



Robert Horwitz
Telephone: (510) 987-0887
Email: robert.horwitz@ucop.edu

Chair of the Assembly of the Academic Senate
Faculty Representative to the Regents
University of California
1111 Franklin Street, 12th Floor
Oakland, California 94607-5200

August 11, 2022

MICHAEL DRAKE, PRESIDENT
UNIVERSITY OF CALIFORNIA

Re: Report and Recommendations of the UCPB Rebenching Workgroup

Dear President Drake:

At its July 2022 meeting, the Academic Council endorsed the attached report from the University Committee on Planning and Budget (UCPB). The report includes recommendations for the next phase of budget Rebenching that Council believes will enhance the equitable flow of state general funds to campuses.

As you know, the University introduced Rebenching in 2012-13 to rebalance the per-student allocation of state general funds across campuses by funding all UC students of a given type equally regardless of campus. The Senate continues to support this overarching goal and the original principles behind Rebenching, which include 1) supporting a common standard of excellence across UC campuses; 2) allocating state funds based on student enrollment with limited “set-asides” to address specific systemwide priorities; 3) recognizing the important role of graduate education in the UC mission; and 4) bringing underfunded campuses to the level of the most well-funded campuses using only increases in state funding.

Council joins UCPB in proposing two additional principles to guide further consideration of the Rebenching formulas. They are to 1) maintain systemwide coordination to prevent unilateral campus enrollment and programmatic decisions from negatively affecting funding allocations to other campuses; and 2) account for asymmetries in funding by recognizing that equal treatment does not always result in equal opportunity. We also join UCPB in recommending the following actions to the University administration that we believe will support a more equitable Rebenching framework.

1. Add a new Rebenching weight category (1.5) for academic master’s students in state-supported academic programs.
2. Review all set-asides comprehensively and regularly.
3. Use targeted, time-limited set-asides to address campus asymmetries, including those arising from unique student demographic and capital needs that require additional support in the near term.
4. Review funding mechanisms to support medical school campuses and UC Health.

5. Maintain the aspirational target of 12% PhD enrollment on all campuses, but provide aspirational funding in smaller increments as a time limited set-aside.
6. Maintain a 95% guardrail” on Rebenching by using new state funds to ensure no campus falls below 95% of the average systemwide per-student funding as calculated on an unweighted basis.

Please do not hesitate to contact me if you have additional questions.

Sincerely,



Robert Horwitz, Chair
Academic Council

Cc: Provost Brown
CFO Brostrom
Associate Vice President Alcocer
Academic Council
Chief of Staff Kao
Chief Policy Advisor McAuliffe
Senate Directors
Executive Director Lin

Encl.

REPORT OF THE UCPB REBENCHING WORKGROUP

August 8, 2022

INTRODUCTION:

The University of California derives its core operating funds from several sources. The two largest are student tuition and fees, which are collected by the campuses, and the annual State General Funds appropriation by the state legislature. Additional revenue streams are also generated by the individual campuses including non-resident supplemental tuition (NRST), earnings by auxiliary enterprises (e.g., housing, parking, self-supporting programs, etc.) and university extension, philanthropy, and extramural research support.

In 2008-2009, the University began to develop and implement a new comprehensive model for how revenue from these various sources would be allocated across the various campuses within the system. The model contains two major components, “Funding Streams” and “Rebenching”. The Funding Streams component was first implemented in FY2011-2012 and applies to tuition and fees as well as all other campus-generated sources of revenue. Under this new model, each campus retains the revenue it generates from these sources. In addition to aligning revenue with workload, this practice is intended to encourage the campuses to be entrepreneurial and optimize revenue. The Rebenching component governs the distribution of State General Funds. Rebenching allocates these funds to the campuses based primarily on student enrollment.

Rebenching was designed to be a transparent, formulaic model that would address funding inequities that had evolved over time for various reasons including differences stemming from the availability of state support at the different periods during which the various campuses experienced their major development. The Rebenching model endeavored to equalize state funding based on campus enrollment numbers, with undergraduate students, graduate students and professional students assigned different weights in the formula based primarily on the different costs of teaching the different groups. In addition to this enrollment-based allocation, a significant fraction of state general funds is “set-aside” for specific activities with these amounts taken off the top, prior to the distribution of enrollment-based funds.

The University began to implement Rebenching in FY2012-2013 and completed a several-year phase-in in 2015-2016. Now, after approximately seven years of a fully phased-in model, the Office of the President (OP) has initiated a review of the model’s impact and discussion of whether changes are warranted, and if so, how the model might be improved. The decisions made during this review will have far-reaching implications affecting nearly every aspect of the University of

California’s mission—its research, teaching, and public service—and will directly impact the well-being and productivity of students, faculty, and staff. The Academic Senate must thus be an important voice in the discussion and the implementation of those changes.

UCPB Rebenching Workgroup

Academic Senate Chair Robert Horwitz asked the University Committee on Planning and Budget (UCPB) to represent the Senate in working with the Office of the President (UCOP) in the analysis of potential revisions of the Rebenching model. In Fall 2021, UCPB Chair Kathleen McGarry established a workgroup to conduct a review of the current model and to participate in the discussion with OP. UCPB vice-chair Don Senear was selected as the chair of the workgroup and with the membership consisting of UCPB Chair McGarry, and UCPB members Dard Neuman (UCSC), Heather Rose (UCD) and Dana Simmons (UCR). The workgroup was charged with updating UCPB and senate leadership regarding discussions and developments, consulting with UCOP on behalf of the Academic Senate, and preparing a final report for UCPB to submit to the Academic Senate. In a series of meetings held throughout the AY2021-2022, the workgroup reviewed the history of the Rebenching model through the examination of the reports of the previous commissions, workgroups and committees involved in the development and implementation of the current model and analyzed the resulting funding allocations and student enrollment figures from 2016-2017 through 2021-2022. The UCPB workgroup also benefited greatly from multiple discussions with UCOP senior staff, Nathan Brostrom (Chief Financial Officer), David Alcocer (Associate Vice President - Budget Analysis & Planning), and Todd Greenspan (Director - Academic Planning) and is grateful for their assistance. This report summarizes the workgroup’s recommendations and conclusions to date based on its analysis.

Principles

In June 2011, UC President Mark Yudoff commissioned a committee to develop the inaugural Rebenching model. This Rebenching Budget Committee, comprised of representatives from UCOP, the campuses, and the Academic Senate, articulated four core principles to guide its recommendations:

1. Student enrollment should be the major determinant of base funding of the campuses, with limited use of set-asides to address specific systemwide priorities.
2. The UC adheres to a common standard of excellence across all divisions.
3. Allocation of funds must recognize graduate education as integral to the research, teaching, and service missions of the UC, and critical to its excellence.
4. Changes made to implement the Rebenching model ought not to reduce current funding for any campus; increases in state funding were to be used to implement changes.

The AY2021-2022 UCPB workgroup affirms its commitment to these four principles and introduced two new core principles to guide its recommendations:

5. **Maintain Systemwide Oversight.** Prevent unilateral enrollment and programmatic decisions made by any campus from negatively affecting funding allocations to other campuses.
6. **Account for Asymmetries.** The final allocation model should recognize that equal treatment does not always result in equal opportunity. Various factors including a history of funding inadequacies, the need for additional academic support arising based on differing student demographics, differences in needed maintenance and retrofitting costs to facilities, different barriers to capital projects and housing/building developments, etc., all serve to impose different cost structures on the campuses. To the extent that such costs can be clearly identified and are justified as system-wide obligations, supplemental funding based on these needs may be appropriate. Such supplemental funding is most appropriately provided to campuses as time-limited set-asides targeting specific goals. Campus funding for these purposes ought to be made in a straightforward and transparent way, using methods that do not unduly punish campuses for prior success or performance, nor ought it to reward campuses for poor performance.

These six principles delineate separate and distinct roles for enrollment-based funding and set-asides. Accordingly, each funding mechanism is considered separately in the following discussion.

