PLANNING STORY

Redesigning a Budget Model with a Grassroots Approach

by Maria R. Anguiano and Jason Rodriguez

While redesigning a campus budget model could happen relatively quickly from a technical standpoint, time spent in extensive engagement, collaboration, and conversation is key to successful implementation.

BACKGROUND AND CONTEXT

The University of California, Riverside (UCR), is one of 10 campuses in the University of California system, inland Southern California's only research university, and a federally designated Hispanic-serving institution. With a current enrollment of approximately 22,000 students including roughly 18,000 undergraduates, UCR is a recognized leader in diversity among the nation's universities. Approximately 69 percent of its students are students of color, and 56 percent of its undergraduates are first-generation college students. UCR's diversity extends beyond race and ethnicity to include diversity of economic opportunity and status, welcoming students for whom a low household income otherwise likely would have been a barrier to higher education. Enrolling one of the highest percentages of Pell Grant recipients among top research universities (56 percent, compared to the 38 percent average for public four-year universities), UCR has continuously demonstrated a strong commitment to providing a quality education to groups with traditionally low access.

Historically, support from the State of California has been a primary revenue source for the university. However, the level of state funding has not increased in step with enrollment growth over the past several decades. Like other similar institutions, UCR actively wrestles with the question of how a cutting-edge university can continue to deliver a superior education to a growing student population in an era of reduced state funding.

Following a period of extensive consultative meetings and stakeholder engagement, in 2010 UCR published its long-term strategic plan. This "living document" serves as the university's guiding vision, offering a compelling narrative of what UCR should look like in 2020. The 2020 vision outlines UCR's strategic goals under four broad themes (figure 1):

Figure 1 **UCR's 2020 Strategic Goals**

Strategic Goal #1	***Academic Excellence*** - Developing a Preeminent Research University for the 21st Century
Strategic Goal #2	***Access*** - Enhancing Opportunity for Graduate, Professional, and Undergraduate Students
Strategic Goal #3	***Diversity*** - Serving as a National Exemplar for Diversity, Inclusion, and Community
Strategic Goal #4	***Engagement*** - Shaping Our World

UCR's 2020 goals are quite ambitious and guide the current leadership team. Individual units are continuously asked to think critically about how their own goals and objectives fit into, or further, the 2020 goals. Success metrics have been developed to track progress toward these targets.

Leadership understood that achieving any of its strategic goals would require careful use of its limited resources, deep collaboration with campus constituents, and integrated planning. As UCR began to plot its path forward, it became clear that the university's administrative infrastructure needed to be revamped. From a budget model perspective, UCR was not set up to nimbly make progress toward the level of growth called for in the strategic plan. It was apparent that in order to meet the 2020 goals, UCR's budget model would need to be redesigned.

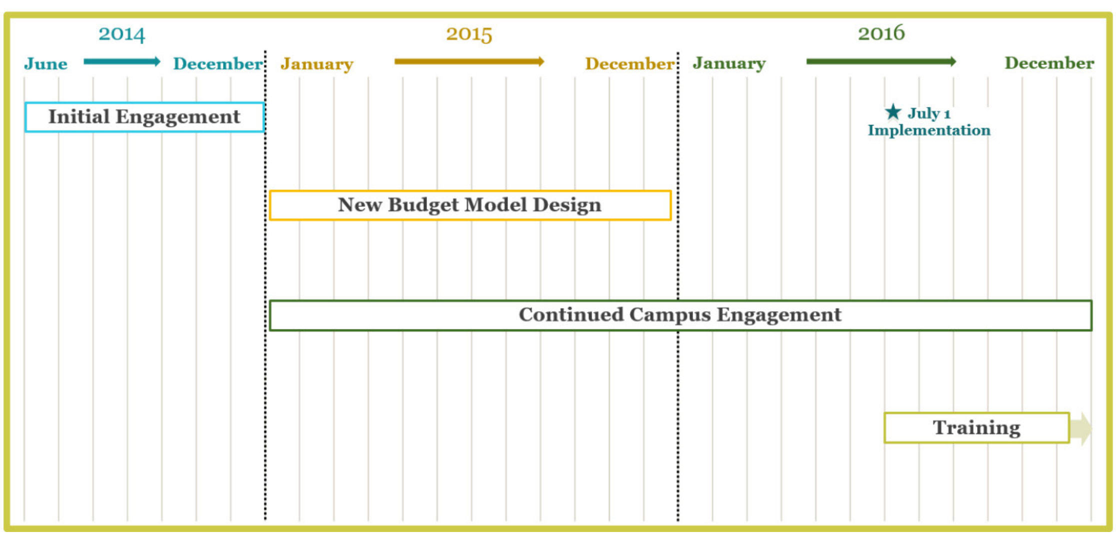
The transition to a new budget model would require more than a mere adjustment to revenue allocation. A new model would represent a cultural shift, requiring broader campus-wide conversations relating to how UCR thinks about and uses its resources.

