Academic Planning and Budget

Bruin Budget Model Overview

INTRODUCTION

Academic Planning and Budget (APB) has designed a new budget model for UCLA at the request of the Chancellor, Executive Vice Chancellor and Provost (EVCP), and Vice Chancellor/Chief Financial Officer (VC/CFO). This effort marks the campus's first major budget model innovation since its founding in 1919. Four years of extensive research on best practices, coupled with internal and external consultations, have yielded the Bruin Budget Model (BBM), a hybrid resource allocation framework customized for UCLA. The BBM is planned to take effect on July 1, 2022.

UCLA currently faces the challenges of persistent declines in State support, mandated caps on nonresident enrollment, limited flexibility to adjust base tuition, and a current budget model that lacks precise resource-allocation rationale. The BBM is intended to help the campus respond to these challenges by enhancing the transparency of allocation decisions and encouraging the growth and diversification of non-traditional revenue sources. Such sources include Summer Sessions enrollment, self-supporting graduate professional degree programs (SSGPDPs), and indirect cost recovery. The key purposes of this report are to contextualize UCLA's planned transition to a new budget model, describe how the main features of the BBM compare against those of UCLA's current model, and summarize plans to oversee and continuously improve the BBM, when it is implemented.

BACKGROUND

For purposes of this report, "General Funds" refer to the sum of UCLA's State appropriations, base tuition and fees, and nonresident supplemental tuition (NRST). Taken together, these funds are also known as UCLA's "major core funds," as General Funds are the primary source of support for *core* academic activities and central services. The decision to explore a new budget model was informed by historical shortfalls in State support, coupled with UCLA's limited flexibility to increase base tuition or enroll additional nonresident undergraduates. Even though State funding levels, tuition increases, and legislative expectations for nonresident undergraduate enrollment are largely beyond the campus's control, UCLA can leverage the growth potential of other, less traditional fund sources. Recent trends in State support for UCLA, tuition and fees, and nonresident undergraduate enrollment, all of which underpin UCLA's decision to explore a new budget model, can be found below.

General Funds Over Time

UCLA's General Funds (adjusted for inflation) grew by 7 percent between 2007-08 and 2019-20, predominantly due to increases in student tuition, fees, and nonresident undergraduate enrollment. Undergraduate and graduate full-time equivalent (FTE) enrollments increased by 13 percent between 2007-08 and 2019-20. At the same time, State support for UCLA *decreased* by 50 percent on a perstudent (FTE) basis. To help compensate for shortfalls in State support, the UC Regents approved substantial base tuition and undergraduate NRST increases during this time period (base tuition increased by 96 percent and undergraduate NRST increased by 56 percent between 2007-08 and 2019-20). Despite these enrollment increases and various systemwide charge adjustments, UCLA's General Funds per FTE still *decreased* by 18 percent – from \$33,300 to \$27,440 – between 2007-08 and 2019-20. See Figure 1, below, for details.

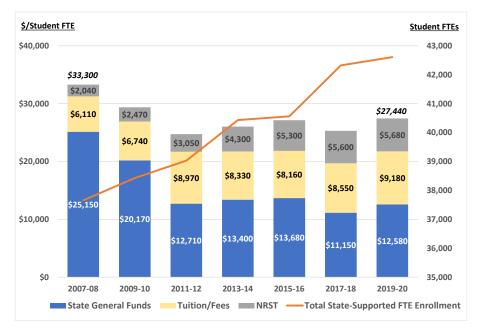
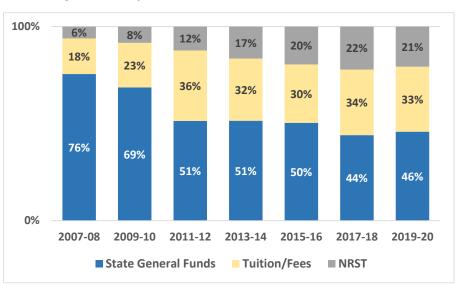


Figure 1: UCLA's Total FTE Enrollment and General Funds Per Student Over Time (Adj. for Inflation)

In 2007-08, just before the Great Recession, the State provided UCLA with 76 percent of its General Funds. This figure has since dropped to 46 percent. As a result, the composition of UCLA's General Funds has changed, with student tuition, fees, and NRST growing in prominence over time. See Figure 2, below, for details.





This downward trend in public support and subsequent increased reliance on student tuition and fees at UCLA mirrors a larger trend in public higher education in the United States. According to the State Higher Education Executive Officers Association (SHEEO), public higher education appropriations per FTE

student in the U.S. in 2020 were 14 percent lower than those of 2001 and 6 percent lower than those of 2008, adjusted for inflation.¹

One traditional response to declining State support is to increase systemwide charges to maintain campus operating budgets. When the UC Regents increase undergraduate base tuition and/or the Student Services Fee, the University sets aside at least 33 percent of new revenue for need-based grant assistance, so this option is also helpful for bolstering institutional financial aid packages. This option lacks long-term sustainability, however. Between 2012 and 2021, base tuition increased only once—by \$282, or 2.5 percent, in 2017. Nearly flat tuition levels since 2012 have created planning challenges for every UC campus. Beyond that, proposals to increase systemwide undergraduate charges on an across-the-board basis are no longer considered viable by the UC Regents. To that end, in July 2021, the Board approved a multi-year, *cohort-based* tuition, the Student Services Fee, and NRST) only to incoming cohorts of undergraduates. (To be clear, annual, inflation-based increases in base tuition and the Student Services Fee will apply to *all* graduate students under this plan, as opposed to just incoming cohorts). Although these approved tuition and fee increases – which will take effect for the first cohort in the 2022-23 academic year – will play a critical role in supporting UCLA's operations, their full effects will not be felt until the phase-in period of cohort-based tuition is complete in 2026-27.

Even when cohort tuition matures in 2026, UCLA's best-case scenario will be for State appropriations and base tuition to increase annually by the rate of inflation. Absent additional sources of funding, budget pressures will persist because UCLA's annual personnel cost increases typically exceed the rate of inflation (currently, 80 percent of General Fund expenditures are for salaries and benefits). This phenomenon is due to faculty merits and promotions, represented staff increases, and established longterm trends in health and pension costs. Furthermore, modest annual growth in the major components of UCLA's core funds will not make up for a decade of State funding reductions and frozen tuition, which has contributed to a 15 percent increase in UCLA's student-to-faculty ratio (relative to 2010). Modest growth in UCLA's General Funds would also be insufficient to support UCLA's high-priority new investments, which include hiring additional staff and ladder faculty, growing graduate student support, and addressing deferred maintenance needs for campus facilities.

Another traditional response to declining State support is to increase nonresident undergraduate enrollment. Nonresident undergraduates are currently assessed charges totaling \$42,324,² in addition to campus-based fees. By contrast, UCLA receives less than \$23,500³ from a combination of in-state tuition, fees, and State funding for each California resident undergraduate it enrolls. UCLA relies on additional revenue from nonresident students to recruit and retain faculty, offer additional courses that lower class size, update instructional equipment, and otherwise maintain quality. Between fall 2007 and

¹ SHEEO. State Higher Education Finance: FY 2020. <u>https://shef.sheeo.org/wp-</u>

content/uploads/2021/05/SHEEO SHEF FY20 Report.pdf. SHEEO's appropriations data include state and local support for public higher education operating expenses, excluding financial aid, research, and medical education. ² This figure includes Nonresident Supplemental Tuition (\$29,754), Tuition (\$11,442) and the Student Services Fee (\$1,128).

³ This figure includes Tuition (\$11,442), the Student Services Fee (\$1,128), and approximately \$10,900 in State support (the State's estimated share of the marginal cost of instruction in 2021-22). Please note that this figure does not account for the portion of student fees that must be returned to financial aid.

fall 2017, before UC implemented caps on nonresident undergraduate enrollment, UCLA added 4,879 nonresident and 195 California resident undergraduates.⁴

Political support for nonresident enrollment at UC has decreased in recent years, limiting campus flexibility to grow nonresident undergraduates. A provision of the California Budget Act of 2016, for example, called upon the UC Regents to "adopt a policy that specifies a limit on the number of nonresident students enrolled" as a condition of receiving \$18.5 million to support the enrollment of 2,500 additional California resident undergraduates in 2017-18 relative to 2016-17.⁵ In response, the UC Regents approved *Regents Policy 2109* in May 2017.⁶ This policy requires the following: "[a]t each campus that in academic year 2017-18 enroll[ed] fewer than 18 percent of its undergraduates from outside California, California residents shall continue to represent a minimum of 82 percent of all undergraduate students." For all other campuses, which included UCLA, the policy limited nonresident undergraduate enrollment to the proportions they enrolled in 2017-18. As a result of this policy, UCLA's nonresident undergraduate cap is currently 22.6 percent.

The 2021 Budget Act (the latest Budget Act as of this writing) further restricts nonresident enrollment at UCLA. According to the statute, the Legislature intends to reduce the number of nonresident undergraduate students at Berkeley, UCLA, and San Diego such that "nonresident undergraduate enrollment at each campus comprises no more than 18 percent of total undergraduate enrollment by the 2026-27 academic year."⁷ The State has expressed the intent to fund the first phase of this reduction in 2022-23. Of course, UCLA's core funds would decline dramatically if the campus phased down nonresident undergraduate enrollment without ongoing State support to offset the associated decrease in revenues.