I. ENROLLMENT-BASED ALLOCATION AND STUDENT WEIGHTS

The Rebenching model recognizes the cost of education as the primary determinant of enrollment-based funding. The weights assigned to various categories of students in a funding allocation formula ought therefore to vary with differences in the cost of educating that category of student. Because any estimate of the relative costs of education is an approximation and subject to some degree of subjectivity, the workgroup recommends a focus on simplicity and transparency in the design and delineation of student weight categories. Regardless of how finely defined the categories are it is impossible to determine precisely the relative cost of educating each type of student. We, therefore, recommend that weighting categories be kept sparse, avoiding a proliferation of categories designed to address immediate, but potentially transient needs. These considerations justify differential weights for student categories based on degree-level (bachelors, master's, doctorate) and, within a doctoral student group, by degree types (e.g., health science professional versus others). But these considerations argue against further refinement within these broad categories.

In addition to reflecting differences in the cost of education, weights also signal academic values and institutional priorities, such as supporting growth in academic Ph.D. programs and fostering an emphasis on research befitting an R1 institution. This ideal further argues for larger weights afforded doctoral and academic master students. The University has reached a critical juncture in this regard. Over the past decade during which Rebenching has been in place, undergraduate

enrollment across the University has increased by over 25 percent (Appendix A). This rise has been driven both by increases in California residents as mandated by the Legislature and approved by the Regents, and by the zeal of the campuses, as encouraged by the Funding Streams model, to enroll non-resident students to collect NRST. With the exception of Self-Supporting Programs, graduate enrollment has not kept pace. As a result, the enrollment of academic PhD students as percentage of undergraduate enrollment has decreased on eight campuses and falls below 12 percent on six campuses. UC considers this 12 percent metric to be a minimum standard for a UC campus, and a value that below which the graduate education and research missions of the University are seriously impacted. Given the significant role that doctoral students play in delivering instruction and expanding access to research opportunities for undergraduates, shortfalls in this fraction also have serious ramifications for the quality of undergraduate education. This 12 percent standard is thought to be so fundamental to the nature of a research university that the UC has considered it a systemwide priority to maintain it at every campus.¹ Restoring the University's PhD programs must be one of the top priorities of the new Rebenching model.

Alternative Weighting Formulas

In reaching our recommendation on the appropriate weighting scheme, the workgroup conducted simulations of funding outcomes based on several alternative weighting formulas using Fall 2021 enrollment numbers as our data source.² Our chief finding was that individual campus allocations are relatively insensitive to modest modifications in the weights. A significant change in campus allocations requires severely reducing the weights for PhD and/or health sciences professional students. Examples of weighting formulas that *did* result in meaningful reallocations of resources include:

- a. reducing the academic Ph.D. weight to 1
- b. reducing the health sciences weight to 2.5 or below
- c. eliminating weighting entirely

Changes in weights of this magnitude cannot reasonably be justified without abandoning the relative cost of education as the primary rationale for weighting. Furthermore, any of these changes would come at the cost of undermining, rather than strengthening, the UC's core academic missions in research and graduate education. **Accordingly, the workgroup recommends strongly against significant changes in the weighting scheme of the type used in our simulations.**

A less extreme proposal that has been suggested would retain the weight of 5 for medical students but reduce to 2.5 the weight for professional students in all other health sciences programs, and to

¹ The current Rebenching achieves this goal by providing aspirational funding to the campuses that fall short of the 12 percent standard. We address this issue further in our discussion of set-asides in Section II.

² The existing student weights are 1 for budgeted California undergraduate, academic master's and non-health sciences professional degree students, 2.5 for academic Ph.D. students, and 5 for professional students in the health sciences.

reduce similarly or eliminate entirely the weight for medical resident students. Higher costs in the health sciences are generally ascribed to accreditation requirements calling for specific faculty:student ratios that are typically higher than elsewhere. However, these ratios vary across programs. We are unaware of any studies by the UC that estimate the relative costs of education across the breadth of health sciences professional programs, but we have reviewed the results of weighting schemes proposed by comparable university systems based on their evaluation of relative costs. Our evaluation suggests that variable costs across health science professional programs could potentially justify weights ranging from 5 for those with the highest faculty:student ratios such as medical students to a low of 2-2.5 for some other programs. **While the workgroup recommends against such a fine-grained approach as violating the principles of simplicity and transparency, it would not object otherwise to these suggested reductions in weights.** However, we do note that doing so would increase what is already a substantial disparity in support for the health sciences at UCD, UCI, UCLA and UCSD relative to UCSF, a campus for which funding allocation is set by a funding corridor that is independent of the Rebenching formula. Under the existing UCSF funding corridor, UCSF already receives over 50% more in State General Funds than it would be were its funding based on the formula for weighted enrollment. **Consequently, changes in health sciences weights will require the University to rationalize and adjust its support for health sciences across the entire system (see below for further discussion).**

Fund actual rather than budgeted enrollment

Enrollment targets for each of the campuses are established in consultation with UCOP and embedded in each campus's five-year strategic plan. These enrollment targets establish the student numbers that are used in the Rebenching formula. Several factors have led to undergraduate enrollment that is significantly larger (approx. 6,550 systemwide in Fall 2021) than these budgeted enrollments. Various factors have contributed to this over-enrollment. These include enrollment increases mandated during Governor Brown's tenure for which full state support was never provided. Some of the over-enrollment is also attributable to conscious decisions made by a few campuses to enroll students above their budgeted targets. More recently, misestimates resulting from changes in the student admissions processes including the elimination of student test scores as an admissions criterion and unexcepted changes in applications and enrollments due to the pandemic have contributed. Because the Legislature typically interprets the current student enrollment as the baseline when mandating enrollment increases, it is difficult for a campus to reduce even advertent over-enrollment. As a result, campus enrollments in excess of targets become permanent unbudgeted costs to the campus.

Unequal distribution of over-enrollment among campuses has led to a call to use actual enrollments rather than budgeted enrollments when calculating campus allocations. Funding campuses based on actual enrollment would be consistent with the foundational principles of funding campuses based on the cost of educating students and of equal treatment for all students within a category.

As such, funding actual enrollment is generally supported by the workgroup. However, providing campuses an incentive to enroll students beyond their targeted numbers violates the core principle that enrollment and programmatic decisions made by any campus should not have a detrimental effect on funding allocations to other campuses. Using funding data for FY2021-2022 and enrollments for Fall 2021, a change from budgeted to actual enrollments would decrease the per capita weighted student allocation by just over 2%. But given the scale of over-enrollment, the effect on total funding would be significant for several campuses to the advantage of those that have over-enrolled and at the expense of those that have not. **Therefore, the workgroup recommends that enrollment management be preserved going forward, but that existing over-enrollment student numbers be added to targeted enrollment as a one-time adjustment.** This adjustment ought to be phased in over a period of a few years to avoid sudden shifts in funding.

Going forward, the workgroup recognizes the uncertainties inherent in the current admissions process and the difficulty to meet targets with precision, a challenge that varies significantly between campuses. However, under Governor Newsom's budget compact the University is subject to a single five-year target for enrollment growth rather than the recent practice of annual increases that are reset to current actual enrollment. This five-year window will allow the University to correct each year for either over or under-enrollment in the previous year—ideally reaching its eventual target more precisely than it could in any one-year window. Combined with moderate smoothing, such as a moving three-year average, the issues of unintentional deviations from targeted enrollments should be substantially mitigated.

There is also significant over-enrollment in some graduate student categories. This too is distributed unevenly across the campuses. Of particular note are instances of both over and under-enrollment of graduate professionals in the health sciences at UCD, UCI, UCLA and UCSD. Changing from budgeted to actual enrollment of these students is particularly concerning because of the large relative weight assigned to students in this category and thus the potential to result in significant effects on funding outcomes.

Further, UCPB understands that there are proposals for new health sciences professional schools and/or programs at several campuses. These expansions would also affect funding to other campuses by enrolling significant numbers of new health sciences professional students and thus decreasing the available per-student funding. Thus, moving from budgeted to actual enrollment at the graduate level has the potential to significantly undermine the principle that enrollment and programmatic decisions made by one campus should not affect funding allocations to other campuses. However, at the same time, restricting the growth of graduate professional programs undermines one mission of the University and the interests of the state of CA. **Accordingly, the workgroup recommends that systemwide enrollment management be applied to graduate growth funding, ensuring that enrollment increases are folded into the budgeted enrollment totals at a rate dictated by the growth in state support for the UC. This would provide the**

campuses the individual autonomy to determine the size of their graduate programs with the expectation that they will eventually be funded, but without imposing an unplanned financial burden on the other campuses.