UCR'S BUDGET MODEL REDESIGN PROCESS

UCR's budget model redesign process lasted over two years and in many ways continues today with subsequent trainings offered to staff and faculty across campus. UCR's prolonged engagement strategy highlights the importance of broad stakeholder involvement and the complexity of transitioning to a new budget model at a university.

Figure 2 illustrates the multi-year implementation process. This process could actually be condensed to a single year from a technical standpoint. However, UCR believes that such an approach would have short-circuited campus engagement and therefore ended with suboptimal results. Changing the budget model was about changing mind-sets, incentives, and behaviors—not just about the numbers. Thus, UCR believes that its implementation timeline was a critical component in the success of the new model. Cultural shifts do not happen quickly, and long-held beliefs do not change suddenly. Formal and informal conversations, dialogue, and individual meetings were all necessary to explore stakeholder perceptions, understand requirements, and gather feedback in a way that allowed many voices to be heard and incorporated into the model. The campus community needs time to consider, and possibly reconsider, the impacts and implications of a new model at the department level.

Figure 2 **UCR's Budget Model Redesign Process**



Changing the budget model was about changing mind-sets, incentives, and behaviors—not just about the numbers.

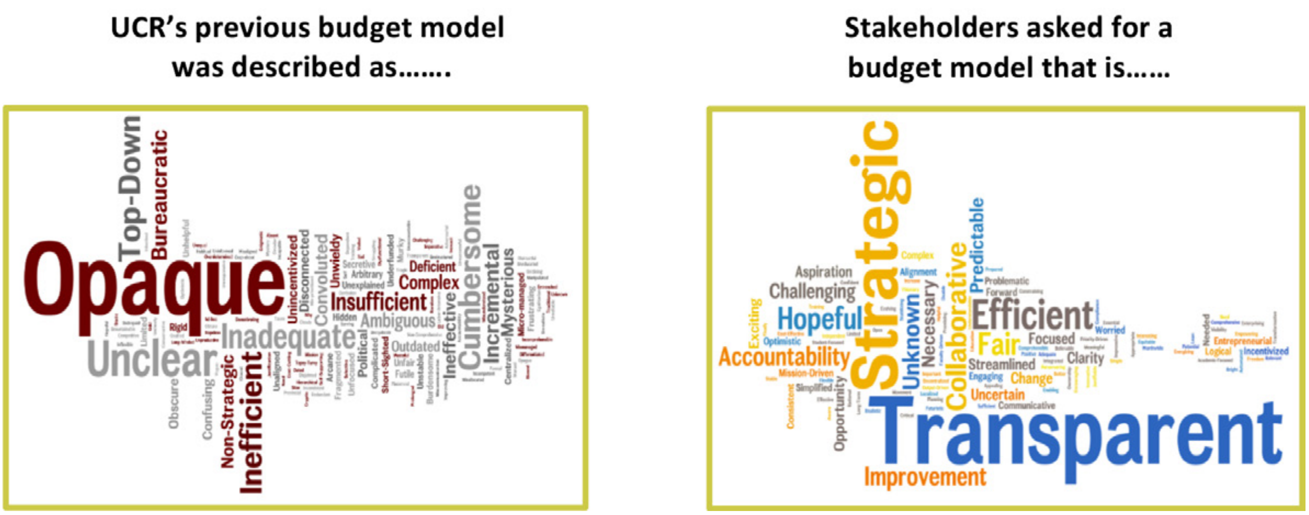
A budget model design process should be tailored to the needs of an individual campus and the environment in which it operates. However, UCR's phased approach may be instructive to other universities that are considering undertaking such a major initiative.

PHASE I: INITIAL ENGAGEMENT

Initial engagement regarding the budget model began with a needs assessment in which the vice chancellor for planning and budget (VCPB) asked campus leaders to offer their candid thoughts on the old model (figure 3). The VCPB and her team began by conducting a listening tour across campus using diverse venues and forums, including surveys, workshops, and one-on-one meetings with deans. Words such as "opaque," "top-down," "inefficient," and "unclear" were repeatedly used to describe the old model. It was apparent that the model lacked transparency and, by the admission and request of a broad range of the campus community, was in need of careful evaluation.

