UNIVERSITY OF CALIFORNIA



## FINAL COMMITTEE REPORT AND RECOMMENDATIONS TO THE PROVOST

COMPETITIVE GRADUATE STUDENT FINANCIAL SUPPORT ADVISORY COMMITTEE

JUNE 2006

Competitive Graduate Student Financial Support Advisory Committee

### **Committee Members:**

RICHARD ATTIYEH (Chair) Vice Chancellor for Research and Dean of Graduate Studies, San Diego

BETH BURNSIDE Vice Chancellor for Research Berkeley

THOMAS CESARIO Dean, School of Medicine Irvine

STANTON GLANTZ Professor of Medicine, San Francisco, and Chair, University Committee on Planning and Budget

KENJI HAKUTA Dean of Social Sciences, Arts, and Humanities, Merced

LARRY HERSHMAN Vice President for Budget Office of the President

WINSTON KO Dean of Mathematics and Physics Davis

DUNCAN LINDSEY Professor of Social Welfare, Los Angeles, and Chair, Coordinating Committee on Graduate Affairs

GLEN (GENE) LUCAS Executive Vice Chancellor Santa Barbara MARY ANN MASON Dean of the Graduate Division Berkeley

JOHN MEYER Vice Chancellor for Resource Management Davis

DANIEL NEUMAN Executive Vice Chancellor and Provost Los Angeles

BRYON NUTTALL Graduate student in mathematics Riverside

DALLAS RABENSTEIN Dean of the Graduate Division Riverside

LISA SLOAN Vice Provost and Dean of Graduate Studies Santa Cruz

ERIC VERMILLION Associate Vice Chancellor for Finance San Francisco

JOSE WUDKA Professor of Physics, Riverside, and Chair, University Committee on Research Policy

#### **Staff to the Committee:**

Kate Jeffery, Director, Student Financial Support, Office of the President David Alcocer, Jameel Alsalam, and Jean Fort, Student Financial Support, Office of the President

## Table of Contents

Executive Summary	iii
Introduction	
I. Context of Graduate Student Financial Support at UC	2
Graduate Student Financial Support Goals	2
Graduate Student Support and Enrollment Growth	3
Graduate Student Support and Competitiveness	3
Estimating Graduate Student Support Need and Availability	6
Recent Efforts to Improve Graduate Student Support	9
II. Findings	
III. Proposed Strategies and Committee Recommendations	13
Appendix A	A-1
<ul> <li>Table 1. Enrollment by Registration Status, Residency, and Program Type</li> <li>Table 2. Academic Graduate Student Support from Research and Teaching Assistantships</li> <li>Table 3. Academic Graduate Fellowship Support by Fund Source</li> <li>Table 4. Trends in Academic Net Stipends by Level</li> </ul>	
Table 5.    Systemwide Fee Levels	
Appendix B. Criteria for the Review of Proposals for Graduate Student Financial Support	B-1
Appendix C. Cost Implications of Eliminating Nonresident Tuition or Introducing a Comparable Return-to-Aid	C-1
<ul><li>Table 3-1. Continuing Academic Doctoral Students</li><li>Table 3-2. First-Year Academic Doctoral Students</li><li>Table 3-3. All Academic Doctoral Students</li></ul>	
Appendix D. Estimating Graduate Student Support Need and Availability	D-1

## Final Report and Recommendations of the Competitive Graduate Student Financial Support Advisory Committee

## **Executive Summary**

**Importance of Graduate Education to California.** Graduate degree holders are critical to California's success in the highly competitive global economy. They conduct the research that underpins the state's ability to play a leading role in developing solutions to California's and the world's increasingly complex problems. They are key to sustaining California's economic growth, serve as managers and professionals in a wide range of civic and commercial enterprises, and become faculty of the State's colleges and universities. Graduate students, too, play a central role in the University of California, contributing ideas and vitality to the University's intellectual life, conducting original research, assisting faculty members with research projects, and enhancing the experience of UC undergraduate students. Consequently, California and UC need to attract the most promising individuals to its graduate programs, including students from other states and international students. Indeed, roughly half of nonresident students who attend the University remain in California after completing their degree programs, representing a substantial "brain gain" for the state. Even those who return home often remain connected to California in ways that benefit our State's culture and economy.