Specific proposals for additional weight categories

There is a tension between adhering to the three principles of a) the use of weighted enrollment, b) simple and transparent administration of weights, and c) avoidance of incentives for campuses to behave in a way that harms other campuses, on the one hand, and the need to acknowledge that campuses may face cost differences in providing an education and in best serving their students on the other. In this section, we address additional weight categories that have been proposed to deal with potential differences in campus costs and provide our reasoning for why these additional weighing schemes should not be implemented.

1. *Greater weights for upper-division compared to lower-division students.* Although upper-division students arguably take more faculty time to educate than students in lower-division courses, different weights along this spectrum needlessly complicate the Rebenching formula since the trajectory of students from lower to upper-division is the same across the system. The same principle applies to differential weights by discipline, or any other factor for which may there be differences in the cost of education but there aren't major differences in the distribution of students between campuses. Care should also be taken to avoid creating incentives that may change the behavior of campuses in ways that could harm others. For example, a differential weight might incentivize campuses to favor the admission of transfer students over freshmen or students in the sciences over the humanities.
2. *A special weight category with a higher weight value for the lowest tercile of admitted undergraduates.* While the workgroup recognizes the possibility that some students might require extra support and that demographic differences exist between the campuses that may be correlated with the cost of education, it recommends strongly against addressing these differences using weights. First, changing the weights for selected groups of students violates the principle that all students within a category should be treated equally. Second, a meaningful, formulaic delineation of the lowest tercile is difficult to define (see Appendix B). Third, unless the criteria used to define the lowest tercile are independent of those considered in admissions offers, allocating extra weight to such students could create perverse incentives in the admissions process. Campuses that are most favored by students would be able to admit students that meet the definition of lowest tercile but who do not themselves require the additional educational resources. The workgroup strongly prefers the use of targeted set-asides to provide additional academic support as a more transparent and effective mechanism to address this need. The effectiveness of set-asides used for this purpose

could then be more easily evaluated and adjusted over time to address changes in needs as student populations shift. A more complete analysis and discussion of this point is presented in Appendix B.

3. *Negative weights for non-resident students.* The workgroup objects on the strongest terms to designating non-residents (or any student cohort) as a negative contribution to the system or a particular campus. We are not necessarily opposed to some degree of sharing of NRST should it be decided that there is a compelling need. However, any reallocation of tuition from non-resident students across campuses should be implemented transparently by direct assessment rather than by manipulating weights. In addition, the legislative mandate to cap non-residents at 18% on each campus by replacing non-residents over this limit with CA residents may abrogate any need for sharing of NRST. This cap on non-resident students seems likely to shift non-resident enrollment patterns to generate a more equitable distribution of non-resident students across the campuses.

In a final note to its analysis of the various proposals to modify student relative weight values, the workgroup notes that it appears that one motivation for these various proposals is to increase the funding for what are considered by some to be the most under-resourced campuses, a goal that is currently addressed by “Guardrail” funding provided as a set-aside labeled “Additional Funding for Unweighted Budgeted Enrollment.” This funding is distributed to campuses at which enrollment-based funding falls below 95% of the systemwide average funding on an unweighted student basis. We infer that some of the proposals to alter the weights are viewed as a more elegant way to address this goal within the Rebenching formula.

The workgroup objects to this approach as it seems like an effort to reverse engineer a desired outcome and comes at the cost of transparency, and thus has the potential to breed mistrust in the Rebenching formula. Nevertheless, we did model the effect of each of the proposed modifications across the eight campuses that would be affected to assess the feasibility of the various proposed changes to the weighting schemes presented as alternatives to the guardrail approach. A summary of the modeling results is presented in Appendix C. Our findings indicate that none of the proposals meets the objective of the guardrails in a precise manner. While some of the proposed changes result in increased funding to some campuses that currently receive guardrail funds, none of the proposals increases funding to all three campuses in this group, and some changes yield a net decrease to at least one such campus. Further, all of the proposals yield increased funding (in some cases substantial increases) to one or more of what might be considered highly resourced campuses. For example, the greatest beneficiary in absolute terms of a reduction of the health sciences weight is UCB. In addition, it is unclear whether the current motivation to increase funding to a particular set of campuses will persist over the long-term such that it that would justify a permanent adjustment of student weights. **For these reasons, the workgroup concludes that**

maintaining the current guardrail funding approach offers the most efficient and transparent way to address this unstated objective.

Workgroup Recommendations for Categories and Relative Weights

In sum, the workgroup recommends generally keeping the current weights, with two small modifications. These are, first, the addition of one new weight category for Academic Master's students (point 3), and second, a slight modification to the Health Sciences weight for medical residents (point 4). The definitions and relative weights are described as follows:

1. CA resident undergraduates – weight =1 (defines the scale).

This category should include all enrolled students (FTE) including summer enrollments and post-baccalaureate. The funding provided on a per-student basis in the budget year 2021-22 would be \$7,836 on this basis, versus \$8,006 based on budgeted enrollment (data from "2021-22 Campus Allocations for Web - Perm - 02-23-2022").

2. Academic Ph.D. – relative weight of 2.5.

The workgroup strongly supports the existing weight used for Ph.D. students. This weight is consistent with a recognition of the higher cost of total support for these students than for undergraduate students, including support through stipends and employment (TA, GSR). This greater weight also recognizes the critical role of Ph.D. students in the success of a research university and reflects the University's values and its commitment to research excellence. This category of students should continue to exclude professional doctoral students despite the likelihood of higher educational costs for this group. The additional instructional costs for professional students should be borne by professional degree supplemental tuition (PDST). Access is important to the mission of a public university system, but this concern is appropriately addressed by student aid. The existing aid formula should be monitored to ensure its adequacy to meet the need.

3. Academic Master's – relative weight of 1.2-1.5.

The workgroup recommends a new weight category for academic master's students in state-supported academic programs. This weight category was debated in the discussions of the original Rebenching formula, and it was decided to forego the additional weight—assigning a weight of one to all master's students. However, a greater weight recognizes the greater educational costs for academic master's relative to undergraduate students and the typically lower cost relative to doctoral students. Academic master's students tend to have smaller class sizes than undergraduate students and are more likely to be taught by ladder rank faculty and less likely to be taught by Unit 18 lecturers. However, academic master's students also require less hands-on mentorship and research support than doctoral students. The original Rebenching formula did not ultimately consider the additional weight relative to undergraduate students to be necessary because a combination of the modest relative

increase and the limited enrollment of academic master's students would result in only minor changes in per campus funding across the system. Our new recommendation represents a statement of values more than just a recognition of costs. The workgroup recognizes that academic master's programs fulfill a variety of roles that vary between disciplines, but in some instances include serving as a gateway to Ph.D. programs for underrepresented students. Additional weights for master's students would also serve as an incentive to maintain state-supported programs.

4. Health Sciences.

The workgroup recommends retaining the category definition and a high relative weight value. The weight of 5 is justified in some programs, e.g., medicine, by the high cost of education resulting in part from accreditation criteria mandating minimum faculty:student ratios. Different weights for different health sciences disciplines/programs (medicine, nursing, pharmacy, etc.) might be justified by cost analysis, but whether the overall effect justifies the added complication is questionable. The workgroup thus argues against parsing the weighting scheme out too finely into many weight values and recommends continuing with the weight of 5. We do, however, recommend removing medical residents from this category.

In accord with principle 4. above, and following the practice used to implement the current Rebenching model, any changes in enrollment-based funding to the campuses should be phased in over a period of years sufficient to protect the campuses from any net decrease in funding. Ideally, the phase-in period would still allow and only slightly constrain funding growth that would otherwise accrue. Both the multi-year funding compact proposed by Governor Newsom and the new cohort tuition model offer potential revenue streams to support a multi-year phase-in of any adjustments under current consideration.