These same stakeholders were then asked to envision the ideal state (figure 3). If the budget model could be redesigned, what should it look like? What elements or characteristics should be prioritized? In their responses, stakeholders made it clear that they wanted a budget model that was both transparent and strategic.

Figure 3 **Word Clouds: UCR's Previous and Future Budget Models**



This initial engagement was a critical step in the process. The community itself recognized the need for, and supported, the change initiative. However, had leadership simply assessed the situation and set out to address the visible problems in isolation, any sense of collaboration and community would have been lost. The change initiative, regardless of its merits, would have been viewed as a top-down change imposed by leadership without consultation with those who would be most affected, namely the academic units across campus. This initial engagement built the political and relational capital that would be needed in subsequent phases.

A steering committee composed of a broad representation of campus units established the guiding principles that would govern the design of the new model. These principles reflected the feedback gained during the initial engagement period. In this way, campus stakeholders collectively determined the characteristics the new budget model should have (figure 4).

Figure 4 **Characteristics of the New Budget Model**

1. Transparent
2. Incentivized
3. Strategic
4. Risk Tolerant
5. Logical

PHASE II: NEW BUDGET MODEL DESIGN

Once stakeholders clearly communicated the need and desire for a new budget model, UCR began the process of actually redesigning the current model. To facilitate this process, budget redesign workgroups were established that represented a wide cross-section of campus stakeholders. These subject matter experts met regularly over the course of a year in partnership with UCR's central financial team, working through a number of steps as described in the paragraphs that follow:

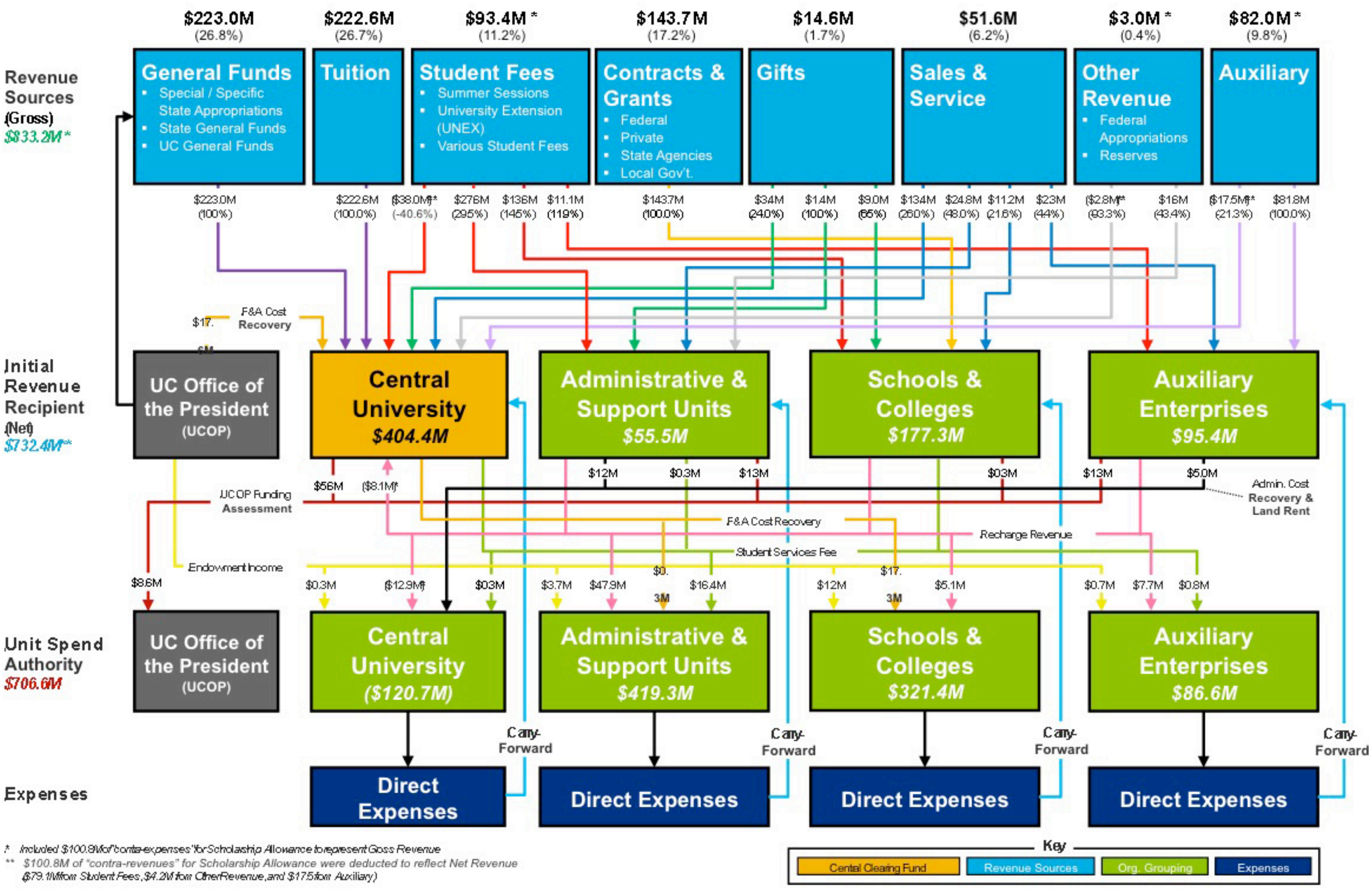
If financial leaders themselves had difficulty explaining and discussing campus finances, how could the broader community financially plan for such dramatic growth in an effective way?

