

# UC DAVIS

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## BUDGET AND INSTITUTIONAL ANALYSIS

WORKING PAPER, V1

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### **Incentive-Based Budget Model Graduate Tuition Allocation**

The following information is intended to provide context for a discussion on allocating graduate tuition revenue within an incentive-based budget. The scope of this paper is limited to graduate academic programs – graduate professional and self-supporting degree programs will be covered separately. This paper is to serve as a starting place for deciding the specific aspects of allocating graduate tuition. As with other elements of the budget model, the initial step will be to develop a formula that identifies the proportion of graduate tuition already included in base budgets. Going forward, the aspects described in this paper will drive future allocations that come as a result of growth or re-allocation.

#### **PRINCIPLES**

Before delving into the specifics of graduate tuition allocation, it is important to reiterate the over-arching principles of the UC Davis budget process. These principles should help inform the decisions to be made on specific aspects of the budget model.

1. Establish a sustainable funding model with incentives that advance the Vision of Excellence.
2. Advance and encourage campus strengths and priorities such as interdisciplinary scholarship and internationalization, as well as boost economic development.
3. Be transparent, linking authority with accountability.
4. Be as simple as possible to understand, administer and implement; rely on common and easily available data sources.
5. Encourage creativity and responsible risk-taking while providing for reasonable reserves and oversight.
6. Balance local autonomy with a strong sense of unity in vision and values.
7. Provide mechanisms for investments in fresh ideas at all levels.
8. Provide for reasonable transitions and bridging strategies.

Additionally, specific to graduate education the model should:

9. Direct as much graduate tuition revenue as possible to graduate student support and academic programs.

10. Recognize the effort by the faculty in support of graduate education, especially in the areas of teaching and mentoring graduate students.
11. Minimize the financial barriers to accepting national and international students.
12. Recognize the role of teaching assistantships as both support for undergraduate programs and training and financial support for graduate students.

## TERMINOLOGY

The term **enrollment** refers to the graduate program of study that a student is registered. For this proposal, a portion of the graduate tuition revenue would be allocated to the dean based on the program of enrollment. Allocations for graduate groups based on enrollment would flow to the lead dean.

**Fee remission** is a benefit of employment for students employed as teaching assistants (TAs), associates in \_\_\_ (As), readers, tutors or graduate student researchers (GSRs). In general, a student must be employed at or above 25% time to be eligible for fee remission. While it may be more accurate to speak in terms of tuition remission and fee remission separately, fee remission is often used to encompass tuition and campus-based fees. The specific campus-based fees that are remitted vary by position.

The term **financial aid** encompasses a variety of mechanisms to help students pay education expenses. It includes federal, state and private sector support in the form of grants, loans and work-study programs. The term **return-to-aid** (RTA) is the portion of tuition revenue that, per Regental policy, is dedicated to the University Student Aid Program (USAP). For graduate academic students, the policy is that 50% of any increase in tuition or the student service fee will go towards return-to-aid. In the undergraduate model, the tuition distributed to units is net of RTA. As explained later, this would not be the case for graduate tuition. Total tuition will be distributed, and over 50% of the funding will be directly used for support.

The **general fund**, known by its fund number (19900) includes the state appropriation and tuition revenue (resident and nonresident supplemental).

**Graduate programs** at UC Davis are either **departmentally-based programs** or **graduate groups**. In general, departmentally-based programs are governed within a single department and comprised of the faculty within that particular department. By contrast, graduate groups bring together faculty from departments across campus that share common research interests and establish independent governance. This proposal is specific to tuition generated by students enrolled in graduate academic programs. Tuition from students in graduate professional programs and fees from self-supporting degree programs will be handled separately.

The term **lead dean** is used to recognize the dean that is responsible for an interdisciplinary organization on campus (e.g., a graduate group, research center). In the context of graduate education, each graduate group has a lead dean.

The **major professor** for a graduate student is the faculty member who supervises the student's research and dissertation and serves as the chair of the student's dissertation committee. In this proposal, a portion of graduate tuition revenue would be allocated based on major professor and would flow to the dean.

**Student credit hours (SCH)** are a measurement of instructional workload. Generally, the SCH for a course is equal to the credit value of the course multiplied by the number of students enrolled. In this proposal, a portion of graduate tuition revenue would be allocated based on student credit hours and would flow to the dean.

For purposes of this paper, the term **tuition** includes the tuition paid by all graduate students (formerly called the educational fee) enrolled in departmentally-based graduate programs, graduate groups and the School of Education credential programs. For 2012-13, tuition is \$11,220 per year. **Nonresident supplemental tuition (NRST)** is the additional tuition paid by national and international students. For 2012-13, nonresident supplemental tuition is \$15,102 per year – or \$26,322 per year when combined with tuition. This paper is focused on the methodology for allocating tuition and NRST. The Student Services Fee (\$972 for 2012-13) is excluded, because its uses are restricted to student services and cannot be used to directly support instruction. Campus-based fees (\$915 - without health insurance - for 2012-13) are also excluded, because they are, in general, dedicated to specific purposes and are not available for the allocation process described in this document. This paper excludes professional tuition and self-supporting degree fees; these will be covered in a subsequent paper.

Unless otherwise stated, the term **unit** is intended to refer to the primary campus organizational units that are led by a dean, vice provost or vice chancellor.