II. SET-ASIDES

Set-asides, or off-the-tops, refer to allocations made from state general funds before the enrollment-based formula is applied. In the FY2021-22, set-asides to support academic activities comprised over 20 percent of state general funds (excluding those funds allocated for capital debt service). These set-aside allocations fund a broad array of systemwide programs and priorities, the goals of which vary substantially. At one end of the spectrum, there are permanent or semi-permanent allocations of a fixed percentage of state general funds to support what have historically been considered to be integral components of the University. On the other end are those set-asides that represent legislative mandates funded by line-item additions to the annual general state funds appropriation.

Though perhaps systemwide in nature, most programs funded by set-asides are located on only one or two campuses. And while the activities funded by these programs may not provide directly for student education, many do enhance the educational experience by enriching the academic

environment of the host campus. For example, many programs provide research and employment for graduate students and a few for undergraduates as well. In this regard, set-asides can offset (potentially to a large extent) the principle that funding per enrolled student should be equal across campuses. Our analyses show that when the funding from set-asides is included in the campus-specific funding totals, some of the least-resourced campuses as measured by the enrollment-based formula, are among the most well-funded campuses, whether calculated using weighted or unweighted enrollment (Appendix D).

A review of the number and variety of set-aside funded activities over the past decade reveals a tendency for mission creep in which it is easier to add new programs or priorities for set-aside funding than to retire existing ones in a timely manner. Funding the cost of education should be the primary use of state general funds. Since set-asides reduce the amounts available to be used directly on education these should only be used in situations in which the need is well justified. Given the current level of state funding, **the workgroup recommends that the current level of set-aside funding should set an upper limit and that effort should be made to reduce the overall expenditure directed to set-asides.**

The workgroup recommends a pair of general principles to govern set-aside funding:

1. **Permanent or long-lived set-aside funding** should be reserved for programs or activities that are de facto integral components of the University. These should meet the following criteria:
 - a. programs should be in support of systemwide priorities or multi-campus in scope
 - b. funding should support aspects of the university mission unrelated to instruction
 - c. funding cannot realistically be obtained from other sources
2. **Time-limited** set-aside funding for immediate priorities or needs should be at a specified amount and subject to a default sunset at a time established with the original allocation. Extension in time or increase in the amount should be subject to review and reconsideration as if a new initiative. This category includes funding to address asymmetries as referenced in principle 6, p.3 above, and discussed below.

Recommendations for the individual categories of set-asides specified in annual summaries of state general funds allocations.

*Set-asides subject to cost adjustment.*³ This is the largest single cost category among the set-asides, comprising about 6.6 percent of the total allocation of state general funds to the University. Except for the Student Academic Preparation and Educational Partnership Program (SAPEP), the programs in this category consist of large research institutes (Agricultural Experimental Stations, Neuropsychiatric Institutes, Scripps, MIND). While the responsibility of UC for some of these was

³ Fixed set aside amounts in this category are increased (or decreased) to reflect changes in the State General Funds Allocation to the University such that the funding is maintained at a fixed percentage of the overall allocation.

originally assigned by the legislature, these institutes are all now considered to be permanent components of the University. They have been funded at fixed percentages of the total appropriation of state general funds for extended periods, in some cases for as long as a half-century. The University has undergone enormous growth over this time, in enrollment, programs and even the number of campuses. Its needs and priorities have changed dramatically, and while state general funds have also increased to reflect growth, their relative contribution to the University's core operating budget has decreased monotonically over the past three decades, forcing students to bear an increasing fraction of the cost of their education through tuition. Unlike the campuses, whose funding is continuously evaluated and adjusted to reflect this changing environment, these institutes continue to receive the same fixed percentage of state general funds. Also, in addition to their research activities, the institutes generally have substantial involvement in academic and professional graduate education (one activity, Mental Health Teaching appears to be entirely so), and in one or two cases, in undergraduate education, activities that should be funded by the enrollment-based Rebenching formula. In addition, some of the institutes also have major clinical roles.

In recognition of these facts, **the workgroup recommends strongly that the funding allocations to the programs in this category be reviewed comprehensively.** Such a review will require the development of methodologies to assess which of the activities of each of these organizations qualify for systemwide support according to the criteria outlined above and which do not, and for evaluating the level of funding appropriate to the qualifying activities. Assessment and evaluation must reflect the context of current UC systemwide and State of California priorities, and the overall level of state support. Such an evaluation is long overdue, having been recommended by the Rebenching Budget Committee in its June 25, 2012, report but never carried out.

Research activities. Support for the development of new research areas should be a priority for the UC. The development of cutting-edge research is critical both to the academic quality of the University and to the technical and economic prowess of the State of California. While the primary responsibility for research activity lies with the individual campuses, there are opportunities for which the advantages of a multicampus or systemwide effort justify a systemwide funding approach. Spending in this category should be used to enhance inter-campus (or inter-lab) collaboration, provide seed funding and leverage campus-derived or extramural support to the maximum extent possible. Funding in this category should not be considered permanent but rather should be provided for a specified duration after which the default would be that support becomes the responsibility of the host campus. Consideration of renewal of systemwide support should be contingent upon a comprehensive review and competitive proposals process. Many of the existing programs in this category have been funded continuously for many years beyond what can rightly be considered seed or development funding. Other programs are newly instituted as specific requirements of the legislature. We note that current funding in this research category accounts for only 0.75 percent of the state general funds allocation, equaling only \$31m 2021-2022. **This**

relatively small amount does not seem adequate to utilize fully the opportunities afforded by a ten-campus system of R1 institutions and should be considered for an increase.

Public Service. Most activities in this category originated as directives from the state legislature. Consequently, these may be more reflective of the legislature's priorities than those of the University. Some activities are funded directly by separate state appropriation, in which case spending is not discretionary (e.g., ANR Cooperative Extension). Others may have been funded by such line items at one time but were subsequently folded into the University's base allocation. Activities in this category may have outlived the initial level of interest or may no longer serve the mission established originally. **The workgroup recommends that activities originally mandated by the legislature receive set-aside funding only while the mandate is in force.** Absent a compelling justification for systemwide support as governed by the principles outlined above, programs that are worthy of continuing support should be folded into campus budgets. Those that are not, should be recommended for sunseting. In addition, the rationale for placing some of the current items in the Public Service category is unclear. For example, why is the UCLA Drew Medical School in this category rather than in set-asides subject to cost adjustment like the UCLA and UCSF Neuropsychiatric Institutes and UCD MIND Institutes? Why is SAPEP funding allocated under both the public service and subject to cost-adjustment categories? The particular categorization of any program should clearly reflect expectations about its status as a permanent component of the University, and consequently its future funding. These examples suggest a need to review all set-asides for consistency of categorization and their contribution to the mission of the UC.

UC Health. A planned expansion of the University in its educational, research, and service missions is necessary to meet the ever-changing needs of California and to fulfill the role of the University as its premier public educational and research institution. In this context, it is appropriate for state funds to provide support to launch new campuses and new professional schools when these are either priorities of the University at the systemwide level or priorities of the state. The current set-aside funding for the UCR medical school and the UCSF Fresno campus is justified in this context. However, set-aside support for launching such programs cannot and should not be maintained indefinitely. The current allocation to the UCR medical school is 4-fold greater than what would be specified by the enrollment-based Rebenching formula. **There must be a plan to transition these enterprises to a sustainable funding model that is similar to those used for the UCD, UCLA, UCI and UCSD medical schools.**

Consideration of UC Health set-asides raises a larger question regarding disparate mechanisms to fund the health sciences academic enterprises across the University. The funding corridor used to allocate funds to UCSF is entirely outside the Rebenching framework, although the approach is similar in spirit to funding distributed through the "*Set-asides subject to cost adjustment*" mechanism, but with constraints on funding growth paired with protection from loss of funding. As discussed previously, the funding corridor generates much greater funding for UCSF than

would be provided by the enrollment-based Rebenching model that governs support for health sciences at UCD, UCI, UCLA and UCSD. Thus, the University employs at least three models to support the health sciences academic enterprises – the Rebenching formula, set-asides, and the UCSF funding corridor. The use of these various mechanisms results in substantial discrepancies in funding across medical school campuses, all of which fulfill similar missions. **The proposal to reduce the weight for health sciences professional students, and to reduce or eliminate the weight for medical residents, would exacerbate the discrepancies. There is thus a need for an immediate and comprehensive review and rationalization of support for the health sciences across the UC system.**

This review should also consider the expected financial support role of the UC Health clinical enterprises. UC Health self-reports that it provides almost \$2 billion in annual support to the UC health sciences. Most of this support is salary for clinician services, which is a medical center cost, not support for the UC academic mission. It is not clear what fraction supports the academic mission of the health sciences. In addition, as noted earlier in this report, several institutes with major clinical roles receive substantial set-aside support from state general funds. These examples illustrate a deep symbiotic relationship between UC Health and the academic health sciences. It seems likely that this relationship is different at UCR with its community-based model relative to the other campus with attached academic medical centers. A deep review of these fund flows is necessary to rationalize support for the health sciences on the different health sciences campuses and to determine the relative levels of support for health sciences versus non-health sciences campuses. While a review at this level is beyond the scope of the current rebenching discussions, it ought to take place before the allocation of funds to launch a seventh medical school at Merced.