BUDGET WORKGROUP STEP 1: ASSESS AND EVALUATE THE PREVIOUS RESOURCE ALLOCATION PROCESS

The first task of the budget redesign workgroups was to understand the current state. Stakeholders routinely commented that the resource allocation process was unclear and bureaucratic. Although there was a nearly universal negative reaction to the previous model, few on campus could actually describe the flow of funds in any meaningful way, highlighting the model's opacity. To successfully move to a new model, UCR first needed to understand and untangle its current state.

As UCR began to diagram the actual revenue allocations under the old budget model (figure 5), it quickly became clear that reaching the university's 2020 goals would likely have been very difficult, if not impossible, with that model. The labyrinthine allocation structure would have severely limited stakeholders as they lacked the specialized skill and experience needed to decipher the flow of funds. If financial leaders themselves had difficulty explaining and discussing campus finances, how could the broader community financially plan for such dramatic growth in an effective way? Mapping the old model confirmed the descriptions provided by campus stakeholders and validated the call for redesign.

Figure 5 **Map of Previous Budget Model**



BUDGET WORKGROUP STEP 2: BENCHMARK NATIONAL LEADING PRACTICES FOR RESOURCE ALLOCATION IN HIGHER EDUCATION

Once the workgroups had a deeper understanding and awareness of the limitations of the old model, they were positioned to begin considering what type of model would best serve UCR in the current growth environment.

Workgroups and campus leadership began to explore a wide range of budget models, analyzing and discussing the pros and cons of each, with special consideration given to how each model may or may not create an environment in support of broader campus goals. As UCR began researching various models, leadership also reached out to other universities, some of which had recently undergone budget process redesigns as well, to better understand how their budget models operated. These interviews allowed UCR to examine what worked well in other environments and ask those campuses what they might have done differently in hindsight. Were there any drawbacks to their new models? Were there any unintended or unanticipated consequences of the transition process? Is there anything they wished they would have known as they entered the redesign process? These candid conversations helped UCR begin to navigate the various models and estimate how they might fit in the UCR context. As leaders connected with other universities, UCR also partnered with Deloitte, which had deep experience implementing a variety of budget models across the country.

Deloitte team members helped gauge how specific models might translate to the UCR environment and provided valuable insights throughout the redesign process.