## BACKGROUND

The scope of this paper is limited to graduate academic programs – graduate professional and self-supporting degree programs will be covered separately. Currently, there are 81 graduate academic programs on campus, consisting of 39 departmentally-based graduate programs and 42 graduate groups. Enrollment at UC Davis in graduate education has increased by 28% from 2001-02 to 2011-12, compared with a 16% increase in undergraduates over the same period. In 2011-12, the three quarter average of students was 4,205 (2,234 in departmentally-based programs and 1,971 in graduate groups).

But there are challenges with increased enrollment. Financial support for graduate students has not kept up with the increasing cost of tuition, and there is increased competition for limited resources. In May of 2011, the Joint Administration / Academic Senate Special Task

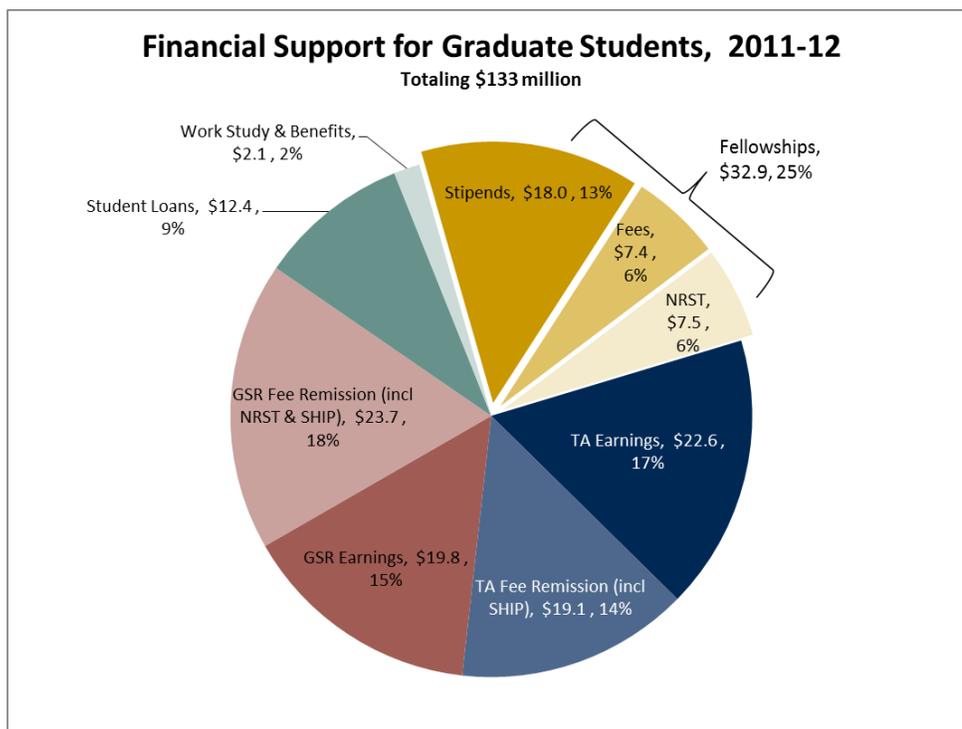
Force on Graduate Education was appointed. One element of its charge was to assess the various ways UC Davis supports graduate education and how this might be further improved.

In developing this proposal we have considered the conclusions of the Task Force (the full report is available here: <http://provost.ucdavis.edu/initiatives-and-activities/initiatives/initiative-ja-as-ge.html>). To the extent possible, the model attempts to address the concerns of the Task Force through the following attributes:

- Recognizing faculty effort in support of graduate education in both teaching and mentoring.
- Ensuring that the full amount of graduate tuition flows to activities that support graduate education.
- Recruiting and attending to special needs of international students.

**Financial support for graduate students**

While the focus of this paper is on graduate tuition as a source of revenue for the campus, it is important to acknowledge that tuition is only one source of graduate student support. In the broadest sense, total financial support for graduate students is approximately \$133 million. Financial support is comprised of fellowships (\$32.9 million), earnings and fee remission for TAs and other teaching positions (\$22.6 million and \$19.1 million, respectively), earnings and fee remission for GSRs (\$19.8 million and \$23.7 million, respectively), student loans (\$12.4 million), work study earnings (\$1.3 million), and other employee benefits (\$0.9 million). The sources of this support include graduate tuition revenue, unrestricted state funding, extramural research funding (direct charges and indirect cost recovery), and endowments, gifts and grants.



We can also make some comparisons as to how this support is distributed between departmentally-based programs and graduate groups. Focusing on competitive financial support (TA and GSR positions and fellowships), students in departmentally-based programs and students in graduate groups receive similar levels of support. As displayed in Table 1, during 2011-12, total competitive financial support for students in departmentally-based programs was \$59.7 million. For students in graduate groups, the level of support was \$58.4 million. On a per student basis, recipients in departmentally-based programs obtained about \$10,000 per quarter compared to almost \$11,000 per quarter for recipients in graduate groups. The biggest difference between the two types of graduate programs is in the category of fellowships and grants. Recipients in departmentally-based programs were awarded, on average, roughly \$3,600 per quarter, while recipients in graduate groups were awarded about \$5,000 per quarter. See Appendix III for additional details on financial support for graduate students.