Other set-asides. As its title suggests, this category serves as a catch-all for a variety of somewhat disparate activities including satellite campuses and online education, a variety of UCOP specialty faculty and postdoctoral hiring programs and guardrail funding for campuses perceived to be under-resourced based on the Rebenching formula. The workgroup cannot offer specific principles to guide its recommendations for this eclectic list, but rather we offer individual recommendations.

Guardrail funding. First, under the principle that equal treatment does not necessarily generate equal opportunity, the workgroup understands the motivation for applying guardrails to the enrollment-based funding model. As discussed previously, a finding of our analysis of the outcomes of the various modifications to student weights that have been proposed to provide such funding indicates that none of the proposals offers the precise targeting of funds that is gained through the “Additional Funding for Unweighted Budgeted Enrollment” set-aside which directly sends funds to the campuses targeted. This finding tempers our natural dislike of *ad hoc* and somewhat arbitrary modifications of this sort. At the same time, there is also a “Fixed Cost” set-aside to each campus whose nature causes it to disproportionately benefit the same campuses that receive “Additional Funding for Unweighted Budgeted Enrollment”. Given the somewhat redundant effects of these two separate set-aside categories, we recommend that they be considered

for consolidation, either by eliminating the “Fixed-Cost” set-aside, or alternatively by increasing it to the point that no campus is below the 95% threshold that triggers the guardrail approach.

Differences in student demographics between the campuses might justify additional funding for campuses that enroll a larger fraction of students who may require extra academic or other support services. (See Appendix E, Asymmetries.) Presumably, the distribution of “Funding to Improve Graduation Rates” is directed to address this need. These funds are allocated to the same campuses that are perceived to be under-resourced and consequently receive guardrail funds. The perception of under-resourcing derives from the comparison of enrollment-based funds received when assessed based on unweighted enrollment. However as mentioned previously, a more comprehensive accounting of funds allocated to the campuses that include set-asides in addition to the enrollment-based allocation offers another perspective on under-resourcing (see Appendix D).

When set-aside funding to address perceived asymmetries is justified, the workgroup recommends that funds be allocated for a fixed period to support programs developed by the individual campuses to address specific support services or geared towards reducing performance gaps of certain students at their institution. This recommendation was made previously in our discussion of a special weight for students in the lowest tercile of admitted students. A set-aside program would define target groups of students in need of support and would define specific performance metrics to which participating campuses would be held accountable. Renewal or extension of the period would be contingent on meeting targets and on a thorough analysis of the value of the program. Through such a mechanism, programs could also be adjusted over time to reflect changing student needs and the specific successes of the program.

Aspirational doctoral funding. The original Rebenching model provided funding to each campus for a minimum number of Ph.D. students, a number set to be equal to 12 percent of undergraduate enrollment at that time. While all but one campus have increased Ph.D. enrollments since 2012-2013, some campuses have not yet reached the targeted number of PhD students (Appendix A). Others that initially had met the minimum number have found their increase in Ph.D. enrollment to have been outpaced by undergraduate growth, so that while the number of PhD students is on target or above, in percentage terms, the ratio of PhD students to undergraduates is below 12 percent. In particular, with the sharp rise in non-resident enrollment since 2011-2012, only UCB and UCLA are clearly above 12 percent target while UCD has just met the target level the past two years. The workgroup strongly supports the existing commitment to this 12 percent figure for all campuses as a system-wide priority. Achieving and maintaining at least the minimum enrollment is necessary for the existence of quality Ph.D. and research programs.

In acknowledgment of the difficulty of expanding programs without additional financial support for this growth, the workgroup recommends that funding for doctoral growth be maintained for campuses with PhD enrollments below 12 percent of undergraduate enrollments. Consistent with

the general approach recommended to address asymmetries, this excess funding should be transparently identified as a set aside and be subject to sunset after a specific number of years. The original Rebenching model provided aspirational funding during the phase-in period that was sufficient to support the number of PhD students necessary to equal 12 percent of undergraduate enrollments. This funding came with the explicit understanding that if enrollments were short of the targeted number, the unused funding would be withdrawn at the end of the Rebenching phase-in period. However, the funds were never withdrawn, and a few campuses are still receiving aspirational funding 7-8 years after the phase-in was completed for doctoral enrollment that still has not been achieved. To reduce the exposure of systemwide resources to this risk of indefinite funding, the work group recommends that the set aside funding be provided in smaller increments only as necessary to fund a targeted number of additional PhD students that is realistic to achieve within the specified time frame defined by the scheduled sunset date. If the funded targets are met, but PhD enrollment still falls short of 12 percent, additional increments of set-aside funding could be considered.

In addition to this direct funding, the capacity of PhD programs and the ability to provide quality training for students depends on the size of the Senate research faculty. Over the past decade during which the undergraduate enrollment has grown by over 25 percent, the university has become increasingly reliant on lecturers and teaching professors to serve these students. The number of non-senate lecturers has grown by 46 percent across the system while the number of Senate faculty has grown by only 18 percent. Furthermore, one-third of the increase in Senate Faculty has been among the ranks of Professors of Teaching (UCPB Faculty Hiring Report, June 24, 2022 draft) who do not mentor PhD students. (There has also been an increase in the number of adjunct faculty.)

It is evident that systematic replacement of research faculty by teaching faculty presents a serious constraint to the growth in PhD programs. This also affects the quality of undergraduate education. It undermines the unique character of a research university, which is the promise of instruction delivered by foremost experts in their academic fields. The decline in the relative numbers of research faculty also severely limits the research opportunities available to undergraduate students. These effects weaken our stature as an R1 institution. Therefore, along with providing increased stipend and fellowship support, the top priority for the use of aspirational PhD funding must include increasing the size of the research faculty.

Buy-out of NRST. The mandate from the state legislature, with the acquiescence of the Regents, to limit the non-resident enrollment at every campus to 18 percent of the resident undergraduate enrollment, creates a new funding anomaly, one that impacts only those campuses that currently exceed the limit (UCB, UCLA, UCI, UCSD). These campuses are now mandated to reduce their non-resident enrollment to below the cap over the next five years and to replace displaced non-residents with an equal number of CA residents. This change results in a loss of approximately \$200 million in non-resident student tuition (NRST) revenue from 6,300 non-resident students –

an amount that is larger than or on par with the total enrollment-based funding received by 4 of the 9 undergraduate campuses. It would result in a dramatic decline in resources available to support CA resident students on the affected campuses. In recognition of this damaging effect on the financial picture for these campuses, the Governor has agreed to provide additional support to compensate the University for this loss of NRST. The 2022-2023 California state budget passed by the legislature includes \$31 million as an ongoing general funds augmentation to offset the loss for an initial tranche of 902 non-resident students. **These funds should be provided to the campuses so affected in direct proportion to the reductions in non-resident enrollment that the limit imposes. We recommend that the funds be distributed as a targeted set-aside for this purpose.** Following our general recommendations, the long-term future of this set-aside will have to be evaluated periodically, but with the recognition that the loss of NRST is permanent.