UCLA's Budget Savings Program: Origins and Outcomes

In response to the financial pressures described above, and in order to expand opportunities for central investment in strategic priorities, UCLA initiated a \$100 million budget savings and reallocation program in March 2019. This savings program entailed the following: \$25 million in permanent budget reductions to central administrative units; \$25 million in a one-time, central recapture of unit reserves in excess of reserve targets⁸; repurposing \$25 million in one-time gift funds for expenses previously covered by UCLA's General Funds; and \$25 million in other budget-strengthening actions, such as improving the campus's indirect cost recovery rate and capitalizing on new investment strategies from the UC Office of the President (UCOP) to enable higher returns from working capital. This iteration of UCLA's savings program was only partially executed, as UCLA's financial conditions changed dramatically in the wake of the COVID-19 pandemic. In particular, funds were recaptured from unit reserves in excess of their

- ⁵ California Budget Act of 2016. Provision 4.1 (a)(2) of section 6440-001-0001.
- https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160SB826.

⁶ The full text of this policy can be found here:

- https://regents.universityofcalifornia.edu/governance/policies/2109.html.
- ⁷ California Budget Act of 2021. Provision 43 of section 6440-001-0001.

⁴ UCOP. *Fall Enrollment at a Glance* dashboard. <u>https://www.universityofcalifornia.edu/infocenter/fall-enrollment-glance.</u>

https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB128.

⁸ For units funded primarily by recurring appropriations, ending fiscal year reserve balances should not exceed two months of expenditures. For units with a significant percentage of their support raised annually, ending fiscal year reserve balances should not exceed four months of expenditures. The \$25 million recapture of reserve balances was designed to affect only those units whose reserves exceeded these targets.

targets for a one-time budget benefit of \$25 million. In addition, \$4.4 million in gift funds were allocated to summer fellowships for graduate students (\$1.3 million more than the year before), as a variation on the original plan to repurpose gift funds to cover \$25 million of General Fund expenses. Lastly, the campus is currently working with UCOP to enable higher returns on working capital.

UCLA's savings program was expanded to \$200 million in 2020, after the onset of the COVID-19 pandemic and its resulting recession. This expansion maintained a 10-percent cut to the permanent budgets of academic units and increased the permanent budget cuts of central administrative units to 15 percent. Informing this expansion was the UC Regents' understandable decision, in light of the extraordinary losses resulting from the pandemic, to defer consideration of a systemwide cohort-based tuition proposal, originally brought to the Board for action in March 2020. The profound effects of the pandemic on California's economy also informed the decision to expand UCLA's savings program: The state's projected surplus of \$5.6 billion in January 2020 devolved into an estimated deficit of \$54.3 billion by May 2020. By mid-2021, the forecast for the state's economy improved dramatically, and UCLA's savings targets were modified a final time to 4.5 percent for academic units and 10 percent for central administrative units. The decision to assign a higher savings rate to central administrative units was motivated by particularly high growth rates of central administrative unit budgets over the past decade, a phenomenon described in more detail in the "Current Budget Model" section below. These permanent budget reductions have a three-year phase-in period and will be fully implemented by fiscal year (FY) 2024-25.

To summarize, UCLA is faced with the challenge of sustaining excellence in instruction and research under the following conditions: persistent State funding shortfalls, a decade of flat tuition followed by a cohort-based tuition model that will take years to mature, and political resistance to nonresident enrollment. These financial pressures have necessitated not only a campus-wide budget savings program, but also an inward-look at the campus's budget model and how it might better support campus-wide needs, entrepreneurial activity, and non-traditional revenue growth (e.g., SSGPDPs, Summer Sessions, and indirect cost recovery). Features of common university budget models are discussed below.

UNIVERSITY BUDGET MODELS

For purposes of this report, a campus budget model is defined as a set of rules and parameters used for creating the budgets of schools, college divisions, academic support and research organizations, and central administrative units. There are five main types of budget models used by institutions of higher education (IHE): incremental, zero-based, priorities/performance-based, activity-based, and Responsibility Center Management (RCM). In practice, no single budget model can support all of the financial needs and goals of an institution. As a result, most institutions deploy hybrids of two or more budget models. Relatedly, university budget models can be situated along a spectrum of centralized to decentralized. Centralized budget models enable senior leaders to advance strategic priorities through central investment and oversight. Under decentralized budget models, by contrast, each of the units within a university controls its own expenditures and pays to fund central operations. The characteristics of the five budget model types, and the extent to which they entail centralized funding decisions, can be found in Figure 3, below.

	Budget Model Types				
	Centralized				Decentralized Responsibility
Budget Model Characteristics	Incremental	Zero-Based	Priorities/ Performance-Based	Activity-Based	Center Management (RCM)
1 Base Budget Allocation	Base budgets set by historical agreements (not usually well- documented). Annual changes to overall university revenue split proportionally across units (e.g., UCLA General Funds).	Budgets built from zero each year. Annual justification of spend to leadership.	Budgets based on pre- determined outputs/ outcomes (e.g., graduation rates)	Budget based on	Allocations based on formulas (e.g., % of SCH)
Annual incremental 2 funding allocation	Yes. All units receive the same % increase. Not strategic.	No. Funds fully allocated to units based on approval.	No. Funds fully al	located to units bas	ed on formulas.
Centralized funding sources are available 3 to support department requests and also campus priorities	Yes	Has the option	Has the option	Has the option	No. Funds fully allocated to units.
4 Provides incentives for revenue growth	No	No	Yes	Yes	Yes
Transparency of 5 allocation of funds	Base budget allocation is not transparent. Incremental fund allocation is transparent.	Not transparent. Decisions about what each unit should spend are made centrally.	High transparency, based on formula	High transparency, based on formula	High transparency, funds fully allocated to each unit based on formulas

Additional information about incremental budgeting, activity-based budgeting, and Responsibility Center Management (RCM) can be found below. These three budget model types are particularly relevant to this report because: 1) incremental budgeting is fundamental to UCLA's current budget model, particularly the allocation of General Funds; 2) activity-based budgeting is relevant to the allocation of certain fund types under both the current model and the Bruin Budget Model; and 3) the extreme decentralization that typifies RCMs does not typify the Bruin Budget Model. Key features of the BBM are described in the "Bruin Budget Model" section of this report.

Incremental Budgeting

Under an incremental budget model, the budget for the current fiscal year becomes the base for the next fiscal year. Only new, or *incremental*, revenue is allocated to subsidiary units (i.e., schools, college divisions, academic support and research organizations, and central administrative units). Approximately uniform percentages of any change in annual university revenue are then added to (or subtracted from)

each unit's most recent budget.⁹ This model's allocation method is driven by precedent, not by formula. Its main virtue is stability; going into each new year, all subsidiary units know what their base budget will be. Critiques of incremental budgeting include the lack of incentive it provides for units to increase their revenue or find cost efficiencies, the lack of accountability it expects for annual expenditures, and the lack of flexibility it offers to align core funds with strategic priorities. Incremental budgeting is also agnostic to changes in enrollment, sometimes leaving growing Schools to support more students without corresponding adjustments to their base budgets. Given their reliance on incremental net revenue, these models can also be difficult to implement when such revenue grows very slowly or not at all (e.g., when State support is on the decline, enrollment is constrained, and/or tuition is frozen or fixed). For this reason, IHEs generally avoid allocating all fund sources incrementally.

Activity-Based Budgeting

Under an activity-based budget (ABB) model, resources flow automatically to units that increase certain activities (e.g., instruction and/or research). Of course, increased activities generally create increased costs, both directly in the units and indirectly in administrative areas of the university. For activity-based budget models to work well, then, there needs to be sufficient overall revenue (e.g., from a range of activities) to compensate for times when one activity-based revenue stream cannot fully support the associated activity. Benefits of this model include the immediacy with which local leaders and central administrators can identify potential budget opportunities or threats. If a school is losing enrollments, an activity-based model draws immediate attention to that, and the central administration can help to determine next steps. Similarly, if a research unit generates substantial indirect cost recovery revenue from large increases in sponsored research under an ABB model, the central administration will see quickly and clearly that external communities highly value this particular work.

Concerns about this model include its potentially negative impacts on collaborative work, interdisciplinary research and teaching, campus-wide initiatives, and academic activities that might not be popular but are nonetheless vital.¹⁰ In addition, many important parts of a university, including libraries, campus police, and academic departments with unique curricular requirements, cannot sustain themselves on revenue they generate independently. For this reason, universities with ABB models usually impose a tax on the revenue generated by units and use it to support central infrastructure, strategic investments, special programmatic priorities, various indirect costs, and shared expenses that might have no direct source of funds.¹¹ The University of Michigan and the University of Washington have both adopted largely activity-based budget systems that leave room for central discretion and support for campus-wide activities. The principle of maintaining central discretion has been especially helpful at the University of Michigan in recent years, as it "encouraged the creation of a contingency fund that could be used to buffer mid-year rescissions in State appropriations."¹²

⁹ Jane Radecki. "University Budget Models and Indirect Costs: A Primer." Ithaka S+R. Last modified 25 February 2021. <u>https://doi.org/10.18665/sr.314858</u>.

¹⁰ Paul Courant and Marilyn Knepp, "Budgeting with the UB Model at the University of Michigan." Last modified May 2008. <u>https://obp.umich.edu/wp-content/uploads/pubdata/budget/ub_model.pdf</u>.

¹¹ Jane Radecki. "University Budget Models and Indirect Costs: A Primer." Ithaka S+R. Last modified 25 February 2021. <u>https://doi.org/10.18665/sr.314858</u>.

¹² Paul Courant and Marilyn Knepp, "Budgeting with the UB Model at the University of Michigan." Last modified May 2008. <u>https://obp.umich.edu/wp-content/uploads/pubdata/budget/ub_model.pdf</u>.