<b>Table 1: Financial Support for Graduate Students - Competitive Support</b>				
<b>Total and average per recipient per quarter</b>				
<b>(\$ in thousands)</b>				
<b>Type of Program</b>	<b>TA Support<sup>1</sup></b>	<b>GSR Support<sup>2</sup></b>	<b>Fellowships/Grants<sup>3</sup></b>	<b>Total</b>
Departmental Programs	\$28,311	\$17,380	\$14,012	\$59,704
<i>Avg. support/recipient/qtr.</i>	<i>\$3.3</i>	<i>\$3.2</i>	<i>\$3.6</i>	<i>\$10.0</i>
Graduate Groups	\$13,392	\$26,144	\$18,882	\$58,418
<i>Avg. support/recipient/qtr.</i>	<i>\$3.2</i>	<i>\$3.3</i>	<i>\$5.0</i>	<i>\$10.9</i>
<b>Total Support</b>	<b>\$41,703</b>	<b>\$43,524</b>	<b>\$32,895</b>	<b>\$118,122</b>
<i>Avg. support/recipient/qtr.</i>	<i>\$3.3</i>	<i>\$3.3</i>	<i>\$4.3</i>	<i>\$10.6</i>

<sup>1</sup>TA Support includes earnings, GSHIP and fee remission for TAs, AIs, readers and tutors

<sup>2</sup>GSR Support includes earnings, GSHIP, fee remission and NRST remission

<sup>3</sup>Fellowships/Grants includes stipends, fee remission and NRST remission

While the financial support on a per recipient basis is fairly close, this does not imply that departmentally-based programs and graduate groups do not face other challenges. Departmentally-based programs and graduate groups that are closely aligned with a department can more easily place students in TA positions than graduate groups that are not aligned with a department. Another difference is that, in general, graduate groups are in disciplines that have greater access to extramural research funding, which brings with it an additional opportunity for supporting graduate students.

### **Campus leadership for graduate education**

Currently, the dean of Graduate Studies (now also vice provost of Graduate Education) and the deans of the schools, colleges and divisions each have a role in graduate education and funding graduate student support. The dean of Graduate Studies oversees the administration of graduate programs for the campus, distributes graduate fellowship and related funding, and appoints the chairs of the graduate groups. The deans of the schools, colleges and divisions are engaged with graduate education as part of their leadership of the academic programs. They

provide unit funding for graduate support in the form of TA positions, fellowship funds and administrative support to departments. Administrative support for graduate groups is jointly funded by the dean of Graduate Studies and the deans of the schools, colleges and divisions. The proposed budget model recognizes this dual role of responsibility.

## **CURRENT FUNDING MODEL**

Currently, revenue from graduate academic tuition is approximately \$54 million per year. For context, the revenue from undergraduate tuition is roughly \$290 million (including return-to-aid), and indirect cost recovery from research sponsors generates about \$120 million.

Per Regental policy, roughly 50% of graduate tuition must be dedicated to return-to-aid. At UC Davis, about 75% of the revenue from graduate tuition is distributed back to graduate students in the form of fellowships, grants or fee remission. The remainder is distributed as part of the general fund that supports campus instruction and research. Each of these distributions is described in more detail below. See Appendix I for a graphical representation of the current flow of graduate tuition revenue.

### **General funds for academic programs**

About 25% (\$14 million in 2012-13) of graduate tuition revenue is already allocated to the campus units. It is a part of their existing general fund base budget, but it is not categorized as graduate tuition. Instead, graduate tuition is captured under the larger heading of general funds which supports the academic endeavors of the campus, including funding for faculty and staff salaries, operating expense, and any other costs associated with the academic mission. Similar to undergraduate tuition, one of the goals of this component of the budget model is to develop a formula that, in effect, reveals the amount of graduate tuition that each unit has within their current budget.

One exception to this category is the \$0.6 million of general funds allocated for administrative support for graduate groups. These funds are allocated by formula from the dean of Graduate Studies to the lead deans of the graduate groups. The lead deans are expected to, at a minimum, match the funding from Graduate Studies. This mechanism is intended to ensure equity between departmentally-based programs and graduate groups, but this is difficult to assess since there has been five years of base budget reductions and the development of many shared services and consolidated administrative structures. It may be advisable to revisit this allocation as part of the overall review of graduate tuition.

### **Fee remission and tuition buy-down for GSRs**

While fee remission is a vital component of graduate student support, it is also a benefit of employment that is provided automatically when a student is appointed to a TA, AI, reader, tutor or GSR position at or above 25% time. All of these positions receive full remission of their tuition (terms set as part of the collective bargaining process), and GSRs are eligible for remission of the NRST. Other campus fees are remitted based on the appointment type. If the student is employed in more than one unit or in another eligible title code, then the fees are

split between the appointments. Student Health Insurance Program funding (SHIP) is also provided as a benefit of employment.

Currently, close to 50% of graduate tuition revenue (about \$25 million in 2012-13) is spent on fee remission for TAs and other teaching positions (about \$20 million) and GSRs paid with general funds (about \$5 million). The decentralization of employee benefits that occurred in 2012-13 did not include fee remission. So, the funding that supports fee remission is still held centrally, not in the individual units. A rationale for decentralizing fee remission like all other employee benefits is discussed in a subsequent section of the paper.