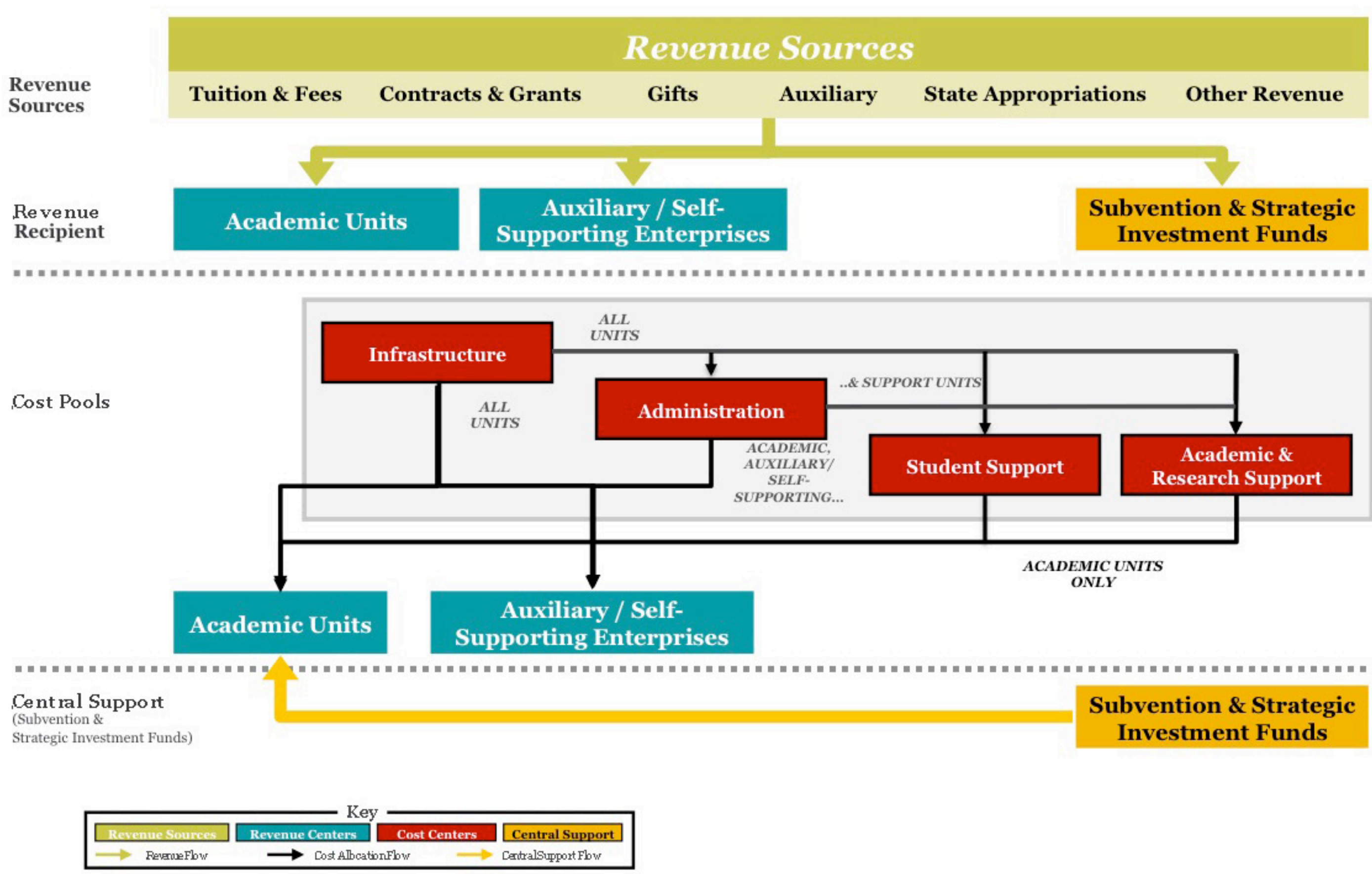
UCR considered a spectrum of choices, from highly decentralized models to others where the central campus retains complete budget authority. In the end, UCR settled on an incentive-based budget model that is a variant of responsibility center management.

BUDGET WORKGROUP STEP 3: CREATE A SAMPLE BUDGET MODEL

Once UCR decided on the type of budget model it wanted to implement, the budget model workgroups, in conjunction with the consultant team, began the process of actually designing the new model, ensuring alignment with the established guiding principles.

As mentioned previously, one of the criteria for the new model was a level of transparency that would promote meaningful, informed decision making. Transparency in this sense referred not only to information dissemination, but also to presenting that information in an accessible, understandable way for all stakeholders. Therefore, the task of the workgroups was to develop a streamlined budget model that clearly and logically routed the flow of funds (figure 6), resulting in a more transparent view of the institution's resource use and enabling stakeholders with the knowledge and understanding of how their own resources operate within university finances.