**Competition for Talented Students is Intense.** The University competes with other universities to attract the best academic graduate students. This competition occurs at both national and international levels. Competing successfully for these highly sought-after students is crucial to the long-term health of the University of California.

**Need for Enrollment Growth**. California has been underinvesting in graduate education relative to the State's workforce needs. The University is therefore planning graduate enrollment growth of about 1,000 per year through 2010-11 and continued substantial growth through 2015-16.

**Graduate Student Support Goal.** Universities compete for the very best graduate students, just as they do for faculty. Critical to attracting such students and ensuring their timely completion of graduate study is the ability of the University to provide competitive graduate student support. The Committee, therefore, recommends that University graduate support programs be funded at a level that enables the University to provide its graduate students with net stipends that, when adjusted for regional cost-of-living differences, are competitive, and to meet its graduate enrollment targets, including both overall growth and ability to recruit the best students from both inside and outside of California.

Adequacy of Current Support. Overall, the University's graduate student support awards are not fully competitive with peer universities as measured by surveys that indicate an average shortfall of \$2,000. While this shortfall has not widened in recent years, the difficulties have been compounded by the large increases in fees and nonresident tuition, which has strained University graduate fellowship, instructional, and research budgets. This situation has forced programs to limit their recruitment of non-California residents and/or to admit fewer students in order not to worsen the competitiveness of their awards. Consequently, the number of new academic doctoral students declined by 10% between 2003 and 2004 and new international doctoral enrollment declined by 40% between 2001 and 2004.

**Projected Need for Additional Graduate Student Support in 2010-11.** Requirements for graduate student support were estimated under four scenarios: maintaining the status quo (in terms of current levels of graduate enrollment and net stipends), meeting graduate enrollment goals, closing the

competitive gap, and eliminating the disincentive to admit international graduate students. Estimates were made of increases in traditional graduate student support that could reasonably be expected to occur as a result of graduate enrollment growth, fee increases, faculty growth, and undergraduate enrollment growth. As shown in the following table, for UC to achieve its principal graduate student support goals by 2010-11, an additional \$122 million (in constant 2004-05 dollars) is needed beyond the normal increases that will accompany growth in graduate and undergraduate enrollments, faculty, and fees.

	Additional Cost
Goals to be Achieved	(Over 2004-05 Levels)
Maintain the Status Quo	\$51 million
Increase Graduate Enrollment (Goal 1)	\$131 million
Close Competitive Gap (Goal 2)	\$58 million
Eliminate Disincentive to Enroll Int'l Students (Goal 3)	\$4 million
Total Required	\$244 million
Available Funding from Traditional Sources	\$122 million
Graduate Student Support Gap	\$122 million

## **Committee Findings Related to Future Graduate Student Support.**

- 1. Anticipated increases in traditional funding levels for graduate student support will be inadequate to allow the University to achieve its twin goals of closing the competitive gap and meeting its enrollment growth targets. Indeed, graduate enrollment growth alone will generate an additional need for graduate student support to provide fee coverage, nonresident tuition coverage, and a net stipend for these students that outpaces the anticipated increase in graduate student support from traditional sources.
- 2. The cost of covering tuition for first-year nonresident students and for international students who have not yet advanced to candidacy severely limits the extent to which UC graduate programs can compete for and enroll these students.
- 3. Research and training grants cannot be relied upon both to fully cover all future tuition and fee increases and help increase the University's competitiveness.

#### **Committee Recommendations for Funding Graduate Student Support.**

The gap between needed and available funding for graduate student support is so large that the University needs to pursue increases from all possible sources and to consider appropriate changes to nonresident tuition, fees, and graduate support policies. The Committee developed academic, financial, and other criteria to guide its review of proposals.