While not funded by tuition revenue, another central program that helps support graduate students is the GSR buy-down program. When GSRs are paid on extramural funds, the tuition and SHIP must be charged to the grant. If the GSR is a national or international student, then the NRST must also be charged to the grant. Beginning in July 2006, the campus subsidizes 25% of these costs as part of the GSR buy-down program. The total cost of the buy-down program in 2011-12 was \$4.1M. The funding comes from the share of indirect cost recovery retained by the provost. When implemented, this program sought to mitigate the effect of multiple years of large tuition increases and to mitigate the rising cost of a GSR when compared to a postdoctoral scholar. As noted in a recent presentation by Graduate Council, this is still a significant issue. In 2012-13, the average cost of a resident GSR charged to an extramural grant is about \$40,000, while the cost for a postdoctoral scholar is roughly \$47,000. For a student subject to the NRST, the amount charged to the grant exceeds \$51,000. This situation is exacerbated by the fact that a GSR works, on average, 60% of a calendar year while a postdoctoral scholar is usually working 100%. Lastly, this comparison is based on the direct costs charged to a grant and does not include the indirect costs. Since the indirect cost rate is not applied to tuition or the NRST, then the indirect costs for a postdoctoral scholar are greater than a GSR. See Appendix IV provided for additional details on this comparison.

### **Fellowships and other graduate student support**

Graduate Program Fellowship Allocations (formerly called block grants) are a primary source of funding for fellowships provided by graduate programs to their students. The funds are distributed by the dean of Graduate Studies based on a formula that considers the size of the program and type of degree offered (doctoral students are weighted more than masters students). However, the dean has proposed and is developing a methodology that incorporates specific metrics to determine allocations to programs. Programs choose how to use these funds to best support their students. Fellowships may be distributed to students as stipends (to pay for living expenses), used to pay for tuition (resident and nonresident supplemental), or a combination of the two. For 2012-13, the fellowship allocations were almost 20% (roughly \$10 million) of graduate tuition revenue.

The dean of graduate studies also sponsors other targeted programs for graduate support. These include humanities/social science fellowships, campuswide competitive fellowships, and matching funds for dean priorities and training grants. Currently, these programs account for more than 5% of graduate tuition revenue (approximately \$5 million).

While general funds are the primary funding source, endowments earnings (approximately \$0.6 million) and indirect cost recovery (\$2.6 million) also support these programs.

## **PROPOSED FUNDING MODEL FOR GRADUATE TUITION REVENUE**

It is important to be clear about the scope of this proposal. The methodology presented here is focused on how best to distribute the tuition and nonresident supplemental tuition that the campus receives from, or on behalf of, its graduate students. Implementing this component of the budget model will not add resources to the system. Instead, the model will create incentives for future years and serve as a mechanism to distribute the revenue in a more transparent manner.

The following sections summarize the significant changes between this proposal and the current methodology. See Appendix II for a graphical representation of the proposed allocation methodology.

### **Decentralization of fee remission**

One of the significant features of the proposed model is that it recommends the decentralization of funding for fee remission. Through decentralization, deans would receive a separate provost allocation (base funding) equivalent to the current budget authority coming from the central pool. The rationale for this approach is described below.

First, similar to the justifications for decentralizing other employee benefits (health insurance, retirement, etc.) in 2012-13, decentralizing the funding for fee remission would create a clearer connection between the expense and the unit that is responsible for the appointment. Because the funding for fee remission is held centrally, the base budgets at the unit level do not reflect the full operating costs of those units. Second, decentralizing fee remission will reinforce the idea that graduate tuition is not the only, or even primary, source of funds that can be used to pay these costs. Lastly, the current funding model creates an incentive for units to package appointments in such a way that maximizes fee remission while not necessarily being the most effective use of scarce resources. A decentralized approach asks units to be responsible for the full cost of each graduate student appointment (salary and fee remission). Finally, a decentralized model creates a consistent funding approach for general funds and other funds such as extramural research.

To decentralize the central funds, units would receive a base budget allocation equivalent to the amount spent on fee remission for TAs, AIs, readers, tutors, and GSRs paid from general funds during the prior year. Going forward, the hiring unit would be responsible for paying fee remission. If a greater number of TAs are hired than in the previous year, deans or departments could use any funds available to them to pay for the fee remission, including graduate tuition, undergraduate tuition or provost allocation. As tuition increases, the fixed cost implications of TA fee remission would be considered as part of the overall campus budget process similar to increases in composite benefit rates or other fixed salary cost increases.

### **Return-to-aid in the new model**

Another significant feature of the new model is how to account for graduate return-to-aid. In the undergraduate model, the first call on the revenue is for RTA – approximately 30%. A similar set-aside of 50% of the revenue is not a part of the proposed model for graduate tuition. Instead, we will be allocating 100% of the revenue to campus units, and it will be labeled graduate tuition. Because of this change and because the campus augments graduate tuition revenue with indirect cost recovery, endowment earnings and other funds, the campus will be able to easily demonstrate that we spend in excess of 50% of the tuition to directly support graduate students, which is the expectation from the Office of the President.

### **Increased participation by the deans of the schools, colleges and divisions**

Currently, decisions made by graduate programs are highly decentralized. Because of this environment it is often difficult to determine where a graduate program should turn for additional resources: the dean of Graduate Studies, the lead dean of the graduate group, the dean of the home department of a particular faculty member. The proposed methodology will make clear how much is allocated to each unit and creates an expectation that the deans will transparently manage the funds.