Responsibility Center Management (RCM)

On the decentralized side of the budget-type spectrum is Responsibility Center Management (RCM). Under this model, subsidiary units, or *responsibility centers*, generate revenue (e.g., tuition, State appropriations, and product sales) from students, governments, and corporations. Then, they determine how to best spend those revenues to achieve their objectives. Under this model, units generate revenue, cover direct and indirect costs, retain surpluses, and are responsible for their losses.¹³ In addition, each budget unit negotiates the amount it is willing to pay for centrally-provided services. A formula is typically developed to determine which budget units will pay for various central costs and how much. The extent to which the central administration plays a role in resource allocation under RCM models varies by institution.

RCM models allocate resources in a highly transparent manner (though the formulas for achieving those allocations can be complicated). This transparency helps departments engage in long-term planning, especially in times of changing student demand. RCM models also enable deans and directors to see clearly the financial consequences of expanding or contracting their programs.¹⁴ Given their decentralized nature, these models create incentives that prioritize financial accountability of individual departments. They assign decision-making authority to academic units, increase accountability, shift resources to high-growth areas on campus, and motivate both revenue-generation and cost-reduction efforts. Strictly implemented, however, RCM models make it difficult for central leadership to support units that have limited capacity to generate additional revenue or increase efficiencies. Some units struggle under strict RCM models, for example, because they require one-on-one instruction or other high-cost activities. RCM models can also leave institutions without adequate funding to support campus-wide priorities.

Since the 1970s, most IHEs seeking to change budget models have moved away from incremental budgeting and toward variations on RCM. Adoption of RCM models at IHEs in the United States increased dramatically after the Great Recession, as institutions with flat tuition and unpredictable State funding sought to improve finances. Given the drawbacks of strict implementation of RCMs, most institutions whose budget models include elements of RCM elect to preserve its transparency while retaining a portion of funding in the center to support departments and institutional priorities. When Indiana University (IU) Bloomington adopted RCM in 1990, for example, its budget model did not include central funding for campus initiatives to enhance quality, foster inter-unit cooperation, or otherwise support the "common good." Starting in 1997, however, the campus modified this component of its RCM model by assessing taxes on IU Bloomington Schools¹⁵ to create a pool of central funding known as the Provost's Fund.¹⁶ (The amount of tax assigned to each School is based on a formula, which is revised annually, that considers student credit hours, ladder faculty FTE, staff FTE, and net direct expenses.¹⁷)

¹³ Jane Radecki. "University Budget Models and Indirect Costs: A Primer." Ithaka S+R. Last modified 25 February 2021. <u>https://doi.org/10.18665/sr.314858</u>.

¹⁴ Paul Courant and Amy Dittmar, "Report on the State of the Budget Model and Budget System at the University of Michigan (Abridged Version)," Review of the University Budget Model undertaken in FY19, 2019, <u>https://obp.umich.edu/wp-content/uploads/pubdata/budget/Budget%20Model%20Review%20abridged</u> <u>FINAL.pdf</u>.

¹⁵ "Responsibility-Centered Management at Indiana University Bloomington: Report of the RCM Review Committee." December 2011. <u>https://obap.indiana.edu/pdfs/2011-rcm-review-report.pdf</u>

¹⁶ "IUB RCM Review Committee Report." May 2017. <u>https://obap.indiana.edu/doc/RCM_IUB_Report2017.pdf</u>.

¹⁷ "RCM at IU Bloomington." 2021. <u>https://obap.indiana.edu/rcm-at-iub/index.html</u>.

CURRENT BUDGET MODEL

UCLA's current budget model represents a hybrid of various budget types noted above, though General Funds are currently allocated on an <u>incremental</u> basis. UCLA's core operating budget includes the following major fund sources: General Funds, Summer Sessions, indirect cost recovery, Professional Degree Supplemental Tuition (PDST), SSGPDPs, and sales and services. Below is a description of each of these fund sources, how they are allocated under the current model, and which budget model type best captures that allocation. Please note that the allocation approach for three of these fund sources (General Funds, Summer Sessions, and indirect cost recovery) will change substantially under the BBM. These and other key features of the BBM are discussed in more detail in the "Bruin Budget Model" section of this report.

General Funds

General Funds, also known as fund 19900, are composed of State appropriations, tuition/fees, and NRST. General Funds make up 65 percent of UCLA's core funds budget. They serve as the primary source of support for instruction and central services on campus. General Funds are currently allocated incrementally. That is to say, each subsidiary unit at UCLA has a base (permanent) General Fund budget determined by a combination of historical decisions and the budget set last year, which is then adjusted by an approximately uniform percentage each new fiscal year, depending on annual changes in GF revenue. Today, each subsidiary unit at UCLA can count on receiving its base GF budget every July 1 without submitting a budget proposal or justification to the Chancellor and EVCP.

General Fund Support for Schools and Divisions

About two-thirds of UCLA's General Funds are allocated to its 16 Schools and Divisions. UCLA's Schools and Divisions receive General Funds in three ways under the current model. The first is through the incremental allocation approach described above: in the years that the campus receives additional tuition/fee revenue and/or State appropriations, those increases are split proportionally across campus units (the same approach applies to *decreases* in these fund sources). Any additional, proportionately-split revenue is usually applied to cost increases related to personnel, such as merits and benefits. The second way units may receive GF support is through requests for additional funds, which may be submitted to the Chancellor and EVCP by Deans and Vice Provosts as part of the annual budget process. In this process, the Chancellor and EVCP evaluate requests and determine how much additional GF support to allocate (from a central fund for campus-wide initiatives) based on campus priorities, units' ability to fund their own requests, and overall availability of funds.

Thirdly, additional 19900 funds may be allocated at the department level when a new faculty member is hired. In this process, the hiring department receives additional permanent funding for the new faculty member's salary. The amount of that supplement depends on the base rate for that faculty's salary, a figure established at the School/Division level in the early 2000s. When a faculty position is vacant, departments have access to their faculty base rates (these funds are restricted for faculty, lecturers, or Teaching Assistant support); when a new faculty member is hired, Academic Planning and Budget (APB) allocates additional permanent GF support to the hiring department to make up the difference between that department's base rate and its approved rate for the new hire. When the faculty member leaves the institution, this incremental amount returns back to the pool of central funds for campus-wide initiatives.

Absent specific budget requests or new hires, each unit's permanent General Fund (GF) budget is based on precedent. This precedent-based approach has contributed, over time, to the disproportionate allocation of GF support relative to enrollment growth at certain Schools. Figure 4, below, illustrates this phenomenon by showing how enrollment growth did not necessarily correlate with GF growth at various Schools over the 15-year period between 2004-05 and 2019-20.

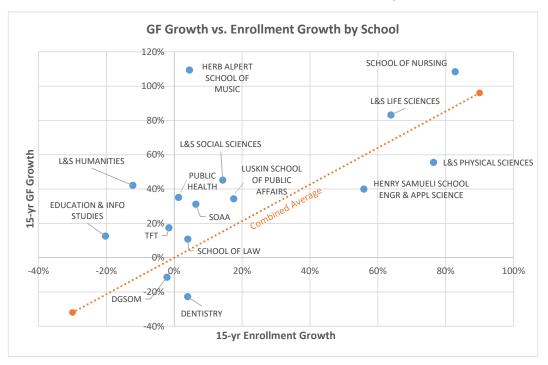


Figure 4: Headcount Enrollment Growth Compared Against General Fund Growth at 15 UCLA Schools/Divisions¹⁸ between 2004-05 and 2019-20 (Adj. for Inflation)

Between 2004-05 and 2019-20, total headcount enrollments¹⁹ in the Division of Social Sciences and the Henry Samueli School of Engineering and Applied Science increased by 14 percent and 56 percent, respectively (see the horizontal axis of Figure 4). At the same time, GF support grew by nearly the same proportion at both – by 45 percent for Social Sciences and by 40 percent for Engineering and Applied Science (see the vertical axis of Figure 4). On a per-student basis, this disparity becomes starker: General Funds per student increased by 27 percent for Social Sciences and *decreased* by 10 percent for the School of Engineering and Applied Science over the 15-year period between 2004-05 and 2019-20. GF growth for the School of Engineering and Applied Science, in other words, has not kept pace with its enrollment growth; in fact, on a per-student basis, GF support for this School has shrunk over time. Similarly, enrollments in Public Health and Physical Sciences increased by 1 percent and 76 percent, respectively, between 2004-05 and 2019-20. Even so, General Fund support grew by 35 percent for Public Health and 56 percent for Physical Sciences over the same time period. On a per-student basis,

¹⁸ UCLA has 16 Schools and Divisions in total. Figures 4, 5, and 7 exclude the Anderson School of Business, however, because most of the academic programs in this School are self-supporting. Please also note that the Herb Alpert School of Music was formally established in 2016. The "School of Music" data reported in Figures 4, 5, and 7 prior to that year apply to the three departments that, together, became the Herb Alpert School of Music (Ethnomusicology, Music, and Musicology).

¹⁹ Throughout this report, headcount enrollments include both undergraduate and graduate students and exclude enrollments in self-supporting programs, unless explicitly stated otherwise.

General Funds increased by 33 percent for Public Health and *decreased* by 12 percent for Physical Sciences. See Figure 5 for more details about GF support per student at the School level over time.