<u>2006-07 Proposals</u>. Last fall the Committee endorsed the two nonresident tuition items proposed for The Regents Budget to freeze nonresident tuition at the 2004-05 level and to waive nonresident tuition for up to three years for graduate students who are advanced to Ph.D. candidacy. The Committee also endorsed the recommendation that, to the extent possible, campuses allocate Strategic Sourcing savings from General Fund-supported and student fee-supported programs for graduate student support and that campuses submit an annual report on Strategic Sourcing savings and on the increases in campus funding for graduate student fellowships. The Committee is pleased that the Governor's budget proposes the freezing of the Educational and Registration fees at their 2005-06 levels.

2007-08 and Beyond Proposals. The Committee's principal recommendations are the following:

- 1. *Nonresident Tuition*. The Committee recommends eliminating nonresident tuition for academic doctoral students in two stages: starting with continuing students in 2007-08 and adding first-year students in 2008-09, if possible.
  - The Committee acknowledges that eliminating tuition for all nonresident graduate academic doctoral students would not be consistent with existing State policy regarding nonresident tuition. If eliminating nonresident tuition proves impossible to achieve, then the Committee recommends a nonresident tuition return-to-aid that ensures an equivalent benefit to programs seeking to enroll nonresident students.
  - The Committee recognized that the proposal will result in lost revenue to the University, some of which may be offset by reduced institutional costs (such as the need to cover nonresident tuition for UC fellowship recipients). The Committee agreed that the development of a funding plan that fully covers the cost of the proposal, permits campuses to improve the competitiveness of their graduate student support offers, and also minimizes any cross-campus subsidization that might be created by the proposal, is a necessary prerequisite to implementing the proposal.
- 2. *Future Tuition and Fee Increases.* The Committee recommends that the Educational Fee and Registration Fee for academic graduate students be frozen at their 2005-06 levels for the indefinite future. The Committee also recommends that nonresident tuition for academic masters students (and academic doctoral students, if the Committee's first proposal is implemented as a return-to-aid) be frozen at its current level for the indefinite future.
- 3. University Student Aid Program (USAP).

Remove the portion of USAP funds that OP allocates for TA fee remission from the USAP allocation and place it in a separate "TA Fee Remission" budget category distinct from graduate return-to-aid.

Allocate increases in USAP fellowship funds (i.e., excluding funds allocated to campuses in accordance with their need to cover TA fee increases) to campuses based upon their budgeted academic graduate student enrollment, with greater weighting assigned to academic doctoral students.

Increase over time the USAP fellowship return-to-aid from its current 24% to 33% of fee-increase revenue in order to generate substantial new graduate funding to meet in part the competitive gap.

- 4. *New State-Funded Graduate Student Researcher Positions*. Develop a large new research budget initiative to the State that includes a significant component for graduate student researcher positions, which would result in substantial, permanent new funding for graduate student support.
- 5. *Proposals for Campus Actions*. Seek the strong collective action of campus administrators, faculty, and students in addition to the above University-wide actions to achieve UC's graduate student support goals. A range of proposals for specific actions are recommended for campuses.
- 6. *Professional Degree Programs*. The Committee acknowledges the serious challenges posed by recent large increases in professional degree fees, which also need to be addressed. The fact that the Committee did not address these issues does not lessen their importance. The Committee recommends that they be addressed separately.

**Impact of Recommended Systemwide Actions on the Need for Graduate Student Support.** The Committee's three recommendations regarding systemwide tuition, fee, and return-to-aid policies could be expected to address \$95 million of the projected \$122 million needed to cover the University's graduate support goals. The impact results primarily from a real reduction in student costs that graduate student support would be required to cover (due to declines in the real level of student fees and nonresident tuition) for both current and incremental graduate student enrollment. A gap of \$27 million would remain and would need to be generated from other actions by the campuses and the Office of the President (e.g., a new State-funded research initiative and campuses providing more internal funding for graduate student support). The fact that implementing the recommendations in this report would substantially reduce the cost associated with achieving the University's enrollment goals is an important argument for implementing these recommendations.

## Final Report and Recommendations of the Competitive Graduate Student Financial Support Advisory Committee

## June 2006

**Introduction** Graduate degree holders are critical to California's success in the highly competitive global economy: they conduct the research that underpins California's economic growth, they serve as managers and professionals creating, inventing, and developing solutions to California's and the world's increasingly complex problems, and they serve as faculty of the State's colleges and universities.