### **Maintain existing levels of support for OGS**

The proposed methodology assumes a consistent level of funding for the Office of Graduate Studies. Currently, Graduate Studies is responsible for managing funds for a variety of purposes, including the following:

1. Graduate Program Fellowship Allocations (formerly called block grants)
2. Administrative support for graduate groups
3. Matching funds for graduate student support
4. Graduate Studies administrative costs

Graduate Studies may choose to modify the way in which it allocates these funds, but any such modifications are not a part of this proposal. Further, Graduate Studies will continue to make allocations directly to graduate programs.

To maintain the existing level of funding for Graduate Studies, this paper proposes that 40% of tuition and 15% of NRST be allocated to the dean of Graduate Studies via the provost.

### **Supplemental tuition from national and international students**

For graduate tuition, the starting assumption is that tuition and nonresident supplemental tuition will be allocated separately and will be based on a unit's specific enrollment. For graduate tuition revenue, this seems reasonable for three reasons.

First, by allocating NRST as a separate revenue stream, we hope to significantly reduce the barrier of admitting an international graduate student. This point, in particular, is consistent with a recommendation from the Special Task Force on Graduate Education to recruit and attend to special needs of international students. Second, decisions about graduate students

are local and specific. Unlike the undergraduate environment, graduate programs admit and provide support for particular students. Third, graduate students do not take courses outside of their field of study to the extent that undergraduate students do when completing their general education requirements.

Table 2 shows the distribution by unit of students assessed the NRST. The percentages are based on a two-year average (2010-11 and 2011-12). The complete data set is available here: [http://budget.ucdavis.edu/data-reports/documents/enrollment-reports/Enrlxfee\\_GR.pdf](http://budget.ucdavis.edu/data-reports/documents/enrollment-reports/Enrlxfee_GR.pdf).

This paper proposes that 85% of the NRST be allocated to the unit based on the student's program of enrollment. For graduate groups, the allocations will be made to the lead dean of the group. As the number of national and international graduate students grows, the majority of the revenue will follow the student.

<b>Table 2: Distribution of students assessed NRST (two-year average)</b>		
<b>Unit</b>	<b># of Students</b>	<b>% of Total</b>
CA&ES	259	23%
CBS	68	6%
COE	385	35%
HArCS	62	6%
MPS	164	15%
DSS	114	10%
SOE	10	1%
SOM	9	1%
SVM	34	3%
<b>Total</b>	<b>1,105</b>	<b>100%</b>

Like the rest of the budget model, the proposed 85% distribution of the NRST provides an opportunity in the future, but it does not provide immediate relief to the NRST barrier. There are other approaches that would reduce this barrier more quickly. One is blended tuition rates for students charged to contracts and grants. Another is an infusion of new resources dedicated for this specific purpose.

At UC San Diego, they have established blended rates that combine the base tuition and NRST for GSRs paid by contracts and grants. Instead of charging a grant for the tuition that a particular student is assessed, the grant is charged the average tuition based on a pool of students. For example, if the pool of students is 100, with 75 charged tuition (\$11,220) and 25 charged tuition and NRST (tuition + NRST = \$26,322), then a grant would be charged the blended or average rate of \$14,996, instead of charging \$11,220 for residents and \$26,322 for national and international students.

An advantage of this approach is that the tuition support charged to a grant for residents and nonresidents would be identical. The blended rate would allow a faculty member to select the best student, free from the financial concern of whether or not the student is subject to the NRST. A disadvantage is that while some grants would be charged less (about \$11,000 less based on the example above), most grants would be charged more (about \$4,000 more based on the example above). Also, based on the model at UC San Diego, there is not one blended rate but eight different rates, based on discipline and sub-discipline. Lastly, the campus would need approval from the federal government before it could implement such a program.

Another option is to dedicate new revenues coming to campus towards increasing graduate student fellowships. These fellowships would be dedicated to paying for the NRST and would

have the added benefit of allowing more flexibility for current fellowship funding. Current fellowships could continue to be used to cover NRST or re-purposed into other forms of support.

### **Acknowledge teaching and mentorship aspects of graduate education**

Another recommendation from the Special Task Force on Graduate Education is to recognize faculty service effort in support of graduate education. To that end, the proposed methodology allocates 60% of the tuition to the schools, colleges and divisions based on three metrics: student credit hours (50%), program of enrollment (25%) and major professor (25%). A hypothetical distribution of graduate tuition (excluding NRST) using these weighted metrics is shown in Table 2.

<b>Table 2: Hypothetical Distribution of Graduate Tuition Revenue</b>				
<b>Unit</b>	<b>SCH<sup>1</sup></b>	<b>Enrollment<sup>2</sup></b>	<b>Major Professor</b>	<b>% of Grad Tuition Rev 50-25-25 Allocation</b>
CA&ES	20%	22%	23%	21%
CBS	10%	9%	5%	8%
ENGR	20%	21%	21%	21%
HArCS	8%	8%	9%	8%
MPS	13%	12%	12%	13%
DSS	12%	11%	12%	12%
SOE	7%	9%	7%	7%
SOM	6%	2%	7%	5%
SVM	4%	3%	3%	4%
Other units	0%	3%	1%	1%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

<sup>1</sup>SCH are double-counted when pay and course units are different; manually adjusted to control for comingling of graduate academic and graduate professional data

<sup>2</sup>Duplicated count for any students enrolled in multiple programs

### *Student credit hours*

While other universities tend to emphasize the program of enrollment for the graduate component, given the interdisciplinary nature of our graduate groups, it seems appropriate to weight student credit hours more heavily than the other factors. Also, the percentage being attributed to SCH is intended to achieve a dollar of revenue per SCH that is not less than the same measure in the undergraduate module. For example, the current proposal yields about \$90/SCH for graduate tuition compared to roughly \$78/SCH for undergraduate tuition.