Summary of Recommendations for Set-asides

1. Institute the governing principles, Maintain Systemwide Oversight and Control of Funds Allocation and Account for Asymmetries, described above.
2. Review each of the institutes funded with *Set-asides subject to cost adjustment* to determine which activities within these institutes are appropriate for set-aside support in compliance with the governing principles and at what level of support.
3. Set a limit to the total spending on research set-asides as a fraction of the state general funds allocation. Fund items within this category, with an emphasis on seed and matching funding, for a fixed duration, with renewal subject to review and continued justification.
4. Flag individually funded (or state-mandated) public service set-asides for sunset when no longer mandated or contributing substantially to the UC mission.
5. Continue with the systemwide approach to the distribution of financial aid including the increase in tuition-generated aid per the cohort tuition formula.
6. Transition UC Health- Funding for the UCR medical school and the UCSF Fresno campus to the enrollment-based model. Develop a comprehensive and consistent model for the funding of the health sciences and a transition plan for its application to all health sciences campuses.
7. Any withdrawal of set-aside funding for specific institutes or activities should be implemented over a period of years (perhaps 2-5 depending on the amount) and as increases in the state general funds allocation to the campus or alternative sources of funds are sufficient to maintain the total campus allocation.

Appendix A: Undergraduate and Academic Doctoral Student Enrollments, Fall 2011 to Fall 2021

Source: UC Information Center dashboard: <https://www.universityofcalifornia.edu/about-us/information-center/fall-enrollment-glance>

| Student level | Campus | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 10-yr Change* | |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|-------|
| Undergraduate | Berkeley | 25,885 | 25,774 | 25,951 | 27,126 | 27,496 | 29,310 | 30,574 | 30,853 | 31,348 | 30,799 | 31,814 | 21.2% | |
| | Davis | 25,038 | 25,666 | 26,533 | 27,565 | 28,257 | 29,379 | 30,066 | 30,718 | 30,982 | 31,162 | 31,657 | 23.9% | |
| | Irvine | 22,004 | 22,216 | 23,530 | 24,489 | 25,256 | 27,331 | 29,307 | 29,736 | 30,382 | 29,638 | 29,449 | 33.6% | |
| | Los Angeles | 27,199 | 27,941 | 28,674 | 29,633 | 29,585 | 30,873 | 31,002 | 31,577 | 31,543 | 31,636 | 32,122 | 15.6% | |
| | Merced | 4,938 | 5,431 | 5,837 | 5,884 | 6,237 | 6,815 | 7,375 | 7,881 | 8,151 | 8,276 | 8,321 | 60.1% | |
| | Riverside | 18,522 | 18,539 | 18,621 | 18,790 | 18,607 | 19,799 | 20,073 | 20,581 | 22,055 | 22,055 | 22,693 | 22,868 | 22.9% |
| | San Diego | 23,046 | 22,676 | 23,805 | 24,810 | 26,590 | 28,127 | 28,587 | 30,285 | 30,794 | 31,842 | 33,343 | 42.6% | |
| | Santa Barbara | 18,620 | 18,977 | 19,362 | 20,238 | 20,607 | 21,574 | 22,186 | 23,070 | 23,349 | 23,349 | 23,196 | 23,091 | 23.1% |
| | Santa Cruz | 15,945 | 15,978 | 15,695 | 16,277 | 16,231 | 16,962 | 17,577 | 17,792 | 17,517 | 17,207 | 17,864 | 17,864 | 9.9% |
| Total | 181,197 | 183,198 | 188,008 | 194,812 | 198,866 | 210,170 | 216,747 | 222,493 | 226,121 | 226,449 | 230,529 | 230,529 | 25.4% | |
| Graduate Academic Doctoral | Berkeley | 5,851 | 5,803 | 5,742 | 5,593 | 5,500 | 5,365 | 5,335 | 5,337 | 5,307 | 5,283 | 5,341 | -8.8% | |
| | Davis | 3,332 | 3,349 | 3,330 | 3,408 | 3,445 | 3,511 | 3,549 | 3,583 | 3,641 | 3,797 | 3,859 | 14.6% | |
| | Irvine | 2,682 | 2,614 | 2,567 | 2,628 | 2,624 | 2,646 | 2,786 | 2,898 | 3,038 | 3,196 | 3,302 | 22.7% | |
| | Los Angeles | 4,622 | 4,680 | 4,722 | 4,631 | 4,492 | 4,551 | 4,600 | 4,584 | 4,685 | 4,754 | 4,847 | 3.2% | |
| | Merced | 231 | 288 | 315 | 348 | 406 | 472 | 539 | 607 | 639 | 694 | 728 | 174.0% | |
| | Riverside | 1,825 | 1,845 | 1,919 | 1,880 | 1,901 | 1,981 | 2,040 | 2,068 | 2,105 | 2,155 | 2,112 | 16.3% | |
| | San Diego | 3,039 | 3,060 | 3,174 | 3,201 | 3,172 | 3,217 | 3,269 | 3,459 | 3,530 | 3,648 | 3,825 | 22.5% | |
| | Santa Barbara | 2,393 | 2,348 | 2,303 | 2,234 | 2,295 | 2,255 | 2,304 | 2,349 | 2,434 | 2,504 | 2,521 | 2,521 | 6.0% |
| | Santa Cruz | 1,222 | 1,183 | 1,245 | 1,253 | 1,243 | 1,332 | 1,353 | 1,424 | 1,491 | 1,476 | 1,519 | 1,519 | 24.5% |
| Total | 25,197 | 25,170 | 25,317 | 25,176 | 25,078 | 25,330 | 25,775 | 26,309 | 26,870 | 27,507 | 28,054 | 28,054 | 10.3% | |
| Academic Doctoral as % of Undergraduate | Berkeley | 22.6% | 22.5% | 22.1% | 20.6% | 20.0% | 18.3% | 17.4% | 17.3% | 16.9% | 17.2% | 16.8% | -5.6% | |
| | Davis | 13.3% | 13.0% | 12.6% | 12.4% | 12.2% | 12.0% | 11.8% | 11.7% | 11.8% | 12.2% | 12.2% | -1.0% | |
| | Irvine | 12.2% | 11.8% | 10.9% | 10.7% | 10.4% | 9.7% | 9.5% | 9.7% | 10.0% | 10.8% | 11.2% | -1.0% | |
| | Los Angeles | 17.0% | 16.7% | 16.5% | 15.6% | 15.2% | 14.7% | 14.8% | 14.5% | 14.9% | 15.0% | 15.1% | -1.8% | |
| | Merced | 4.7% | 5.3% | 5.4% | 5.9% | 6.5% | 6.9% | 7.3% | 7.7% | 7.8% | 8.4% | 8.7% | 3.6% | |
| | Riverside | 9.9% | 10.0% | 10.3% | 10.0% | 10.2% | 10.0% | 10.2% | 10.0% | 9.5% | 9.5% | 9.2% | -0.5% | |
| | San Diego | 13.2% | 13.5% | 13.3% | 12.9% | 11.9% | 11.4% | 11.4% | 11.4% | 11.5% | 11.5% | 11.5% | -1.9% | |
| | Santa Barbara | 12.9% | 12.4% | 11.9% | 11.0% | 11.1% | 10.5% | 10.4% | 10.2% | 10.4% | 10.8% | 10.9% | -1.8% | |
| | Santa Cruz | 7.7% | 7.4% | 7.9% | 7.7% | 7.7% | 7.9% | 7.7% | 8.0% | 8.5% | 8.6% | 8.5% | 1.0% | |
| Total | 13.9% | 13.7% | 13.5% | 12.9% | 12.6% | 12.1% | 11.9% | 11.8% | 11.9% | 12.1% | 12.2% | 12.2% | -1.7% | |

* Values show for enrollment numbers are (Average(2020/2021) / Average(2011/2012)); for % Doctoral, (Average(2020/2021) - Average(2011/2012))

Appendix B

An important feature of any funding formula is that it meets the resource needs of students as they strive to obtain the educational goals prescribed by the university. One of the most important goals in terms of successfully meeting the needs of students is ensuring that they graduate on time. Although all students admitted to UC have met the rigorous admissions standards and are academically qualified to be at UC, some students, for structural reasons, may require extra support in achieving their goals. For example, some students may face a housing and food insecurity, others may come from lower-income or lower-wealth families and may need to engage in paid work while juggling their studies. These various issues may lead them to take fewer courses per term or to have less success in their course work, as they lose study time to meet other demands. These impacts may in turn lead to a longer time to degree or failure to complete a degree. Other students may not have the social or navigational capital to proceed through college as quickly or as successfully as their peers. Additional support may benefit such students and can help the University achieve its goals in terms of student success. Thus, the University may want to direct resources to campus-based on the number of such students.