The University of California's 44,000 graduate students play a central role in the University's ability to meet its three-part mission of research, instruction, and public service under the California Master Plan for Higher Education. As alumni, they go on to make important contributions to the California economy and to help the State meet its professional workforce needs. As graduate students, they gain deep knowledge of a scholarly discipline, conduct original research, and contribute ideas and vitality to the intellectual and cultural life of the University. As research assistants, graduate students assist faculty members on research projects that expand the domain of human knowledge. As teaching assistants, they enhance the instructional experience of UC undergraduate students.

Today, the University faces a growing imbalance between available graduate student support funding and the amounts needed to meet the State's and the University's goals. This imbalance threatens the University's ability to enroll a highly qualified and diverse graduate student body and to meet its planned graduate enrollment growth. Left unchecked, it will inevitably have an adverse effect on faculty recruitment and retention, the quality of the University's research programs, and UC's academic and public reputation.

To address this concern, the Provost established the Competitive Graduate Student Financial Support Advisory Committee in September, 2005. The Committee's charge included directives to assess the current state of graduate student support at the University, to define a set of goals and benchmarks related to graduate student support, and to recommend a strategy for meeting identified support needs. The Committee has focused its analysis on academic graduate student support – that is, support for graduate students in academic programs, including programs leading to the M.A., M.S., M.F.A., and Ph.D. degrees. In doing so, the Committee acknowledges the serious challenges that recent increases in professional degree fees pose for the University's professional degree programs. The fact that the Committee did not address these issues does not lessen their importance. The Committee recommends that they be addressed separately. This report presents the findings and recommendations of the Committee related to academic graduate students based upon its work to date.

## Part I Context for Graduate Student Financial Support at the University of California

#### Graduate Student Financial Support Goals

In 1994, The Regents of the University of California established a policy for providing financial support to its students. The policy on graduate student support establishes the goal of attracting "a diverse pool of highly qualified students" for both academic and professional graduate degree programs. Consistent with that policy, the Council of Graduate Deans articulated a set of four graduate student support goals:

- To attract both high-quality and diverse graduate students in a competitive environment
- To enable students to complete their degree program in a timely manner
- To enable graduate students to meet the cost of attending the University
- To promote the educational objectives of the programs in which the students are enrolled.

The Committee endorsed these general goals. The Committee also acknowledged that, for budgetary purposes, a set of goals is needed that can provide a more direct measure of the adequacy of graduate student support. Such goals must enable policy makers to answer questions such as, "How much additional funding is needed?" To that end, the Committee recommends a two-part goal for assessing the adequacy of graduate student support:

University graduate support programs should be funded at a level that enables the University <u>both</u> (a) to provide its graduate students with net stipends that, when adjusted for regional cost-of-living differences, are competitive; and (b) to meet its graduate enrollment targets.

The goal identifies the net stipend (fellowship and assistantship awards in excess of tuition and fees), adjusted for cost of living, as the fundamental measure of graduate student support competitiveness. Budgetary decisions regarding fees, tuition, and UC-provided graduate student support – all of which are within UC's control – will directly affect the University's progress towards the goal.

Any assessment of the adequacy of graduate student financial support must consider both the competitiveness of the University's graduate student support relative to other institutions and the extent to which the University is able to meet its academic graduate student enrollment targets. A level of graduate