Allocations based on SCH would flow to the dean. Similar to the undergraduate model, when the pay and course units are different, then the SCH associated with the course will be credited to both units.

It is worth noting that the data for SCH in Table 2 are approximate. The SCH data are complicated by the fact that in the current set of reports, the data for the professional schools include SCH for all of their programs - graduate academic and professional. The data have been manually adjusted to account for this and are, therefore, not exact. A more accurate mechanism to separate the two programs within the schools of education, medicine and veterinary medicine is needed before funds can be allocated based on this metric.

It is also worth noting that the SCH data includes the variable-unit 299 research course series.

### *Enrollment*

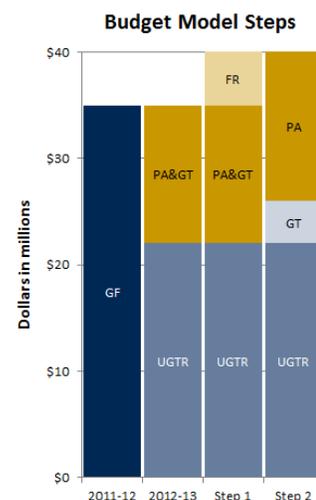
Similar to how we define degree major in the undergraduate environment, graduate enrollment is based on Student Information System Decision Support (SIS DS) report 410, Majors by Discipline, Three-quarter Average. Allocations based on enrollment would flow to the dean. Allocations for graduate groups would flow to the lead dean of the group.

### *Major professor*

For determining the major professor of a student, we are using the Graduate Student Inventory report, which is produced twice a year (fall and spring) by BIA. We intend to use the spring report, because incoming Ph.D. students may not have a major professor when the fall survey is completed. For this report, each faculty member is linked to her primary department and the data are summarized at the level of the schools, colleges and divisions. Allocations based on major professor would flow to the dean. The most current report is available here: [http://budget.ucdavis.edu/data-reports/documents/enrollment-reports/egrsfac\\_curr.pdf](http://budget.ucdavis.edu/data-reports/documents/enrollment-reports/egrsfac_curr.pdf).

### **Re-coloring exercise**

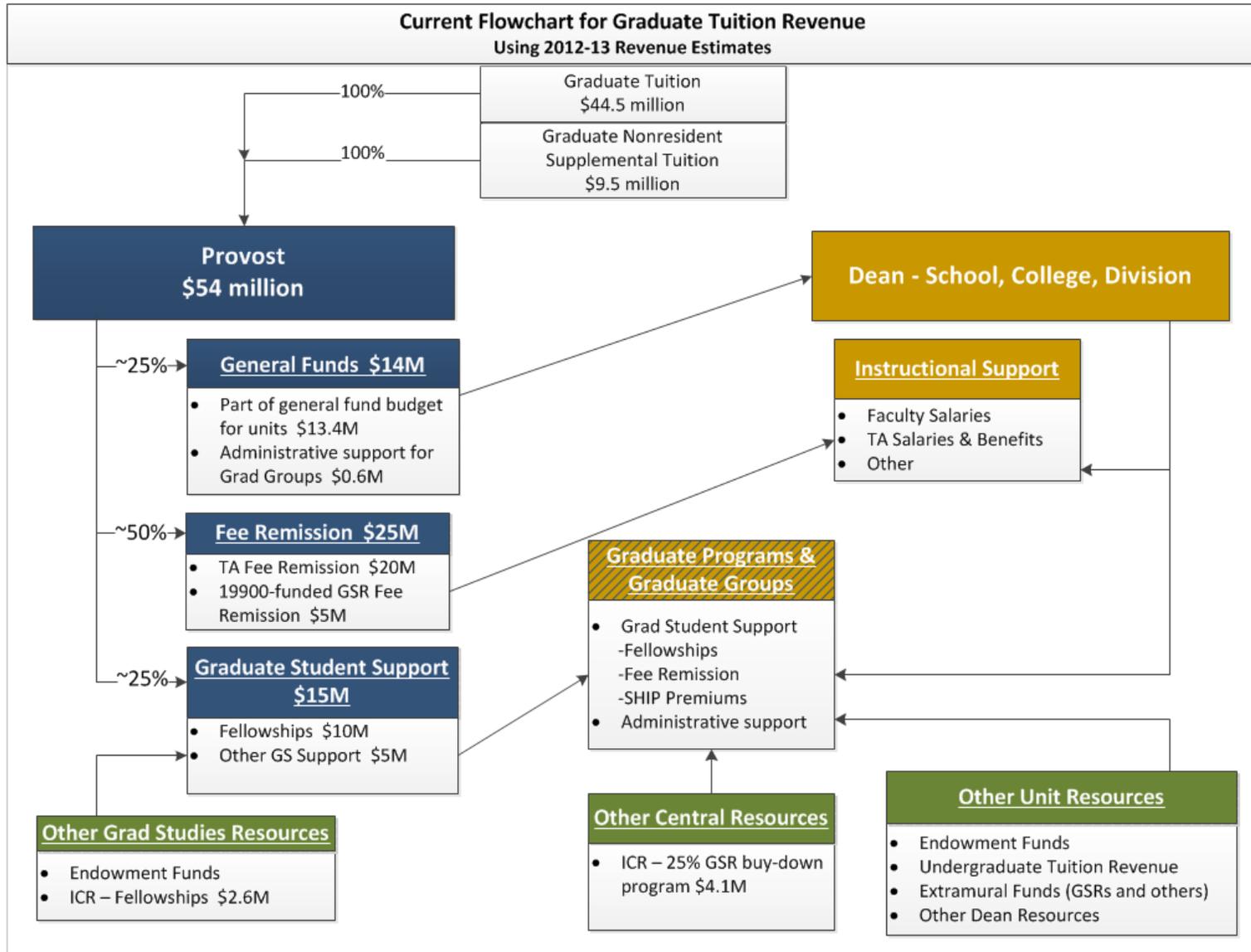
We have often referred to the initial implementation of the new budget model as the re-coloring of general funds. In the first year (2012-13), the general fund (GF) for each unit was divided into undergraduate tuition revenue (UGTR) and provost allocation (PA) (see chart at right). Because graduate tuition revenue (GT) was not included in the initial implementation, each unit's provost allocation includes a portion of this revenue. To incorporate graduate tuition into the budget model, we are proposing that, first, fee remission (FR) be decentralized as an increase to each unit's provost allocation (step 1). Then, by developing a formula for allocating graduate tuition, we will disaggregate it from the provost allocation (step 2).