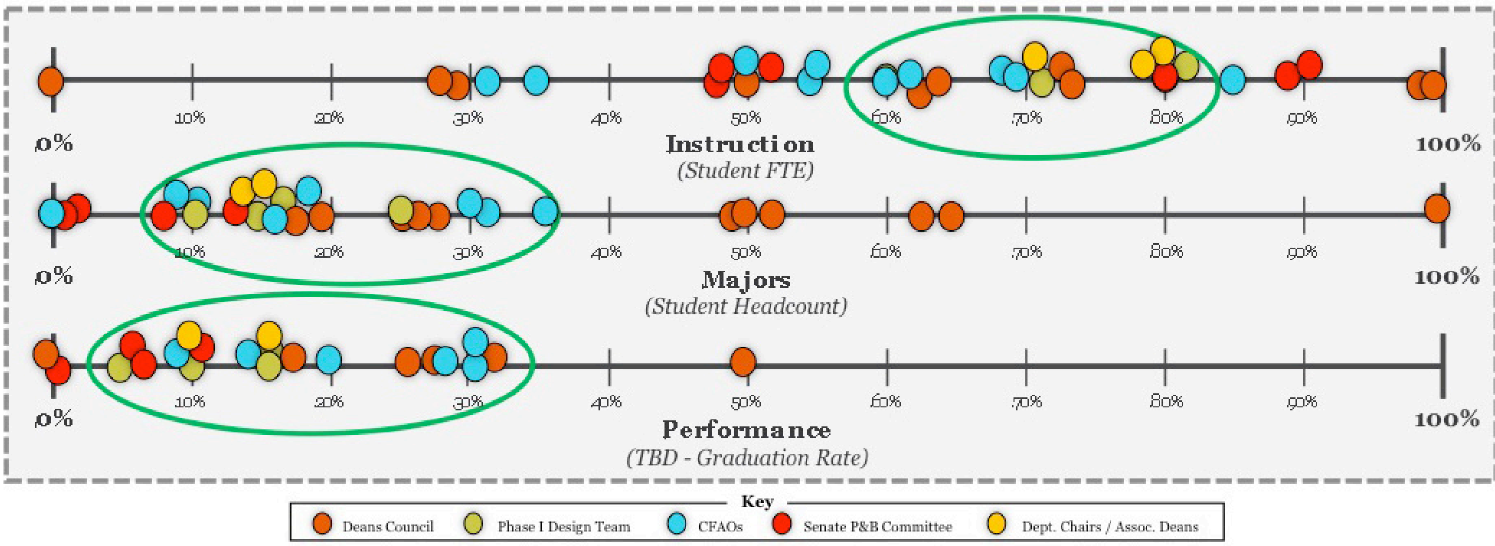
Figure 6 **Map of Redesigned Budget Model**



For example, in UCR's new incentive-based budget model, the majority of net new undergraduate tuition revenue is allocated directly to the academic units based on a formula that considers the number of courses, student headcount in majors, and improvement in graduation rates. Since revenue per student credit hour produced is fixed, understood, and transparent in the new model, unit heads now know how much tuition revenue they will receive for a given level of output and can focus on how to optimize those resources.

The tuition formula for the model was developed in collaboration with the Academic Senate, the Deans Council, chief financial officers from the academic units, department chairs, associate deans, and the budget model design team. Members of each group were given an opportunity to vote on how tuition revenue should be allocated among the academic units, deciding what percentage of tuition should be distributed based on instruction versus majors or performance. Figure 7 captures the results of the voting.

Figure 7 **Voting Results for Tuition Allocation**



Clusters of voting for each option were readily apparent and drove the final decisions regarding the allocation formula. Though the design team was charged with outlining the mechanics of the model, it was also careful to engage a wide audience of stakeholders in consequential decisions such as the tuition allocation formula.

In UCR's new model, units that directly generate revenue from outside the university, such as schools/colleges and auxiliary/self-supporting units, are considered *revenue generators*. All other units are considered *service providers* and grouped into one of four cost pools: infrastructure, administration, student support, and academic and research support. All institutional revenue, including tuition, flows to the revenue generators, and the service providers' budgets are funded via charges to consuming units based on "drivers" that reflect each unit's consumption of the service in question. For example, the costs of facilities are allocated across the university based on each unit's percentage of campus square footage used. Thus, units that use more space will bear a higher share of facilities costs. Should a unit choose to reduce its space on campus, its portion of facilities costs would then decrease. These indirect costs to each unit are transparent, logical, and predictable under the new model. Figure 8 outlines some of the drivers used to determine the indirect costs charged to campus units.