	support that causes a campus or a department to admit fewer students in order to maintain the competitiveness of its awards is not adequate. Similarly, a funding level that enables campuses to meet their enrollment targets only by offering less competitive awards (and hence enrolling less talented students) is detrimental to the University's and the State's long-term well being.	
Graduate Student Support and Enrollment Growth	California has been underinvesting in graduate education relative to the State's needs for a highly-educated workforce to meet California's needs and to drive economic growth <sup>1</sup> . To meet these needs, the University plans substantial graduate enrollment growth over the next ten years. Refinement of these plans is currently under university-wide discussion.	
	Enrollment growth plans need to account for the financial realities – for both individual students and the University – discussed in this report if expansion is to occur in a way that maintains or improves the quality of the University's graduate academic programs. Any such plans need to provide for identifying and securing the resources necessary to expand enrollment without compromising quality.	
Graduate Student Support and Competitiveness	The Regents' policy on student financial support explicitly acknowledges the role of student support in enabling the University to compete for the best graduate students. This role differs from the primary role of financial support at the undergraduate level, which is related not to the University's competitiveness but to its ability to remain financially accessible to students of all income levels.	
	The competitiveness of graduate student support for UC academic graduate students and its impact on the ability of the University to enroll top students from around the world has been a longstanding concern at the University. Several administrative and faculty groups and committees, including the 2001 Commission on the Growth and Support of Graduate Education, have taken up the issue and concluded that both the size and composition of UC's awards for academic graduate students are not fully comparable to the best offers UC students receive from competitor institutions. <sup>2</sup> Recently, the longstanding concern about the impact of cost increases – especially increases in nonresident tuition and systemwide fees – that were instituted in response to declining State support for the University's budget.	
	Concerns about the competitiveness of the University's graduate student support awards were substantiated by surveys conducted in 2001 and 2004 of students admitted to UC's academic doctoral programs. (Neither survey	

<sup>&</sup>lt;sup>1</sup> Innovation and Prosperity at Risk, University of California Commission on the Growth and Support of Graduate Education (2001).

<sup>&</sup>lt;sup>2</sup> Progress towards implementing recommendations made by the Commission has been limited. Since the Commission's report was issued, certain campuses have increased the priority for graduate fellowships in their internal budgeting and in fundraising activities, but most of the Commission proposals to obtain additional funding have been postponed due to the State budget crisis.

evaluated the competitiveness of offers to students admitted to UC's academic masters programs.) These surveys showed substantial variation in the competitiveness of UC's offers across academic disciplines and campuses but indicated that, on average, the net stipend associated with the offer from the student's top choice UC doctoral program was \$1,500 less than the student's top choice non-UC offer. Taking into account difference in the cost of living in different university communities increased the average shortfall in the value of UC's offers to approximately \$2,000<sup>3</sup>.

The surveys also indicated that the competitive gap between UC's offers and those of students' top-choice non-UC institutions remained about the same between 2001 and 2004, despite increases in the per capita net stipend for both new and continuing UC academic doctoral students. (The UC net stipend for these students increased by \$980, or 3.6 % after inflation, between 2003-04 and 2004-05, the latest year for which data are available.)

Fee increases during these years were offset in part by new UC graduate student support funding generated by the fee increases themselves. Thirty-three percent of the revenue resulting from systemwide fee increases in 2002-03 and 2003-04 was set aside for graduate student support, and twenty percent of the additional revenue generated by the 2004-05 fee and nonresident tuition increases was set aside for graduate student support.

By itself, this additional funding would have been insufficient to maintain – let alone increase – the value of doctoral students' per capita net stipends during this period. Other developments contributed to the University's ability to maintain this net stipend level, including some factors that work against the University's long-term ability to increase graduate student enrollment and to enroll international students. These factors include the following:

- Because departments are generally reluctant to reduce the value of their offers to students, departments admitted and enrolled fewer graduate students, especially international students for whom they would need to cover nonresident tuition for multiple years. After years of growth, new academic graduate student enrollment declined by 10% between 2003-04 and 2004-05. The decline in the enrollment of new international doctoral degree students started earlier and was steeper: new enrollment of these students declined by 40% between 2001-02 and 2004-05. (See Appendix A, Table 1.)
- Expenditures from research grants for research assistants increased substantially (7.1% increase overall between 2003-04 and 2004-05, consisting of a 19.5% increase in RA fee remission, a 26.1% increase in RA nonresident tuition remission, and a 1.4% increase in RA salaries). Such increases have raised concerns about faculty researchers' ability and willingness to continue to hire graduate research assistants to work on their grants. In addition, the need for grants to cover the large tuition and fee increases for RAs has required cuts in other research budget components,

<sup>&</sup>lt;sup>3</sup> See the report *Findings from the Graduate Student Support Survey: Trends in the Comparability of Graduate Student Stipends, 2001 and 2004* at <u>http://ucop.edu/sas/sfs/</u> under "Reports & Data."

which negatively affect the University's ability to effectively carry out its research mission. (See Appendix A, Table 2.)