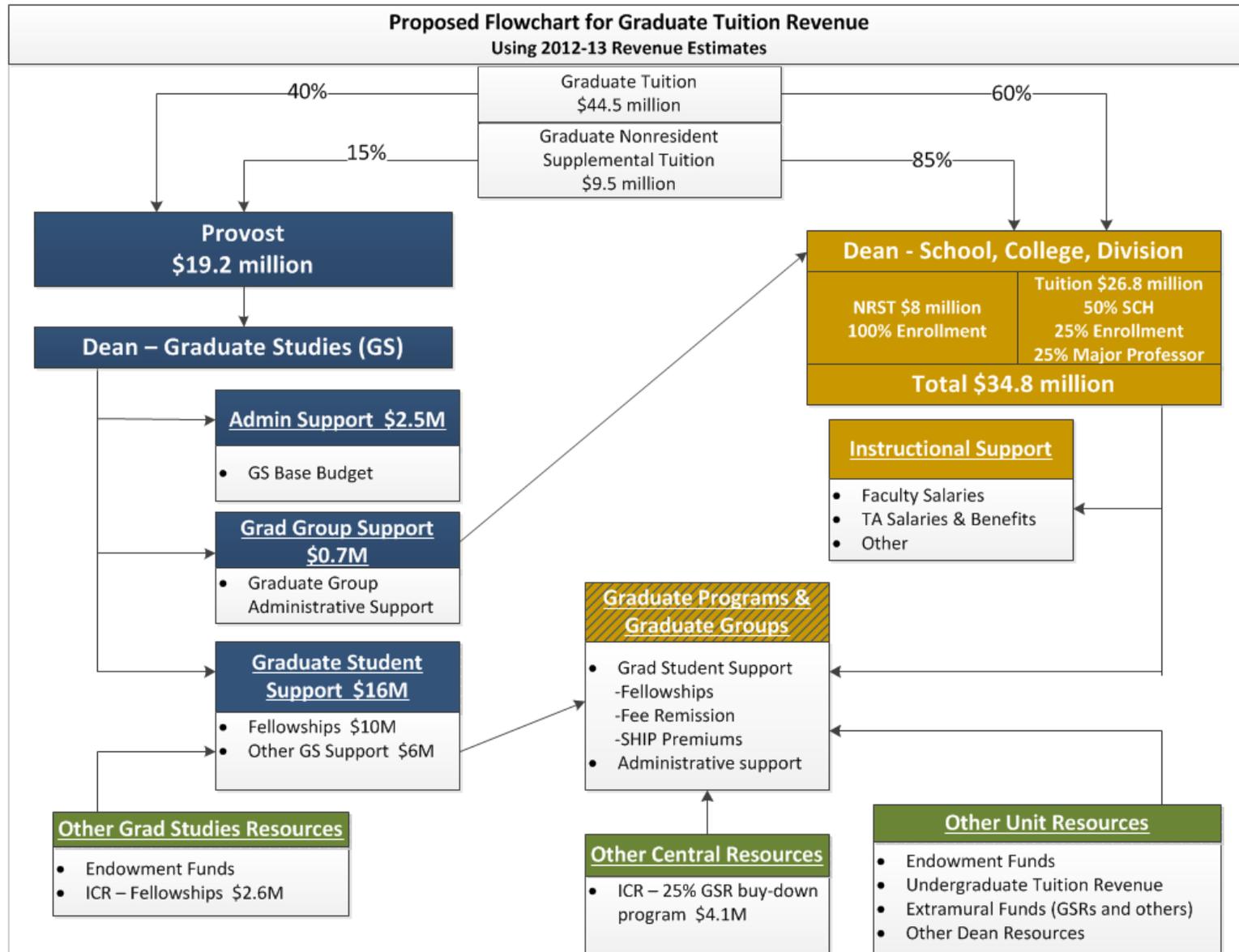
### **Impact on Academic Master's Pilot Program**

Under this proposal, the pilot program for academic master's students would end and the allocations for all graduate students would be treated according to the new methodology. The overall impact is that the deans of the schools, colleges and divisions would receive slightly more funding related to any new master's students. This is because the pilot program allocated funds after accounting for RTA. This had the effect of allocating 40% of tuition to the academic units (50% RTA x 80% of the additional revenue). The new methodology proposes to allocate 60% of tuition to the academic units. The pilot program allocated 80% of the NRST to the academic units. This paper proposes allocating 85% of the NRST to the academic units.