School/Division	10-year % change in GF per Student	15-year % change in GF per Student
DENTISTRY	-16%	-26%
L&S PHYSICAL SCIENCES	-7%	-12%
HENRY SAMUELI SCHOOL ENGINEERING & APPLIED SCIENCE	8%	-10%
DAVID GEFFEN SCHOOL OF MEDICINE (DGSOM)	-10%	-9%
SCHOOL OF LAW	22%	7%
L&S LIFE SCIENCES	-6%	12%
SCHOOL OF NURSING	13%	14%
LUSKIN SCHOOL OF PUBLIC AFFAIRS	6%	14%
SCHOOL OF THEATER FILM & TELEVISION (TFT)	12%	19%
SCHOOL OF ARTS AND ARCHITECTURE (SOAA)	14%	23%
L&S SOCIAL SCIENCES	17%	27%
UCLA FIELDING SCHOOL OF PUBLIC HEALTH	31%	33%
EDUCATION & INFORMATION STUDIES	41%	41%
L&S HUMANITIES	62%	62%
HERB ALPERT SCHOOL OF MUSIC	98%	100%

 INTERQUARTILE RANGE
 2004-05
 2009-10
 2019-20

 (75th PCTL - 25th PCTL)
 \$ 8,299
 \$ 9,530
 \$ 14,160

Figure 5 spotlights how the GF-per-student figure at various Schools/Divisions changed over the tenyear period between 2009-10 and 2019-20 and the 15-year period between 2004-05 and 2019-20. Yellow and green figures denote higher relative growth in GF-per-student support over time, whereas orange and red figures denote lower relative growth or decreases in per-student GF support over time. Between 2004-05 and 2019-20, enrollments increased by 1 percent in Public Health and by 4 percent in the School of Music. They decreased by 20 percent in Education & Information Studies and by 12 percent in Humanities. Over the same time period, the GF-per-student figures for Public Health, Music, Education & Information Studies, and Humanities all grew by between 33 and 100 percent. By contrast, GF-per-student figures *decreased* for Dentistry, Physical Sciences, and the School of Engineering and Applied Science, all of which experienced enrollment growth during this time period (by 4, 76, and 56 percent, respectively). In the cases of Medicine, Law, and Public Affairs, changes in enrollment since 2004-05 (of -2, +4, and +18 percent, respectively) correspond somewhat with associated changes in GFper-student (of -9, +7, and +14 percent, respectively).

The last row of Figure 5 shows the interquartile range (IQR) of the GF-per-student levels across the Schools/Divisions for fiscal years 2004-05, 2009-10, and 2019-20. An IQR measures a dataset's variability; it subtracts the first quartile (the 25th percentile) of a set of values from the third quartile (the 75th percentile) to identify how spread apart a dataset's "typical" values are from each other. "Typical" values fall within the middle 50 percent of a dataset. Higher IQRs denote greater variation between typical values. Lower IQRs denote a smaller spread between the values in the middle 50 percent of a dataset (e.g., more clustering around the center). As shown in Figure 5, the IQR of the GF-per-student levels between 2004-05 and 2019-20 increased from \$8,300 to \$14,200. Although the "ideal" IQR for this particular dataset is unknown, given that different Schools require different levels of per-student support for myriad reasons, Figure 5 is still instructive in that it shows that the *variability* of UCLA's typical GF-per-student figures has increased over time. That increase in variability is not the result of a particular strategy guided by Schools' specific budgetary needs or enrollment contexts. What has

contributed to that increase, however, is UCLA's incremental budgeting approach, which is – by design – agnostic to enrollment growth.

Enrollment growth is, of course, not the only measurement of a School's need for GF support. Each School/Division has unique mandatory costs, such as supporting a School-specific library. That said, the primary purpose of General Funds is to support the instruction of students, and UCLA's incremental approach for allocating these funds does not appear to precisely reflect that purpose. Instead, the current approach has contributed to a distribution of General Funds across Schools underpinned more by the logic of historical agreements than by instructional need. Regardless of whether student enrollment is the most appropriate lens through which to assess the efficiency of resource allocation, UCLA's current General Fund allocation to Schools and Divisions is difficult to justify through that lens. As of now, when a School/Division's enrollment is trending upward, Deans must request additional GF support to accommodate that growth. When such requests are not feasible in a given year, UCLA's current budget model proceeds with an incomplete picture of a School/Division's budgetary needs.

General Fund Support for Central Administrative Units & Academic Support and Research Organizations

About a third of General Funds is allocated to central administrative units and academic support and research organizations at UCLA. Such units include the Police Department, IT Services, Facilities, the Office of the Vice Chancellor (VC) for Research, the Office of Legal Affairs, the Academic Senate, Student Affairs, Enrollment Management, UCLA's Institute of American Cultures, and the Library. General Funds for these units, like for Schools and Divisions, are allocated incrementally.

Central administrative units are unique in that they can supplement their GF budgets by taxing the campus for various services provided. This practice, also known as recharging, entails charging a unit for a service and in return receiving funds (recharge revenue) to cover the cost of providing that service. Recharges apply to basic services, such as IT support or campus police, and to premium services, such as police hired specifically for an event. UCLA has hundreds of individual recharges and service fees. Creating and assessing these recharges requires substantial time and overhead.

Central administrative units may increase service rates in order to accommodate enhanced services or cost increases. These increases, which are not always predictable, can create planning challenges for campus units. In addition, given the magnitude and specificity of UCLA's recharges and various service rates, central administrative units' recharge revenues are not factored into annual budget discussions. In other words, these discussions take place with incomplete information about central administrative units' total operating budgets. By comparison, UCLA Schools and Divisions may only supplement their GF budgets by requesting additional funds from the Chancellor and EVCP during annual budget discussions. As a result of the current recharging landscape at UCLA and the conventions surrounding it, central administrative unit budgets, as approximated by expenditures, grew at nearly the same pace as academic unit budgets between 2009-10 and 2019-20 (by 5.7 and 5.6 percent per year), but they did so *less transparently*.

Of course, expenditure growth at UCLA has been driven by multiple factors, including volume growth in activities (such as research and enrollment), new compliance requirements, and pension and health cost escalation. Even after taking such factors into consideration, academic unit budgets would still, ideally, grow faster than central administrative unit budgets in an academic institution – not at the same rate. The University of Michigan has noted that its discretionary and activity-based budget model, which was first implemented in 1998-99, has equipped the campus to align investments with university priorities,

translating into higher budget allocations to academic units relative to administrative units.²⁰ Figure 6 shows how administrative and academic unit budgets at UCLA, as measured by expenditures, grew between 2009-10 and 2019-20.

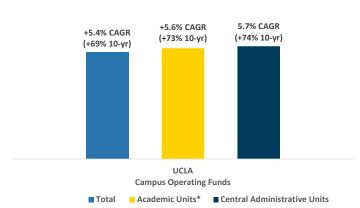


Figure 6: Expenditure Growth on Campus Operating Funds,²¹ including Compound Annual Growth Rates (CAGR), from FY 2009-10 through FY 2019-20

* Academic support and research organizations are included as part of the "Academic Units" expenditure growth noted in Figure 6.

Over the decade between 2009-10 and 2019-20, if 1 percent of savings had been derived from the annual budget growth rate of central administrative units, UCLA would have saved \$74 million. To put this figure in perspective, \$74 million is approximately equivalent to the total salaries and benefits of roughly 370 full-time ladder faculty.²² The BBM, as described in more detail later in this report, is designed to enhance the transparency of central administrative unit budgets and constrain their growth over time.

Summer Sessions

Summer tuition revenue currently covers the operating budget of the administrative group that manages UCLA's Summer Sessions program. This group sets its own operating budget, which includes a tax it must pay to the Chancellor (this tax has not changed in many years). Consultation with campus senior leadership is not required for this budget-setting process. Once the Summer Sessions operating budget is covered, the remainder of the tuition revenue is distributed to the departments that teach Summer Sessions in a manner proportionate to the total summer tuition revenue generated by those departments. Given this approach, the allocation of Summer Sessions revenue falls under the activity-based funding model.

²⁰ Paul Courant and Amy Dittmar, "Report on the State of the Budget Model and Budget System at the University of Michigan (Abridged Version)," Review of the University Budget Model undertaken in FY19, 2019, <u>https://obp.umich.edu/wp-content/uploads/pubdata/budget/Budget%20Model%20Review%20abridged</u> <u>FINAL.pdf</u>.

²¹ Figure 6 denotes growth in expenditures from UCLA's Campus Operating Funds. This pool of funds includes recharges as part of units' total budgets. Campus Operating Funds include nearly every unrestricted fund source for the campus.

²² Based upon the salary scale for the Professor III position in 2019-20 (\$130,000), and assuming benefit costs equivalent to 40% of salary.

Indirect Cost Recovery (ICR)

Direct and indirect costs, taken together, represent the true costs of conducting research at universities. Direct costs associated with research include salary support for researchers and lab personnel, laboratory supplies or research equipment, and travel for conducting the research or disseminating its results. Indirect costs associated with research include the maintenance of labs, utilities (e.g., light and heat), telecommunications, and the disposal of hazardous waste.²³ The terms "Facilities and Administrative (F&A)," "overhead," and "research operating costs" are often used interchangeably with "indirect costs." Generally, the sponsoring agency reimburses UC for the share of the indirect costs that are attributable to the research project. (Federal funding dominates UC's research portfolio.)

In order to "recover" the indirect costs associated with a given research project, an indirect cost rate is applied to the project's direct research costs. Each UC campus, in coordination with UCOP, develops and negotiates an indirect cost rate agreement with the U.S. Department of Health and Human Services. In the lead-up to this negotiation, each campus submits a proposal that calculates its total research costs (direct and indirect) in a given year. Those costs are then compared against the total amount of all direct costs of research supported during the same year to arrive at a proposed ICR rate for that campus. This proposal is reviewed by the federal government and negotiated to a final campus rate. This final rate is used to calculate the indirect costs of all externally-funded research projects on that campus, with a few exceptions. Unless limited by statute, regulation, or other agency rule, the final rate applies to all of the campus's new grants and contracts for the following three to five years, until the next indirect cost rate negotiation.²⁴

Approximately \$34 million of UCLA's ICR funds are allocated to support 19900 expenses, the bulk of which pertain to instruction and central services. Of the remaining amount, approximately 50 percent is distributed to the Deans, 40 percent is retained by the Chancellor, and 10 percent is allocated to the Vice Chancellor for Research. Since the share of UCLA's total ICR funds that goes to Schools and Divisions is based on the ICR they have generated through research *activities*, this type of funding allocation qualifies as activity-based.