Figure 8 **Examples of Drivers for Indirect Costs Under UCR's New Budget Model**

Cost Pool	Description	Driver
Infrastructure	Facilities	Square Footage
	IT	Academic + Student + Staff FTE
Administration	Functional Administration (Finance, HR, etc.)	Academic + Staff FTE
	Central Administration (Chancellor, Planning & Budget, International Affairs, etc.)	
Student Affairs Support	Student Affairs	Undergraduate FTE/Graduate FTE
Academic & Research Administration	Research Administration	Academic FTE
	Academic Administration	Academic + Student FTE

In the new budget model, the revenue generators fund the service providers and can be thought of as their customers. To govern these arrangements, service-level agreements have been created that act as contracts between the service provider and the customer to align expectations about the services provided and their costs. Each service is classified as a core service (provided as a base service to units), premium service (provided and charged only by additional agreement), or recharge. Moving to this model allowed UCR to eliminate 90 percent of recharges and over 15,000 recharge general ledger transactions per year, removing a source of opacity and freeing up valuable staff time. Crucially, customers now have a say in what services are prioritized and how much is spent on them.

A Governance Committee was established to serve as an advisory committee to the provost and VCPB during the budgeting process. The Governance Committee, made up of representatives of the academic units, reviews service provider budgets and works closely with the service providers to ensure that service provision, quality, and cost are in alignment with the needs of the customer units and the overall strategic objectives of UCR. Increases in service provider budgets will necessarily increase the indirect costs charged to each unit. Thus, the units that pay for services now have a voice in what services are provided.

BUDGET WORKGROUP STEP 4: DEVELOP A PLAN TO IMPLEMENT THE BUDGET MODEL

Once the new model was created, the design team then developed a plan to actually implement it. Transitioning to the new model required several phases as well as regular communication with stakeholders across campus according to a detailed communications plan.

To transition to the new budget model, fiscal year 2016 was established as a "hold harmless" year such that a unit's budget before and after the new model was held the same via subvention. A subvention is a block allocation that reflects the differential cost structures of the academic units and is composed of state funding, which is thought of as providing the baseline funding for core campus operations. Each academic unit received a subvention, the size of which depended on how much was needed to hold the unit harmless when moving to an enrollment-based allocation of tuition. Going forward, the subvention will not increase, except in the case of mandatory cost increases such as salary increases. Because the subvention remains essentially constant while tuition revenue is likely to increase (due to enrollment growth or tuition increases), the subvention will comprise a smaller portion of the budget over time.

The subvention also represents an opportunity to make adjustments outside of the tuition calculations to ensure sufficient funding for a growing academic unit. For example, UCR's School of Public Policy was relatively new during the transition process with significantly fewer students and majors than its established counterparts. During the transition, the school was allocated funding based on the tuition calculation, but also received an increased subvention in order to create an appropriate budget structure.

PHASE III: CONTINUED CAMPUS ENGAGEMENT

Campus engagement continued throughout the implementation process, with monthly meetings held with unit CFOs and quarterly meetings held with campus financial officers. Leadership also hosted update meetings and question-and-answer sessions with the Academic Senate, department chairs, faculty, and staff.

UCR's continued engagement process has been iterative and characterized by hands-on and visually oriented workshops designed to elicit active participation whereby attendees felt their voices and experiences were heard and valued. Though these workshops require a certain level of guidance, great care was taken to leave adequate room for conversation and creativity.

This type of engagement typically began by providing context and background to attendees on the purpose of the meeting or a specific aspect of the model. Facilitators then transitioned to the actual workshop component by offering participants a variety of choices based on the introduction. The workshop component of a meeting often divides attendees into small groups. For groups that meet regularly, such as the unit CFO group that meets monthly, it is particularly helpful to change group assignments for each session, offering individuals the opportunity to collaborate with different colleagues and units across campus. However, group size and makeup will depend on the specific topic for the meeting. For example, for a broader topic such as space utilization, it may be helpful to make sure that each group has a representative from the various unit types on campus—academic, service provider, self-supporting, auxiliary. Individuals are then able to hear the different perspectives and concerns of the campus. However, for more specialized topics such as tuition allocation, it would be useful to group the academic units in order to hear their collective insights and recommendations. The workshop component will vary by topic but could include feedback sessions in which groups are given a list of options and asked to explore the potential consequences of each and then report back to the larger group.

Offering attendees choices spurs debate, encourages dialogue, and provides a launch pad for fruitful discussion. This type of collaborative environment allows participants to be innovative in a setting in which they can honestly consider the pros and cons of each choice. These workshops are not about stakeholders sitting in an information session and providing feedback in a question-and-answer format. There should be *active* engagement. Attendees should be mobile, walking to different areas, weighing different options, looking at visuals, conversing with colleagues, and actually casting a vote.

