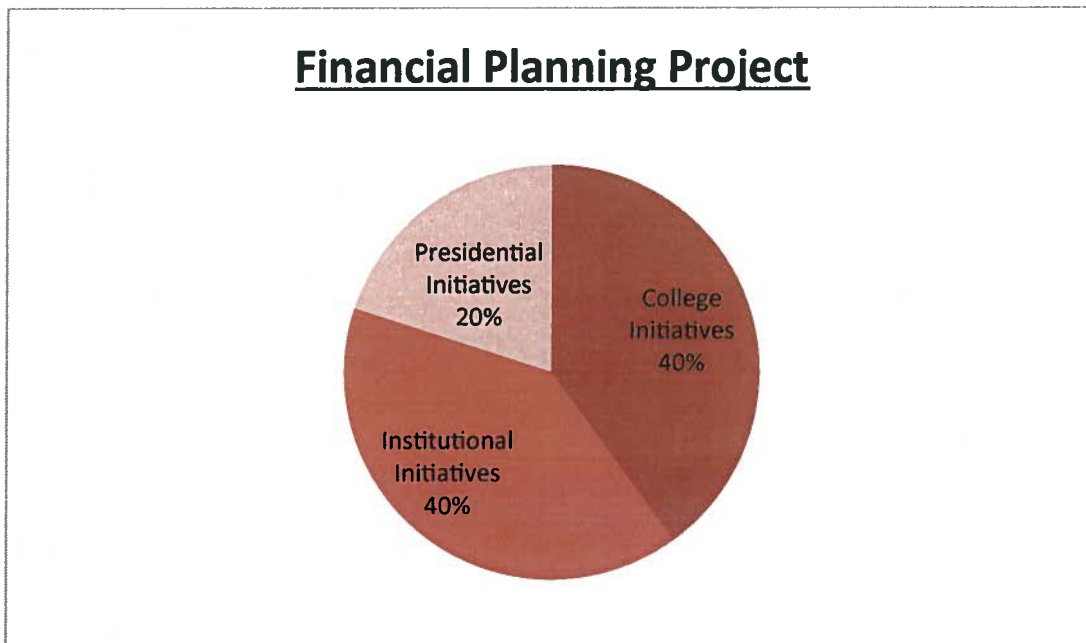
*Green if average over past 3 years is greater than FY09, Red if average is less than FY09.

- Decreased time to degree/improved graduation rates
- Increase scholarly activity – research/publications/public service
- Maximize faculty/student ratios
- Percentage of tenure/tenure track faculty

RCM and PBB Cost Efficiency Metrics - Financial Planning Project: UNM is beginning a 6-month project to better understand the revenue and cost associated with instruction. The project, a collaborative effort among the President's Office, Academic Affairs, Enrollment Management, the Office of Planning, Budget & Analysis, Information Technologies, and the Center for Education Policy Research, will develop models and a set of tools to allow decision-makers the ability to adjust a variety of cost and revenue levers and see projected outcomes. Beginning with an analysis of course capacity and student demand, the team will develop a model to determine where departments can sustain enrollment growth without adding teaching capacity, and where student demand is exceeding department course offerings.

By combining this section capacity analysis with a thorough examination of state and tuition revenues, we can begin to develop models that show the impact of changing enrollments on university revenues. Second, by accounting for the cost of university activities in support of instruction (including faculty salaries, instructional support, student services, research, and college and university overhead), the models will also account for how decision-making can impact the level of expenses.

The final deliverable will be an interactive tool to be used by department chairs, deans, and other administrators giving them the ability to view projected net revenues, or conversely cost efficiencies, based on the structuring of course offerings and section capacities. In the event of cost efficiencies, the university would develop a reallocation model that would serve as a mechanism to maximize these expenditure savings/unbudgeted revenues. Initial discussions include dividing the revenues into three revenue bins, as depicted in the graph below.



- College Initiatives: 40% of the revenue realized as a result of the cost savings would be returned to the college that generated the savings
- Institutional Initiatives: 40% of the revenue realized as a result of the cost savings would be deposited into a central academic reserve and distributed on a proposal basis for overall institutional initiatives that would bolster common institutional goals and objectives
- Presidential Initiatives: 20% of the revenue realized as a result of the cost savings would be available to the President for various new initiatives

With the likelihood of overall state funding being stressed by the growing cost of entitlement programs, and the continued goal of keeping UNM affordable for New Mexican residents, cost savings must play a more prominent role in the university's finances. By providing schools and colleges with the tools to maximize current revenue (reduce costs), the university will be able to reinvest current resources into new institutional priorities that further our teaching and research missions.

Implementation Timeline: The following timeline will guide the RCM and PBB models:

- Phase One: Planning and Design
 - Identification of Steering Committee members
 - Model research and concept development
 - Model development and commitment to project plan and scope
 - Development of metrics
 - Documentation of allocation processes
 - Quantify state instruction and research funding metrics for distribution in FY14 and FY15
 - Scenario analysis for internal UNM metrics
 - Communication to campus constituents
- Phase Two: Refinement of RCM and PBB models
 - Scenario analysis
 - Data validation
 - Communication to campus constituents
- Phase Three: Implementation of RCM and PBB model for FY15
 - Integration into current budget development process
 - Department training
 - Developing of reports

Note: Consultation will occur throughout the phase with focus groups

Overcoming Potential Roadblocks: It goes without saying that there will be roadblocks and naysayers who will offer predictable counter arguments, among them:

- RCM and PBB funding models have been tried before with limited, if any, success. Why is UNM moving towards the use of these models? There are numerous reasons why these models must be incorporated into our budgeting process, namely:
 - The limited resources and growing expectations from parents and students regarding student experience and graduation rates
 - The changing public agenda, both nationally and within our state
 - They clarify priorities and enhance transparency

- Quality will suffer – institutions can easily graduate more students if standards are lower as a means to chase performance dollars. This should not be the case, because
 - Faculty are guardians of institutional quality and they will be diligent in fulfilling this responsibility
 - Continual and rigorous assessment of quality
- It will not effectively make a difference. While it's true results vary, several states and institutions have seen positive results, including in Texas, where institutions increased degree production by 9.3% over baseline levels and increased the number of "at-risk" students who graduated by 17.6%
- With growing enrollments, institutions must fund the base before setting aside funds for performance. The reality is supplemental funding from the state and/or tuition increases that would be administered under a RCM/PBB model should be expected to produce higher levels of performance since institutions are producing their current baseline levels of outcomes with existing resources. New resources and/or the reallocation of existing resources should lead to better results of stated goals and objectives, not the same level of performance.

There is now enough empirical evidence to suggest that RCM/PBB models are effective if designed and implemented correctly. It will be up to the University of New Mexico to refine its academic plan, develop and communicate its goals and objectives-- with this plan as a backdrop--and empower its academic leaders to achieve these goals and objectives through the use of entrepreneurial models that reward financial stewardship and performance.