Professional Degree Supplemental Tuition and SSGPDPs

Professional Degree Supplemental Tuition (PDST) is assessed to students enrolled in certain Statesupported graduate professional degree programs. As the name suggests, PDST is an incremental figure assessed over and above students' base tuition/fees and, if applicable, NRST. State-supported graduate professional degree programs typically propose to assess or adjust this supplemental tuition when State funding and/or base tuition/fees are insufficient to maintain program quality and accessibility. Feesetting procedures and expectations for PDST revenue-use are governed by *Regents Policy 3103: Policy on Professional Degree Supplemental Tuition.*²⁵ As such, these programs are required to submit

²⁴ UC Office of the President. "Background on Rate Agreements." <u>https://www.ucop.edu/research-policy-analysiscoordination/policies-guidance/indirect-cost-recovery/background-on-rate-agreements.html</u>. To be clear, UCOP seeks to apply UC's federally-negotiated indirect cost rates when working with non-federal sponsors of research as well, because the application of these rates is considered to be a proxy for full-cost recovery at UC. Some nonfederal sponsors, however, have policies that do not allow the application of UC's rates. In such cases, an exception to UC policy may be granted, but only before a grant proposal is submitted.

²³ UC Office of the President. "Recovering the Costs of Research." <u>https://www.ucop.edu/research-policy-analysis-coordination/policies-guidance/indirect-cost-recovery/recovering-the-costs-of-research.html</u>.

²⁵ The PDST policy can be found here: <u>https://regents.universityofcalifornia.edu/governance/policies/3103.html</u>.

proposals to the UC Regents every two-to-five years that justify proposed PDST levels and describe how the resulting PDST revenue would be spent. Graduate degree programs retain PDST fee revenue, which increases as a function of the programs' well-justified and approved PDST levels, along with the number of students enrolled. For this reason, the allocation of PDST revenue represents a hybrid of both zerobased budgeting and activity-based budgeting.

Self-supporting graduate professional degree programs (SSGPDPs) do not receive State appropriations and are meant to subsist entirely on student fees assessed for the individual program, and/or other allowable fund sources. A portion of SSGPDP revenue typically supports Deans' initiatives at the School level as well. Fee-setting procedures and expectations for SSGPDP revenue-use are governed by the UC President's *Self-Supporting Graduate Professional Degree Programs Policy.*²⁶ As such, SSGPDPs submit fee proposals to UCOP each year. SSGPDPs retain the revenue that they generate. They also currently pay for campus services via recharges to central administrative units. These recharges are for services including accounting, human resources, mail, police, IT services, phone services, and legal affairs. In addition, these recharges are generally lower than the specific overhead projected by UCOP for UCLA's SSGPDPs.²⁷ The allocation of SSGPDP revenue aligns somewhat with the RCM approach, since these programs own the responsibility of managing their fees and expenses without support from General Funds. Because SSGPDPs generally do not cover their proportionate share of campus overhead, however, the allocation of these fees does not align entirely with traditional RCM.

Sales and Services

According to UCLA Policy 340,²⁸ sales and service (S&S) activities refer to approved campus business activities that provide goods or services – at a pre-established rate or negotiated terms – to customers both internal and external to UCLA. These activities tend to be clearly distinguishable from research activities. Service centers, business contracts, and central administrative units that recharge for services are examples of "sales and service activities" on campus. The revenue generated by these activities is retained by the revenue-generating unit. For this reason, the allocation of sales and services revenue aligns most closely with a traditional RCM approach.

Many central administrative units charge the campus Central Administrative Fees (CAFs) and Central Administrative Recharges (CARs), per the S&S fee policy. As mentioned, these units are allowed to charge campus units for services such as accounting, human resources, police, mail, IT services, and phone services. Fee increases for these services often help to cover central administrative unit cost increases.

²⁸ The full Sales and Service Activities policy can be found here: <u>http://www.adminpolicies.ucla.edu/APP/Number/340.0</u>.

²⁶ The SSGPDP policy can be found here: <u>https://policy.ucop.edu/doc/2100601/SSGPDP</u>.

²⁷ Per systemwide policy, all new SSGPDPs have three years to fully cover their direct costs plus a campus-specific overhead (or indirect cost) rate. This overhead rate is calculated biennially by UCOP and currently stands at 26 percent of direct costs for UCLA's SSGPDPs. As of now, deans retain the SSGPDP overhead that exceeds base central service recharge expenses, along with any net revenue.

Faculty Funding and Support for Faculty Growth

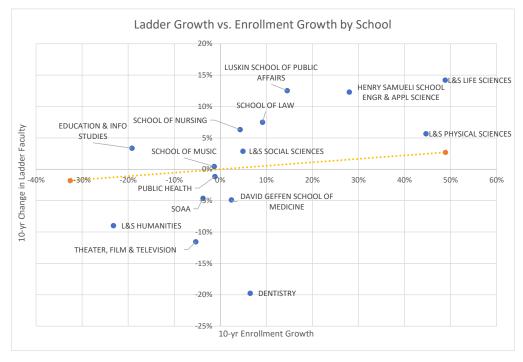
Under the current model, each School's total number of ladder faculty FTE lines²⁹ is a function of historical allocations, as opposed to enrollment. Some adjustments to those historical allocations have been made over time due to Deans' negotiations or the development of new majors, but historical allocations dominate the rationale for the total number of faculty FTE lines under the current model. Costs associated with these positions, as mentioned earlier, are budgeted and funded centrally.

A comparison of headcount enrollment growth at UCLA Schools and Divisions between 2009-10 and 2019-20 against headcount ladder faculty growth over the same time period suggests that this precedent-based approach has contributed to a suboptimal allocation of central funds. In particular, Schools and Divisions with relatively high enrollment growth have not necessarily seen corresponding growth in ladder faculty. For example, Life Sciences headcount enrollments (both undergraduate and graduate, excluding students in self-supporting programs) grew by 49 percent between 2009-10 and 2019-20, but ladder faculty headcounts grew by only 14 percent in the same time period. As a result, the student-to-faculty ratio in Life Sciences has deteriorated from 54.9-to-1 to 71.5-to-1 (a 30 percent increase). Similarly, enrollments in Physical Sciences grew by 43 percent between 2009-10 and 2019-20, while ladder faculty headcounts only grew by 6 percent. For Engineering and Applied Science, enrollments grew by 26 percent and ladder faculty grew by 12 percent.

Figure 7, below, shows that certain Schools – Life Sciences, Physical Sciences, and Engineering and Applied Science in particular – have exhibited enrollment growth without corresponding growth in resources to hire new faculty. Certain Schools, however, such as the School of Art and Architecture and the Herb Alpert School of Music, have seen enrollment and faculty growth rates that nearly align. The School of Art and Architecture's enrollment decreased by 10 percent over this ten-year period, for example, with faculty headcounts decreasing by 5 percent. The School of Music's enrollments decreased by 1 percent over this time period (only six students), with faculty headcounts remaining flat (0 percent growth).

²⁹ Faculty headcount in a School can technically grow without the number of faculty FTE lines growing, since FTE is an expression of workload.





CONTEXT FOR CONSIDERING A BUDGET MODEL CHANGE

Historically, and especially over the past decade, incremental budgeting has worked well for UCLA's General Funds because it has complemented the campus's financial context. In particular, midway through the 2010-2020 decade, UCLA's General Funds had sufficient flexibility (particularly as nonresident revenues grew each year) to support a 10-percent allocation to the Chancellor/EVCP to fund various important commitments. This additional revenue supported strategic investments across the campus through Chancellor/EVCP resources. Throughout that decade, UCLA's General Funds kept pace with inflation despite reductions in State support and only two tuition increases (a 19 percent increase in 2011-12 and a 2.5 percent increase in 2017-18). Factors that contributed to this phenomenon included the following: 1) base tuition had increased eight times leading up to this decade, with increases ranging from \$384 to \$1,796 between 2000-01 and 2010-11; 2) UCLA's nonresident undergraduate headcount enrollment increased by 137 percent between fall 2010 and fall 2020; and 3) UCLA's total undergraduate headcount enrollment grew by 21 percent between fall 2010 and 2020.³¹

Given the General Funds surplus and strong prospects for both resident and nonresident undergraduate enrollment growth over the last decade, UCLA had sufficient central funding to cover annual salaries and

³⁰ The ladder faculty headcounts included in Figure 7 are based on "Ladder and Equivalent Faculty" job codes, which are independent of faculty salary fund-sources. For this reason, the visual includes ladder and equivalent faculty who are supported by both General Fund (GF) and non-GF revenues. A list of the Ladder and Equivalent Faculty job codes included in the display can be found here: <u>https://apb.ucla.edu/file/7a4cbcc2-131f-4477-a8cf-3cc2cb3ecd90</u>. For consistency, this figure also includes SSGPDP enrollments among its student headcounts. ³¹ UCOP. *Fall Enrollment at a Glance* dashboard. <u>https://www.universityofcalifornia.edu/infocenter/fall-enrollment-glance</u>.

benefits for academic and non-academic employees, and to make important new investments. For example, the campus used Undergraduate Academic Initiative Funds (UAIF) to add new College of Letters & Science course selections to accommodate enrollment growth; hired 25 more faculty members in Engineering; increased the permanent budget of Public Affairs by 25 percent to create a new undergraduate major; established a new department and Vice Chancellor position for Equity, Diversity, and Inclusion; and bolstered graduate student financial aid (through fee remissions and block grant awards).