Also, allowing groups to hear the recommendations of other groups provides further opportunity for dialogue, much of which can directly affect later leadership decisions. Such meetings foster a collegial atmosphere in which attendees have the freedom to ask tough questions, present opposing viewpoints, and challenge suppositions. UCR's budget model and processes are undoubtedly stronger as a result of these collaborative meetings.

This type of active stakeholder engagement is not always easy. It requires significant time and investment from leadership. It also requires resources and planning. Leaders must purposefully drive their teams toward this type of collaboration. Left to inertia, units will often work in silos, focused primarily on their own goals and objectives. Alternatively, some stakeholders may come from environments where such dialogue and open feedback is discouraged. Rich collaborative environments need to be fostered, encouraged, and enabled. This may require more work, but in the end it will pay valuable dividends as support for the initiative is cultivated and the prevailing culture begins to shift, however slowly, toward collaboration.

PHASE IV: SUPPORTING THE CAMPUS AFTER IMPLEMENTATION

Following a two-year engagement and design process, UCR's budget model is now fully implemented and has resulted in a workable distribution of funds. The VCPB office maintains regular contact with all stakeholders to identify any remaining pain points and gauge what adjustments are needed. The decentralized budget model represents a completely different way of thinking about university finances both at the campus level and for individual deans and units. Leadership understands that continued conversations are necessary for faculty and staff to be both conversant and comfortable with the new model.

As part of its continued support, UCR coupled its rollout of the new budget model with the implementation of COGNOS, a reporting software that interfaces with the UCR financial system to produce accurate, concise, clear, and well-structured financial reports. Not only do COGNOS reports save analysts across campus hundreds of hours each month to be used toward items of greater strategic importance, they also provide visuals and graphics that make it easier for various levels of leadership to digest and use financial data. The reports have been tailored to the needs of deans and vice chancellors, unit CFOs, and campus financial officers, aiding the annual campus budget process and allowing individuals at each level to make better-informed decisions within their spheres of influence.

UCR continues to develop tools to support campus leaders and stakeholders in decision making. Each of these tools enables leaders to better use and understand the budget model. As new tools are developed and introduced, the VCPB office offers stakeholders one-on-one training to ensure that they are skilled in the use of the tools and well positioned to take advantage of the new data and technology. Similarly, UCR has also developed a budget model webinar that is available to the broader campus on the Planning and Budget website. The webinar, which was designed following interviews with a cross-section of financial officers, walks through each element of the model in detail, addressing the specific questions and concerns raised in the interviews.

LESSONS LEARNED

Any major change initiative requires an overarching message or vision to serve as a goalpost to guide and unify stakeholders throughout the change process. Leadership should continually reference that vision throughout each stage of the initiative. When the initiative actually works to change cultural mind-sets and long-held approaches, the importance of that unifying vision increases dramatically.

UCR's budget model redesign was part of a broader strategy in support of the university's 2020 growth goals, and thus it coexisted alongside other change initiatives. Conversations regarding the details and mechanics of the transition to the new model could have easily eclipsed the unifying growth strategy, disconnecting the initiative from the overarching vision. It was important to regularly, and explicitly, articulate the linkage between the budget model and the vision set forth by the broader campus, not only during the initial engagement period but also throughout the design and implementation phases.

Change leaders cannot assume that stakeholders will communicate, or advocate, on their behalf to other campus groups. During the design and implementation phases, UCR's financial leadership team met regularly with financial officers across campus. This strong collaboration and partnership strengthened the overall model by anticipating and addressing potential risks and issues. Though these individuals in turn communicated within their respective units, it was also critical for central leadership to take the budget model communications directly to deans, department chairs, faculty, and various levels of staff rather than rely solely on the unit financial officers to make the case for redesign themselves. Regular updates with stakeholders across unit types and levels enrich feedback and cultivate acceptance and ownership of the initiative.

CONCLUSION

Any change initiative in a higher education environment will require a considerable time investment to move forward. Given the sensitivity and complexity of the resource allocation process, time may be the most significant resource in any budget model redesign. A budget model shapes the way the campus operates in a fundamental way, and although the actual methodology could be devised fairly quickly, extensive engagement, collaboration, and conversation are key to successful implementation. The biggest lesson we can share is to ensure your engagement continues post-implementation as well, equipping the campus with the tools and data necessary to transition smoothly and promote decision making in line with your institution's strategic goals.

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