The difficulty in targeting such funding lies in defining the criteria used to identify which students would benefit most and in determining which programs are most likely to provide the greatest benefit. Although our committee can provide some initial considerations, more expert analysis is needed. One guiding principle in establishing funding guidelines should be that any criteria used to allocate resources structure incentives properly. Ideally, an allocation formula should distribute funds based on factors that campuses would not use in admissions decisions, but that are related to the additional costs students face once at their UC campus. Simply providing campuses with additional funds if they have worse outcomes, such as graduation rates or longer time to degree, does not provide an incentive for campuses to improve that outcome.

Options for Identifying Students:

- California's K-12 finance system provides additional funding for districts based on the percentage of enrolled students who participate in the free- or reduced-price lunch program (eligibility for which is based on family income and poverty measures), are English Learners (EL), or are foster youth.⁴ UC could take a similar approach and identify students who are Pell-eligible, first-generation college students, or former foster youth. While Proposition 209 may exclude the use of URM as a driver of funding, the correlation between Pell Grant Eligibility and the percent URM is 0.95 (Appendix E) and

⁴ The formula provides a base funding rate per student. In 2020-21, the base rates ranged from about \$8,200-\$10,000 per student, depending on the student's grade. The formula provides an additional 20 percent of the base rate for each student who is in one of these three groups. If a district's share of these students exceeds 55 percent of the district's enrollment, they receive an additional 50 percent of the base rate for every student above that threshold.

the correlation between Pell eligibility with the percent of students who are First Generation college students is 0.99. The Pell Eligibility rate can thus serve as a straightforward criterion for determining how much campuses receive for any asymmetries in this regard. (Such a measure could also incorporate the share of undocumented students eligible for the Cal Grant.) These characteristics are associated with student needs and lower graduation rates but are not characteristics campuses use to admit students.⁵

- High-school characteristics of the student's feeder school have also been discussed as potential criteria for providing additional funding. These characteristics could include the percentage of students who are on the free or reduced-price lunch program, EL, or foster youth. Providing additional funds for students from schools in the highest terciles of these measures potentially creates perverse incentives.⁶ Many students at these schools could be high-income and not EL nor foster youth and are thus less likely to need the additional support. Some campuses could cherry-pick such students, thereby getting additional funding without incurring the additional costs. Using a measure such as the income level of the zip code of the student's high school suffers from similar issues. In addition, this criterion does not reflect the reality that the high school zip code need not necessarily indicate the zip code of the students' residences. In larger cities, students can travel across several zip codes from their home to their school, a situation especially relevant for magnet schools, charter schools, religious and other private schools. Mapping school attendance zones to income data from the census is a potential solution to this problem but would require far more data effort that does not seem tractable for this project.
- Rather than targeting characteristics of the student high schools, an alternative would be to target funding to student characteristics perceived to warrant additional resources, e.g., GPA. The drawback of this approach is that campuses use GPA in their admissions decisions and may have thus an incentive to admit students with lower GPAs to collect the additional funding associated with such students, especially they could also observe other characteristics of these students that would distinguish a subgroup of targeted students that would not be expected to be more costly to educate.

Set-aside vs. Weight

Once the criteria for allocating revenue for these additional costs have been identified, the committee advocates for categorizing this funding to be distributed as a set-aside rather than

⁵ See graduation rate data at <https://www.universityofcalifornia.edu/about-us/information-center/disaggregated-data>. Systemwide, four-year graduation rates for the 2016 entering freshman students who are Pell Eligible is 64% whereas 76% of those students who are not Pell-Eligible graduate in four years. The five-year graduation rates are 80.6% for Pell Eligible students versus 86.6% for non-eligible students

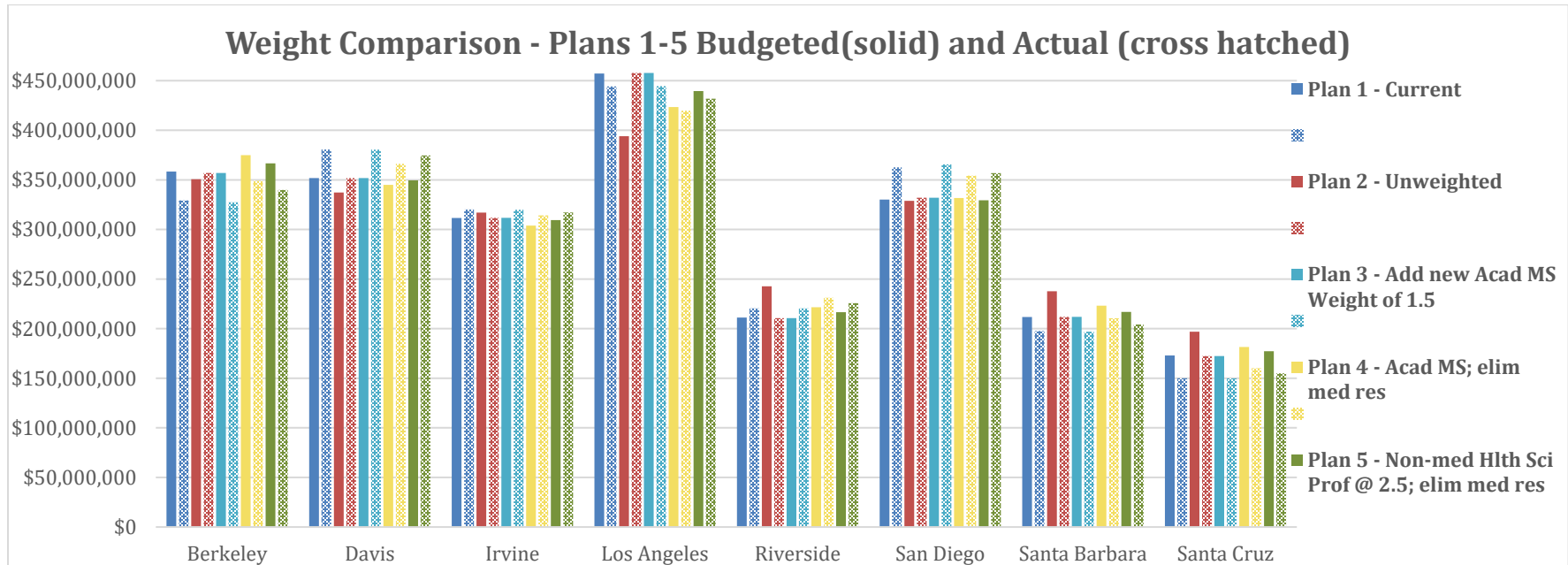
⁶ It is important to acknowledge that under the new K-12 funding formula, these are the schools with higher levels of funding.

endeavoring to incorporate it into the weights. We suggest this procedure for two reasons. First, regardless of the criteria used, a set-aside would require an application from the campus that would need to account for the need, detail the intended use of the funds and specify metrics used to measure success. A renewal application would need to demonstrate movement toward the program goals. Articulating these plans would likely improve the chance of success and could prove instructional to other campuses and or future programs.

A second important reason for using a set-aside rather than a formulaic approach is that set-asides allow more flexibility to change over time in response to changes in the types of students targeted for additional funding as circumstances change. Perhaps the large infusion of K-12 funding for these students will lessen the need for additional funding at UC. Or perhaps other priorities will warrant these additional funds in the future.