The past decade's success with incremental budgeting was driven by factors that are largely unavailable to UCLA today (e.g., a General Funds surplus, high tuition rate increases, and substantial nonresident undergraduate enrollment growth). As mentioned, UCLA's General Fund growth over the next decade will be constrained by State support unlikely to exceed the rate of inflation, a fixed tuition model, and restrictions on nonresident undergraduate enrollment. California resident undergraduate enrollment growth is a strategic priority for UCLA for many reasons, but it requires investments in other resources, including faculty, staff, and graduate student enrollment and support. If current trends continue undisturbed, UCLA's General Funds are projected to fall short of covering future inflationary cost increases for campus units, let alone personnel costs that typically exceed the rate of inflation and new strategic investments, which include enrollment growth, faculty retention, diversity initiatives, and cyber-security enhancements.

Put simply, UCLA's current budget model sits in tension with its current budget context. Incremental budget models are most effective when key revenue sources are sufficient to maintain operations and support important new projects over time. Going forward, however, UCLA's increases in State appropriations and base tuition are projected to be insufficient to cover both mandatory costs and strategic investments. Recent funding agreements at UCLA include harnessing General Funds to support new undergraduate majors in Public Health, Public Affairs, and Education & Information Studies; to meet increasing demand for Engineering courses; and to invest sufficiently in the campus's faculty diversity initiative. Absent growth in non-traditional revenue sources, which the current budget model does not incentivize, UCLA will be less equipped to support commitments like these in the future. By providing transparent incentives for units to: 1) pursue non-traditional revenue growth opportunities, 2) find efficiencies, and 3) exhibit strong expense management, the Bruin Budget Model, described in more detail below, is designed specifically to help the campus adapt to its modern budgetary challenges.

BRUIN BUDGET MODEL (BBM)

Since fall 2017, APB has conducted extensive research, engaged in consultations with external and internal stakeholders, and engaged with over 2,000 UCLA colleagues to develop and refine the Bruin Budget Model.³² The BBM represents a hybrid of historical/incremental, priorities-based, and activity-based budgeting. As noted earlier in this report, incremental budgeting is more centralized, and activities-based budgeting is more decentralized, with priorities-based budgeting falling in the middle.

The BBM deviates from the current budget model in various ways. First, the BBM modifies how the following fund types are allocated: 1) General Funds (also known as "major core funds"); 2) Summer Sessions tuition; and 3) Indirect Cost Recovery. Second, the new model adds transparency to the sources and uses of the campus's central fund for strategic priorities. Third, the BBM changes how central administrative units are funded by replacing UCLA's complex and expensive internal recharge system and, in turn, curbing growth rates in central administrative unit budgets. To be clear, the BBM does not

³² See Appendix 1 for more details on the BBM's design and refinement process.

deviate from the current model with regard to the allocation of registration fees, application fees, the Student Services Fee, financial aid, interest revenue, investment income, or one-time funds.

The BBM's rollout will be guided by the following principle: when the budget model changes, each unit's permanent budget³³ must be held harmless. All subsidiary units, in other words, will enter the BBM era on July 1, 2022 with the same permanent budgets that they otherwise would have had if the current budget model remained in place on that date.³⁴ The characteristics of the BBM, therefore, should be viewed in light of their *future impacts*, as opposed to any immediate windfalls or holes they would create on day one.

Centralized Components of the BBM

As a technical matter, State appropriations (one component of General Funds) and investment income will flow to the office of the Chancellor and Executive Vice Chancellor/Provost (EVCP) under the BBM (as they do under the current model), helping to create a central investment fund (referred to as the "central fund" or "central funding" throughout this report). This fund will also be supported by two types of taxes, discussed in more detail below. The Chancellor's and EVCP's task will be to determine allocations of this central fund that would most effectively advance UCLA's priorities with the resources available. This central fund will be used to: 1) provide a "General Fund Supplement" to each School and Division; 2) continue supporting "non-School units," such as central administrative units and academic support and research organizations; and 3) fulfill various commitments made by the Chancellor and EVCP.

Activity-Based Components of the BBM

An important feature of the BBM's design is its activity-based approach for allocating the following fund types to Schools and Divisions: base tuition, NRST, ICR, and Summer Sessions tuition. To be clear, revenues from PDST, SSGPDPs, gifts and endowments, patent income, and sales and services are already directly recorded by the earning unit under the current model. The allocation of these fund sources will not change under the BBM. Each of the funds noted above are generated through various "activities." For this reason, they constitute the *activity-based components* of the BBM.

Under the BBM, a School's permanent General Fund budget will be bifurcated into two parts – revenue from a General Fund Supplement, and revenue from "activities" (e.g., enrollments and teaching). Each School/Division's ratio of General Fund Supplement to activity-based revenue will differ, as each School/Division has a different cost structure. State appropriations will serve as the source of the General Fund Supplement. (More information about the General Fund Supplement can be found below.) By contrast, base tuition and NRST will serve as the sources of the activity-based component of a School/Division's permanent General Fund budget. Base tuition and NRST revenues will flow to each School/Division according to the following formulas.

For both undergraduate major headcount and undergraduate credit hours taught, a three-year average, weighted for the most recent year, will be calculated. Then, funding for the undergraduate major enrollment figure will be weighted at 20 percent, and funding for the undergraduate student credit hours (SCH) taught will be weighted at 80 percent. (This weighting is designed to ensure that more

 ³³ A unit's permanent budget ensures that there is enough annual funding to support approved staffing rosters.
 Under the BBM, a unit's permanent budget will continue to be utilized to manage and balance staffing rosters.
 ³⁴ Of course, this particular budget baseline might not be ideal for units whose current situation is unfavorable. In certain outlier cases, APB may step in to make fair adjustments. That said, selecting a budget baseline that would satisfy every unit would be virtually impossible.

funding will be allocated to Schools with higher expenditures for undergraduate teaching.) These funding figures will be calculated centrally and will include both base tuition and NRST collected from undergraduate students. That is to say, all tuition and NRST will be pooled together centrally, and a per-credit-hour revenue figure will be generated by dividing that total tuition/NRST figure by total student-credit-hours. That per-credit-hour figure will be distributed using the 80/20 split among Schools that provided the instruction. This method will be applied consistently from year to year; the per-credit-hour value will change only when tuition or NRST rates are modified. New undergraduate degree programs, if approved by the Academic Senate and the EVCP, will be funded using activity-based, per-credit-hour funding. In these cases, central funds will be provided, as needed, on a temporary basis to support the new program's startup costs, until the three-year average can fully fund the new program.

As a hypothetical example of how tuition/NRST revenue would flow to Schools/Divisions under the BBM, consider an undergraduate student who takes a full course load in a given academic year (45 credits). This student elects to take 60 percent of her credits (27) in the School of her major and 40 percent of her credits (18) in a different School. In that same year, APB determines that, net of financial aid, one undergraduate credit hour translates to \$315 of tuition/NRST revenue. A 25 percent tax would be applied to that \$315 figure, yielding a revised per-credit figure of roughly \$236. The School of the student's major would receive revenue for 20 percent (or 9) of her 45 total credits, equaling \$2,126. Revenue for the remaining 80 percent of this student's total credits (36 credits, or \$8,505) would then flow proportionately to the Schools of instruction. In this case, 60 percent of this revenue (\$5,103) would flow to the School of this student's major, and 40 percent (\$3,402) would flow to the non-major School, totaling \$7,229 for the major School and \$3,402 for the non-major School. Figure 8, below, provides a visual representation of this process.

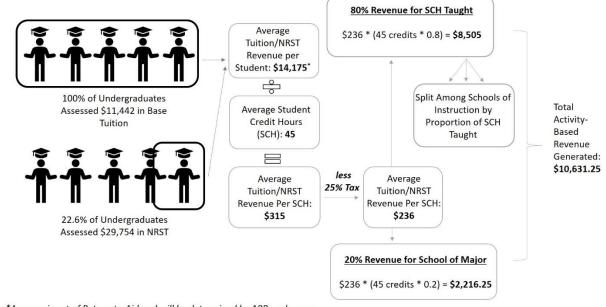


Figure 8: Hypothetical Flow of Tuition/NRST Revenue from One Undergraduate under the BBM

*Average is net of Return-to-Aid and will be determined by APB each year.

For undergraduate teaching, the goal of the BBM is to properly align funding with resource needs, not to increase undergraduate enrollment or incentivize competition for undergraduates. Decisions to increase

undergraduate enrollment require EVCP approval and reflect multiple considerations, including State funding designated to support undergraduate growth in a given year. The BBM's design assumes that academic programs at UCLA will continue to make decisions based on academic quality and student outcomes. To ensure that the BBM's implementation does not run counter to UCLA's values, the EVCP will monitor many of its effects, including shifts in undergraduate credit hours. These shifts are expected to be strategic and reasonable. For more information about BBM outcomes that will be monitored by central leadership post-implementation, see the "BBM Oversight and Assessment Plan" section of this report.

Base tuition and NRST revenue from graduate students will be allocated based on two-year enrollment averages. Graduate student tuition/NRST, less the corresponding return-to-aid component (for graduate academic vs. graduate professional students), will be allocated to Schools/Divisions for each student enrolled in their programs.

ICR and Summer Sessions

The BBM will allocate a higher percentage of gross ICR to earning units relative to the current model. To be consistent with the principle of holding units harmless for a budget model change, there will be a grandfathered amount of ICR funds that will be retained to support central infrastructure. Growth in ICR funds above what is currently generated, however, will be allocated as follows: 90 percent will be allocated to the earning unit and 10 percent will be allocated to the Vice Chancellor for Research to support campus-wide research infrastructure.