APPENDIX I



APPENDIX II



**APPENDIX III**  
**Financial Support for Graduate Academic Students, 2011-12**

	Included in Total Support														
	Total Support	Competitive Support	Included in Competitive Support										Work Study Earning	Fringe Benefit	Student Loan
			Teaching Assistantship (TA)			Research Assistantship (GSR)				Fellowship/Grant					
			Earning	SHIP	Fee Remission	Earning	SHIP	Fee Remission	Fee Remission NRT	Stipend	Fee	Fee NRT			
All programs (N = 81; 3Q Cumulative Enroll = 12,616)															
Cumulative support	\$120,270,158	\$118,121,808	\$22,582,749	\$2,766,092	\$16,354,082	\$19,802,656	\$2,969,346	\$17,972,419	\$2,779,900	\$18,005,752	\$7,419,598	\$7,469,210	\$1,270,174	\$878,175	\$12,423,250
Cumulative number recipients	11,300	11,300	4,666	4,023	4,007	4,393	4,218	4,211	571	4,257	2,126	1,319	362	8,552	2,650
Avg support/recipient/qtr.	\$10,643	\$10,453	\$4,839	\$687	\$4,081	\$4,507	\$703	\$4,267	\$4,868	\$4,229	\$3,489	\$5,662	\$3,508	\$102	\$4,688
% students enrolled receiving spprt	90%	90%	37%	32%	32%	35%	33%	33%	5%	34%	17%	10%	3%	68%	21%
% students enrolled receiving full spprt	54%														
Departmentally-based (N = 39; 3Q Cumulative Enroll = 6,701)															
Cumulative support	\$60,740,232	\$59,703,926	\$15,129,440	\$1,934,256	\$11,247,615	\$7,576,881	\$1,212,291	\$7,305,484	\$1,285,482	\$7,174,305	\$2,611,476	\$4,226,692	\$635,327	\$400,978	\$8,274,116
Cumulative number recipients	5,930	5,930	3,053	2,765	2,753	1,711	1,714	1,712	265	2,180	928	816	183	4,532	1,721
Avg support/recipient/qtr.	\$10,242	\$10,068	\$4,955	\$699	\$4,085	\$4,428	\$707	\$4,267	\$4,850	\$3,290	\$2,814	\$5,179	\$3,471	\$88	\$4,807
% students enrolled receiving spprt	88%	88%	46%	41%	41%	26%	26%	26%	4%	33%	14%	12%	3%	68%	26%
% students enrolled receiving full spprt	51%														
Graduate Groups (N = 42; 3Q Cumulative Enroll = 5,915)															
Cumulative support	\$59,529,925	\$58,417,881	\$7,453,308	\$831,836	\$5,106,467	\$12,225,774	\$1,757,055	\$10,666,935	\$1,494,418	\$10,831,447	\$4,808,121	\$3,242,517	\$634,846	\$477,196	\$4,149,134
Cumulative number recipients	5,370	5,370	1,613	1,258	1,254	2,682	2,504	2,499	306	2,077	1,198	503	179	4,020	929
Avg support/recipient/qtr.	\$11,085	\$10,878	\$4,620	\$661	\$4,072	\$4,558	\$701	\$4,268	\$4,883	\$5,214	\$4,013	\$6,446	\$3,546	\$118	\$4,466
% students enrolled receiving spprt	91%	91%	27%	21%	21%	45%	42%	42%	5%	35%	20%	9%	3%	68%	16%
% students enrolled receiving full spprt	56%														

- NOTES**
- 1) 3Q - Three quarters; FWS - Fall, Spring and Winter quarters.
  - 2) Cumulative means that a student enrolled in three quarters will be counted three times, two quarters two times, and one quarter one time.
  - 3) Total Support includes everything except student loan.
  - 4) Competitive Support includes earnings, SHIP and fee remissions from TA or GSR appointments and fellowships.
  - 5) Teaching Assistantship includes financial support for AIs, tutors and readers

# GSR vs. Postdoctoral Scholar Costs (calendar year example)

Assumptions

- Graduate Student Researchers
- Step V
- 46.9% academic year employment
- 100% summer employment
- 60% average employment over year

- Postdoctoral Scholar
- 0-11 months experience
- 100% time employment year-round

Amounts rounded to nearest \$100

	GSR Resident	GSR Resident 25% Buydown	GSR Non-resident	GSR Non-resident 25% Buydown	Postdoctoral Scholar
Salary	\$28,000	\$28,000	\$28,000	\$28,000	\$39,300
Benefits	\$400	\$400	\$400	\$400	\$7,900
Tuition	\$15,400	\$11,600	\$15,400	\$11,600	---
NRST	---		\$15,100	\$11,300	---
<b>TOTAL</b>	<b>\$43,800</b>	<b>\$40,000</b>	<b>\$58,900</b>	<b>\$51,300</b>	<b>\$47,200</b>

**Note:** This comparison is based on the direct costs charged to a grant and does not include the indirect costs. The indirect cost rate is applied to salary and benefits but not to tuition or the NRST.