Appendix C

| | | Berkeley | Davis | Irvine | Los Angeles | Riverside | San Diego | Santa Barbara | Santa Cruz | |
|--|----------|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--|
| Weighting of Student Categories | | Enrollments | | | | | | | | |
| Plan 1 - Current (1 UG, 2.5 PhD, 5 Hlth Sci) | budgeted | \$358,364,181 | \$351,834,497 | \$311,582,194 | \$457,214,664 | \$211,170,702 | \$330,149,348 | \$211,689,697 | \$173,010,473 | |
| | actual | \$329,327,115 | \$380,557,091 | \$320,144,945 | \$444,169,043 | \$220,506,730 | \$362,667,927 | \$197,651,964 | \$149,990,942 | |
| Plan 2 - Unweighted (1 for all) | budgeted | \$350,721,576 | \$337,286,972 | \$316,924,922 | \$393,952,772 | \$242,669,722 | \$328,860,286 | \$237,682,714 | \$196,916,793 | |
| | actual | \$356,882,465 | \$351,740,628 | \$311,763,143 | \$457,762,684 | \$210,544,907 | \$331,996,451 | \$211,932,765 | \$172,392,714 | |
| Plan 3 - Add new Acad MS Weight of 1.5 (1, 1.5 MS, 2.5, 5 Hlth Sci) | budgeted | \$356,882,465 | \$351,740,628 | \$311,763,143 | \$457,762,684 | \$210,544,907 | \$331,996,451 | \$211,932,765 | \$172,392,714 | |
| | actual | \$327,358,369 | \$380,405,922 | \$319,842,416 | \$444,519,657 | \$220,429,586 | \$365,635,519 | \$196,967,534 | \$149,856,755 | |
| Plan 4 - Acad MS; elim med res (1, 1.5, 2.5, 5/0) | budgeted | \$374,903,664 | \$344,916,897 | \$303,878,187 | \$423,456,858 | \$221,645,873 | \$331,625,262 | \$223,106,906 | \$181,482,109 | |
| | actual | \$349,005,792 | \$366,259,553 | \$314,093,294 | \$419,632,528 | \$231,196,824 | \$354,279,986 | \$210,440,516 | \$160,107,264 | |
| Plan 5 - Non-med Hlth Sci Prof @ 2.5; elim med res (1, 1.5, 2.5, 5/2.5/0) | budgeted | \$366,632,853 | \$349,541,258 | \$309,366,943 | \$439,502,879 | \$216,521,012 | \$329,330,487 | \$216,928,936 | \$177,191,389 | |
| | actual | \$339,796,928 | \$374,586,473 | \$317,190,936 | \$431,790,486 | \$225,679,196 | \$356,847,183 | \$204,199,649 | \$154,924,907 | |
| Plan 3 vs. Current- eff of new Acad MS at 1.5 | budgeted | -\$1,481,716 | -\$93,869 | \$180,949 | \$548,020 | -\$625,795 | \$1,847,102 | \$243,068 | -\$617,759 | |
| | | -0.4% | 0.0% | 0.1% | 0.1% | -0.3% | 0.6% | 0.1% | -0.4% | |
| Plan 3 actual vs. Current- eff of new Acad MS at 1.5 | actual | -\$31,005,812 | \$28,571,424 | \$8,260,222 | -\$12,695,007 | \$9,258,884 | \$35,486,170 | -\$14,722,163 | -\$23,153,718 | |
| | | -8.7% | 8.1% | 2.7% | -2.8% | 4.4% | 10.7% | -7.0% | -13.4% | |
| Plan 5 actual vs. Current - eff of reducing Hlth Sci | actual | -\$18,567,253 | \$22,751,976 | \$5,608,742 | -\$25,424,178 | \$14,508,494 | \$26,697,835 | -\$7,490,049 | -\$18,085,566 | |
| | | -5.2% | 6.5% | 1.8% | -5.6% | 6.9% | 8.1% | -3.5% | -10.5% | |



Appendix D: Summary of 2021-2022 Campus Allocations of State General Funds under Rebenching

| | BERKELEY | DAVIS | IRVINE | LOS ANGELES | RIVERSIDE | SAN DIEGO | SANTA BARBARA | SANTA CRUZ |
|--|-----------------|---------------|---------------|--------------------|------------------|------------------|----------------------|-------------------|
| Allocation of state general funds 2021-22 | | | | | | | | |
| Enrollment-based | \$356,588,240 | \$352,968,964 | \$311,640,006 | \$458,552,695 | \$211,086,778 | \$331,388,332 | \$210,633,303 | \$172,157,439 |
| Total (less Student aid) | \$394,284,679 | \$404,184,638 | \$335,139,241 | \$530,489,062 | \$290,303,771 | \$389,267,028 | \$238,785,724 | \$200,616,110 |
| Budgeted student enrollment | | | | | | | | |
| Weighted for Rebenching | 44537 | 44086 | 38923 | 57272 | 26365 | 41391 | 26308 | 21502 |
| Unweighted | 33546 | 32261 | 30275 | 37677 | 23211 | 31288 | 22734 | 18795 |
| Enrollment-based allocation | | | | | | | | |
| per weighted student | \$8,007 | \$8,006 | \$8,007 | \$8,007 | \$8,006 | \$8,006 | \$8,006 | \$8,007 |
| per unweighted student | \$10,630 | \$10,941 | \$10,294 | \$12,171 | \$9,094 | \$10,592 | \$9,265 | \$9,160 |
| Rank | 3 | 2 | 5 | 1 | 8 | 4 | 6 | 7 |
| Total allocation | | | | | | | | |
| per weighted student | \$8,853 | \$9,168 | \$8,610 | \$9,263 | \$11,011 | \$9,405 | \$9,077 | \$9,330 |
| Rank | 7 | 5 | 8 | 4 | 1 | 2 | 6 | 3 |
| per unweighted student | \$11,754 | \$12,529 | \$11,070 | \$14,080 | \$12,507 | \$12,441 | \$10,503 | \$10,674 |
| Rank | 5 | 2 | 6 | 1 | 3 | 4 | 8 | 7 |

Appendix E

| Asymmetries | | | | | | | | | | |
|----------------------------|-----------|-----------|-----------|-------------|----------|-----------|-----------|---------------|---------------|------------|
| | Berkeley | Davis | Irvine | Los Angeles | Merced | Riverside | San Diego | San Francisco | Santa Barbara | Santa Cruz |
| Year founded | 1873 | 1959 | 1965 | 1927 | 2005 | 1959 | 1959 | 1964 | 1958 | 1965 |
| Endowment (1000s)*** | 4,886,203 | 1,687,615 | 1,036,416 | 5,541,653 | 62,095 | 281,338 | 1,911,374 | 4,339,869 | 438,137 | 221,485 |
| UG Pell Grants | 27% | 32% | 38% | 27% | 61% | 49% | 32% | | 30% | 31% |
| UG First generation | 29% | 39% | 47% | 29% | 71% | 54% | 36% | | 35% | 35% |
| URMs* | 21% | 25% | 27% | 25% | 59% | 42% | 22% | 25% | 27% | 30% |
| Admit rate***** | 15% | 49% | 29% | 11% | 88% | 66% | 34% | | 29% | 59% |
| HS GPA of middle 25-75% | 4.12-4.30 | 3.95-4.25 | 3.96-4.26 | 4.19-4.32 | 3.39-4.0 | 3.7-4.13 | 4.07-4.29 | | 4.10-4.29 | 3.81-4.20 |
| Nonresident | 24.5% | 17.32% | 19.6% | 23.6% | 0.4% | 3.8% | 24.1% | 10% | 17.9% | 9.2% |
| Ph.D. student enrollment** | 16.8% | 12.2% | 11.4% | 15.5% | 8.7% | 9.2% | 11.5% | 25% | 10.9% | 8.6% |
| CA resident UG enrollment | 24,014 | 26,169 | 23,672 | 24,544 | 8,287 | 21,990 | 25,308 | | 18,969 | 16,477 |
| Non-resident UG enrollment | 7,789 | 5,488 | 5,777 | 7,578 | 34 | 878 | 8,035 | | 4,122 | 1,644 |

UG data are from <https://universityofcalifornia.edu/about-us/information-center/fall-enrollment-glance>

* Domestic African American, Hispanic/Latinx, and American Indian/Native American students

** PhD to CA resident undergraduate ratio; figures from 2020-2021 enrollments used for Rebenching

*** 2021 figures from <https://www.ucop.edu/investment-office/investment-reports/annual-reports/annual-endowment-report-2021.pdf>

***** 2021 freshman admit data from <https://admission.universityofcalifornia.edu/campuses-majors/freshman-admit-data.html>