Lastly, the BBM will simplify and add transparency to the distribution of Summer Sessions revenues. The total fees collected will be sent to the earning department. Net of taxes (see the "Taxes" section below for more details), this practice will result in a roughly 10-percent increase in Summer Sessions revenues to Schools/Divisions, relative to the prior year. The costs associated with Summer Sessions administration will be covered through an allocated baseline budget that will now be reviewed during the annual budget process.

General Fund Supplement

The BBM was designed so that units would still need a General Fund Supplement (GFS) in addition to their activity-based revenue each year. This structure stands in contrast to a strict RCM approach, which would treat each School/Division as a "tub on its own bottom." The GFS will give the Provost leverage in determining unit budgets beyond the net of activity-based revenues and costs. On July 1, 2022, the General Fund Supplement will be used to ensure that every School's permanent budget matches what it would have been under the current budget model. To reiterate, the calculation of each School's GFS is only derived at the School level, not the department level.

The GFS is designed to be stable and predictable. The amount provided in the first year will likely only be adjusted for inflation in future years. That said, the GFS will be reviewed as part of the annual budget process, meaning it will not just serve the purpose of providing support for inflationary increases such as faculty merits, but it will also provide units with various one-time, priorities-based adjustments. These one-time adjustments will allow the Chancellor and EVCP to make investments and maintain support for units with funding needs that might exceed the revenues flowing to them from activities and their base GFS. Any one-time, incremental, priorities-based allocation to the GFS will align with a letter released by the EVCP each budget cycle stating the campus's priorities for the year ahead. Historically, these priorities have included teaching to support enrollment growth, student success programs and financial aid, diversity initiatives, deferred maintenance, and research. Strategic plans at the campus and organizational levels will help the EVCP to identify campus priorities and resulting investments.

Putting General Fund Budgets Together

In UCLA's ledger, each academic department currently has permanent General Fund budgets housed within their own accounts. Taken together, these department budgets sum to the associated School's permanent General Fund budget. Today, General Funds flow directly to department accounts in their permanent budget amounts. This convention will not change under the BBM.

On day one of the BBM, each School/Division will continue to receive its July 1 permanent GF budget, allocated through the ledger to department accounts in amounts equal to what would have been provided under the current budget model. When the BBM is implemented, each School/Division's permanent GF budget total will not change; it will just be bifurcated into two parts: an activity-based portion and a General Fund Supplement. In the first year, APB will re-express each School's historical GF permanent budget total by calculating, first, how much of that total comes from its activities. Credit hour formulas based on 9-quarter (3-year) averages (described above) will inform this calculation. The remainder (the historical base minus the activity portion) will constitute the School's General Fund Supplement. That supplement figure will remain stable going forward. That is to say, every year after year-one, each School/Division will be guaranteed its General Fund Supplement from year-one, in addition to inflationary adjustments provided by the central fund, or any commitments approved by the EVCP in the annual budget process.

APB will recalculate the activity portion of a School/Division's General Fund permanent budget every year. This portion of a School/Division's permanent GF budget, therefore, will be subject to change from year to year. To be clear, this GF permanent budget calculation will apply only to School/Division-level budgets. The BBM is not designed to calculate the activity and GFS portion of each department's GF permanent budget.

For all subsequent years in the BBM, as is done under the current model, Schools/Divisions can expect to continue to receive inflation-based adjustments to their General Fund Supplement, along with central funds for faculty merit increases. Furthermore, if the activity-based revenues calculated at the School/Division-level resulted in incremental funding for the School/Division relative to year-one, APB would transfer that increment to the School/Division's Dean. It is expected that the Dean would distribute this increment to departments based on priorities aligned with School/Division-level strategic plans. When the BBM is implemented, APB will provide dashboards and metrics that will help support the Dean's allocation decision-making regarding incremental activity-based funding. If an academic department had pressing needs that could not be fulfilled by its permanent GF budget or by the activitybased formulas of the BBM, it could make a request to the EVCP, through the Dean, for additional funds during the annual budget process.

The annual budget process under the BBM will resemble the annual budget process under the current model in many ways. Under the BBM, any School, College Division, academic support and research organization, or central administrative unit could submit requests to the EVCP for additional GFS support or other funding commitments. During the annual budget process, the Chancellor and EVCP will consider these requests and make determinations about how to allocate additional central funding (when available) so as to most effectively advance UCLA's priorities. Rich quantitative and qualitative data, including information about salary pressures and national trends in various fields, will also inform these annual decisions.

Taxes

Under the BBM, Schools/Divisions will be assessed a 25 percent tax on revenue from tuition, indirect cost recovery, and Summer Sessions tuition to fund central services. The resulting tax revenue replaces

the amounts taken from these fund sources to support central services under the current model. PDST revenue will not be taxed. The BBM will also include a second "expenditure" tax, which will replace the UCOP assessment,³⁵ along with various recharges associated with campus-wide services. (Recharging is UCLA's current approach for passing on costs to campus units for central services rendered.) Instead of taxing units for campus-good services, central administrative units will receive funding from this tax to offset the loss of these recharges. This tax, which will apply to expenditures from sales and services funds and to total SSGPDP expenditures (including transfers) net of financial aid, will not exceed 5 percent and will cover the UCOP assessment, various recharges, and campus-good services (mostly CAFs). The combination of these taxes will fully support central unit budgets while reducing reliance on General Funds. Part of the motivation for creating this particular tax system was not only to fund central services in a simpler, more transparent way, but also to curb growth-rates of non-academic budgets. The target rate for this second tax, which is meant to be reached within five years of implementation, is 5 percent. Discussions about this tax rate's glidepath to 5 percent will take place over the next several months.

Several elements of the BBM expenditure tax are not yet finalized. Central administrative units are still in the process of creating Service Level Agreements describing what will be covered by this tax, for example. The application of the BBM's tax model to UC Health is also still under discussion. Lastly, although recharges on basic campus goods will be replaced, recharges on premium services will continue, and APB is currently working with central administrative units to identify a list of which services will be covered by the expenditure tax and which will remain premium recharges.

Also included in the expenditure tax will be research grants that earn ICR of at least 25 percent. The ICR returned to Schools/Divisions will be the source of this grant expenditure tax. As mentioned, the BBM will allocate a higher percentage of any incremental gross ICR to Schools/Divisions relative to the current model. APB projects that, even after paying this tax, earning units will still receive approximately 30 percent higher net returns from their ICR generated (relative to current levels) after BBM implementation. To be clear, the BBM will not include a tax on research expenditures for grants that earn ICR below 25 percent. UCLA values research from across disciplines, and the BBM does not seek to curb or disincentivize research conducted in areas that tend to collect relatively low ICR revenue.

One of the principles underpinning the BBM tax system is that tax rates should be held stable over time. As mentioned, expenditure tax rates will initially be grandfathered in at the current recharge and UCOP assessment levels; within five years of implementation, this expenditure tax rate will become uniform across the campus and increase to 5 percent. By contrast, the tax on tuition, ICR, and Summer Sessions tuition revenue will remain stable at 25 percent. If the BBM tax rates need to be adjusted beyond these rates sometime in the future, this determination would be made after extensive consultation with campus stakeholders and would require approval by the EVCP and VC/CFO.

Faculty Funding and Support for Faculty Growth

The budgets for faculty positions will be managed by the Deans under the BBM. Faculty funding can be seen as falling into three categories: 1) funding needed for faculty merits, range adjustments, and promotions; 2) funding needed to replace faculty after attrition or migration; and 3) funding needed to hire new faculty. Under the current model, all three of these categories are budgeted and funded centrally. Under the BBM, Schools will use annual growth in their General Fund Supplement and activity-

³⁵ UCOP functions are funded through a broad-based assessment on the full spectrum of University fund sources, nearly 90 percent of which are non-State funds. From 2017-18 through 2019-20, per the recommendation of the California State Auditor in a 2017 report, UCOP functions were instead supported by State General Funds.

based revenue to fund the first category. For the second category, a School/Division's savings from faculty attrition or migration will be used to hire replacement faculty. For the third category, a School/Division's activity-based revenue, or additional revenue granted through requests submitted during the annual budget process, will support the addition of a new faculty member. These conventions do not differ dramatically from the current model; the key difference is that faculty funding will be budgeted and managed locally instead of centrally under the BBM. One anticipated benefit of this approach is that it will give Deans the flexibility to create new faculty FTE lines when department enrollments and/or other activities increase. This level of flexibility is not granted under the current model.

Interdisciplinary Work

Collaboration across the campus will remain a priority under the BBM. In fact, one metric of success for the BBM will be total campus investment in interdisciplinary work. Existing permanent and temporary budgets for interdisciplinary units and projects will continue with no impact under the new model. The BBM might encourage interdisciplinary work through shared activity-based revenue or new investments from the central fund and/or from the Deans. Other incentives for interdisciplinary work will be a topic for discussion over the next several months. APB is currently collecting internal and external ideas about how the BBM might be modified to better incentivize collaborative work. As an example, based on feedback already provided, APB is looking into how the BBM might give credit to home departments when a faculty member teaches in a different School or Division. Similarly, APB is looking into how to best to support cross-School enrollments of graduate students. (Revenue from cross-School enrollments of undergraduates will be split proportionately across the associated Schools of instruction.)

BBM Summary

The BBM, as designed, represents an amalgam of UCLA's current/incremental model, priorities-based budgeting, and activities-based budgeting. Although it is only partially activity-based, it aims to better align future years' incremental allocations with activity trends, such as increases in undergraduate student credit hours taught, new graduate programs and enrollments, research grants, and indirect cost recovery. The new model, when implemented, will retain UCLA's current/incremental model insofar as the permanent General Fund budgets of Schools and Divisions under the current model will serve as the basis for determining their General Fund Supplement under the BBM. Each year, this supplement will be adjusted for inflation. The BBM will reflect priorities-based budgeting insofar as the Chancellor and EVCP will determine which campus priorities to advance through various central fund allocations during the annual budget process. Lastly, the BBM represents activity-based budgeting insofar as units will receive additional resources – including base tuition/NRST, ICR, and Summer Sessions tuition – as they increase the activities associated with those resources.

Budget models are important, but they are only one component of broader budget systems. A budget system represents the partnership between a budget model and its discretionary elements (including the authority and values of the relevant decision-makers). Budget models are deployed by leadership to advance the missions of the university. In the case of the BBM, although some resources will flow toward units that increase various activities, the Chancellor and the EVCP will also retain considerable decision-making authority, particularly with regard to the allocation of flexible resources. In addition, the BBM will be subject to a comprehensive review every four years alongside the decision-making conventions that, taken together, will characterize UCLA's broader budget system. This practice of reliable reviews will help to determine whether the technical components of the BBM, and/or the decision-making system that allocates resources across campus, should be modified or improved over time.

BBM Oversight and Assessment Plan

APB is currently compiling an oversight and assessment plan to assist the campus in determining whether the BBM generates better outcomes than those of the current budget model. In May 2021, the Council on Planning and Budget (CPB) issued a report of recommendations for this oversight and assessment plan. Per the report, "the BBM Oversight and Assessment Plan must include year-over-year data for up to ten years, clear definitions of each metric of interest, and a clear date when the metric first arose."³⁶ The CPB recommended that APB develop various dashboards in partnership with other entities on campus that would have access to the relevant data.³⁷ As part of the work of developing this oversight and assessment plan, APB is creating and refining dashboards in response to these recommendations. Examples of two such dashboards can be found in Appendix 2. These dashboards will offer insight into the effects of the BBM on, for example, the wellbeing of undergraduate and graduate programs, UCLA's rankings, and the nature and volume of UCLA's research.

Concerns and Areas for Possible Reform

Members of the CPB, Academic Senate, and other stakeholders have identified a number of concerns about the BBM. These reasonable concerns pertain mostly to the potential consequences of the BBM's incentives for units to manage resources efficiently and entrepreneurially expand available resources. They also speak to the importance of maintaining strong decision-making authority at the center. If the new model is found to have created incentives that are inconsistent with university values or best practices in higher education, then the central administration will be well-positioned to take swift action under the BBM as designed.

One concern stemming from the activity-based components of the BBM is that units may attempt to attract students to both State-supported and self-supporting programs with an eye toward maximizing revenue, as opposed to maintaining academic rigor and quality. In particular, units may try to attract students through grade inflation, easier courses, decreasing the number of required courses in a major, or offering local versions of courses commonly provided elsewhere (e.g., calculus for the social sciences). The budget model cannot fix this problem by formula. This problem would need to be addressed through policies and practices aimed at safeguarding academic quality and enforced by those who share in UCLA's governance. Such policies and practices already typify those of UCLA's Academic Senate and other regulatory bodies.

On a similar note, campus stakeholders have raised the concern that proposals for new SSGPDPs might proliferate with the implementation of the new budget model. Some of these self-supporting programs

³⁶ Council on Planning and Budget. "Bruin Budget Model Oversight and Assessment Plan Recommendations from the Council on Planning and Budget." May 2021.

https://dms.senate.ucla.edu/issues/issue/?4458.CPBs.Budget.Model.Working.Group.Recommendations.Bruin.Budget.Model.Oversight.and.Assessment.Plan.

³⁷ Dashboards recommended by the CPB included the following: annual dollars generated by non-traditional areas on campus, such as SSGPDPs, Summer Sessions, ICR, and gifts and endowments; annual dollars supplied to the central fund by fund source; annual dollars and percent of central fund allocated to the General Fund Supplement; the annual ratio of internal recharges to central dollars spent; annual dollars spent on central services by all academic and central administrative units; global and national rankings; undergraduate student performance, academic opportunities, and experience dashboards; graduate student performance and experience dashboards; annual direct costs going to research teams with contracts/grants and indirect cost recovery revenue; and annual revenue from patents, licenses, commissions, and royalties.

might not flourish, however, and units may be tempted to lower admissions standards to fill seats. To be clear, the instructional quality, admissions practices, and performance standards of SSGPDPs are all governed by UCLA's Academic Senate. For this reason, this concern could not be fixed by the parameters of the budget model either. This problem would be addressed by the substantial regulation of SSGPDPs already in place at UCLA. For more information about the guardrails in place to ensure that SSGPDPs meet the same standards of academic rigor and quality as State-supported programs, along with the practices on campus that ensure SSGPDP students are adequately supported, please see APB's September 2021 report, *Self-Supporting Graduate Professional Degree Program Growth at UCLA*.

Given the importance of managing resources efficiently under the BBM, another concern is that Deans might have an incentive to economize on faculty salaries by offering lower increases in merit reviews, making less aggressive retention offers, and showing bias toward hiring lower-salaried faculty. Similarly, units might not fill a faculty FTE line and replace a ladder faculty member with an adjunct professor if it helps the bottom line. The new budget model may also pull faculty attention away from research, university service, undergraduate teaching, and collaborative work by incentivizing faculty to assist more in SSGPDPs and to monetize intellectual property. These concerns remain open issues, and APB is committed to researching best practices to address them. In the meantime, the budget system surrounding the BBM will be characterized by the close monitoring of various trends, including ladder faculty growth relative to enrollment growth, along with central discretion to implement and regulate the BBM, as well as to allocate flexible resources strategically. In addition, the BBM's Oversight and Assessment Plan is meant to monitor trends in research and creative activities, undergraduate experiences.

PATH FORWARD

UCLA's distinctive model of shared governance dates back to UC's initial charter in 1868. Today's practice is one of strong collaboration and consultation on all important matters. APB has worked closely with the Senate's Council on Planning and Budget to develop the BBM over the course of four years. This effort has met the appropriately high bar of consultation expected by UCLA. Best efforts have been made to design a model that will be a valuable tool to help ensure, through improved financial resiliency, that UCLA's academic and research programs will thrive in its second century. That said, the campus needs to move forward together for a new budget model to be successful.

APB anticipates a lengthy adjustment period for senior budget staff to learn and acclimate to the new model. For this reason, APB plans to offer consulting, training, and assistance to Schools, Divisions, and administrative areas. Additionally, UCLA's VC/CFO has made a commitment to offer more opportunities for faculty and staff to engage in discussion and dialogue about the new model. APB will be seeking input from Deans and Senate colleagues about best approaches for facilitating such dialogue through the end of this fiscal year. Given the limitations of all new budget models, the BBM is certainly not perfect as designed. For this reason, APB is committed to the continuous improvement of the model through stakeholder engagement as we move forward.

Appendix 1: The BBM Design Process

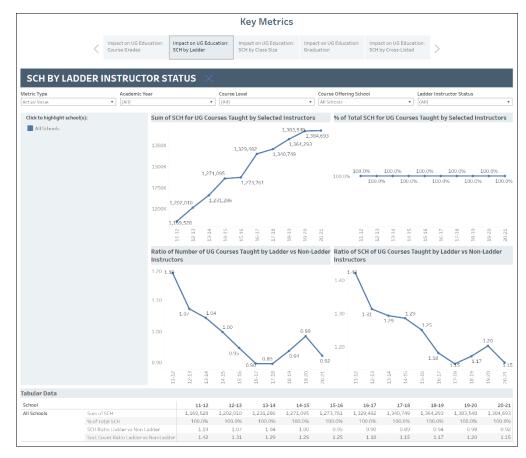
APB was charged in fall 2017 to begin work on a new budget model given UCLA's suboptimal General Funds revenue outlook. An internal committee was formed comprised of four faculty members, including a former Academic Senate chair and two members of CPB, three assistant deans, and a representative from the central administration. The committee's early work was informed by consultations with several peer institutions and eventually deeper engagement with the University of Michigan, which adopted a discretionary, activity-based budget model in 1998-99 that has undergone multiple revisions and upgrades since that time.

The 2017-18 work was presented and discussed at a leadership retreat in February 2018 with 70 participants (Deans, Assistant Deans, Vice Provosts, Vice Chancellors, and Academic Senate members). Since then, APB has participated in more than 200 meetings, consulting on the new model with ~2,000 participants. Further consultation is ongoing with plans for a stakeholder retreat at the end of 2021.

The BBM was developed and refined over the course of multiple meetings with Senate committees, including the CPB, Undergraduate Council, Executive Board, College Faculty Executive Committee, Committee on Interdisciplinary Activities, and Legislative Assembly. APB worked closely over two years with the Senate CPB subcommittees on the details of the proposed model. It also engaged in other consultative activities, which included:

- consulting with William G. Ouchi, UCLA Anderson Distinguished Professor of Management and Organizations, who has written extensively on decentralization in educational institutions;
- running Senate-hosted sessions open to all faculty on important budget matters in 2018, 2019, and 2020;
- conducting spring 2020 budget model sessions with department chairs, joined by UCLA's EVCP, VC/CFO and VC APO;
- meeting multiple times with Institute of American Cultures directors, International Institute directors, and Organized Research Unit directors; and
- hosting APB staff 1:1 sessions with Assistant Deans and administrative CFOs/Directors

Earlier versions of the BBM were modified to accommodate feedback provided during these consultations. For example, stakeholders determined that SSGPDP revenue should be classified in the lower, 5-percent tax bracket in order to maximize departments' financial benefits associated with SSGPDPs. APB is also looking at options to give departments credit for faculty teaching outside of their home department as a result of feedback provided.



Appendix 2: Example BBM Metrics Dashboards Developed by APB