- Total fellowship funds received by academic graduate students from federal sources increased by 82% between 2000-01 and 2004-05 (not adjusted for inflation), including an increase of 19% between 2003-04 and 2004-05. This increase is partly due to the fact that many of these fellowships increased to cover the full cost of tuition and fee charges. Whether such increases will be sustained in response to future fee increases is uncertain. (See Appendix A, Table 3.)
- Campuses increasingly tapped into alternative fund sources to fund graduate fellowships. Between 2000-01 and 2004-05, fellowship funding from private gifts to the University increased by 51%; funding from General Funds increased by 54%; and funding from sales and services related to auxiliary enterprises increased by 47%. By comparison, fellowship funding from systemwide Ed Fee revenue increased by 47% during this period; it remains the single largest source of funds for academic graduate fellowships. (Figures are not adjusted for inflation. See Appendix A, Table 3.)
- Campuses targeted available funds on academic doctoral students at the expense of master students, whose net stipends decreased by 42% in inflation-adjusted dollars between 2000-01 and 2004-05. (See Appendix A, Table 4.) During the same period, per capita borrowing among academic master students increased by 28%.

To date, there are no conclusive data to indicate that the quality of students who enroll in UC academic graduate programs has declined during this period. The Coordinating Committee on Graduate Affairs (CCGA) has expressed its concern that the quality of the graduate enterprise at the University of California has deteriorated in recent years.<sup>4</sup> In any case, the factors mentioned above indicate that the University will be unable to make progress in both closing the competitive gap with other institutions and achieving graduate enrollment goals without additional efforts to improve academic graduate student support.

Monitoring the University's competitiveness will depend on the extent to which the University can obtain information about the net stipends provided by other relevant institutions and evaluate its own success in meeting its enrollment targets. The Committee agreed that the Graduate Student Support Survey, which compares UC offers to students admitted to its doctoral programs against those received by students' top-choice non-UC institution, represents the best available measure of the competitiveness of the University's graduate student support. That survey takes into consideration the difference in graduate student support levels by discipline and implicitly assumes that the University should strive to offer support that is equal to or better than the best offers that students receive from the institutions against

<sup>&</sup>lt;sup>4</sup> See *The Decline of UC as a Great International University* at http://www.universityofcalifornia.edu/senate/reports/ ac.uc.decline.10.05.05.pdf

	which UC actively competes. The survey has certain limitations. For example, it focuses exclusively on doctoral programs and can only compare offers, not actual support received by new and continuing students, which often can be higher. In general, however, these can be addressed by making certain rational adjustments (e.g., by assuming that our competitiveness for doctoral students is comparable to our competitiveness for masters students, and that the competitiveness of our offers accurately reflects the competitiveness of UC actual support levels overall). Over time, if better assessments become available (e.g., from an improved version of the AAU graduate support survey), they will be analyzed to improve our measures of the competitiveness of UC's graduate student support.		
Estimating Graduate Student Support Need and Availability	unt University's graduate student support goals, the Committee agreed that estimates of future graduate enrollment targets, increases in competitors'		
	Developing such an estimate requires a quantifiable description of each of the goals related to competitiveness and enrollment articulated earlier in this report. For purposes of this analysis, three specific goals were identified:		
	Goal 1: Increase enrollment of academic graduate students by 18% betw 2004-05 and 2010-11, consistent with the current projected enrollment increases used for budget and space-planning purpo		
	Goal 2:	Increase the value of academic doctoral students' per capita net stipend by \$2,000 (in 2004-05 dollars) to fully close the current estimated competitive gap.	
	Goal 3:	Eliminate the disincentive to admit international academic graduate students. For purposes of this analysis, this goal is interpreted to mean restoring the proportion of international students among academic graduate students to the same percentage (25%) that was achieved in 2002-03, when international enrollment as a percentage of all graduate academic students peaked. (It is currently 23%.)	
	academi increase	ing these goals is the assumption that the per capita net stipend for ic graduate students must not be allowed to erode – due to fee s, enrollment growth, or any other factor – from 2004-05 levels (the ear for which data are available).	
	example	arties might choose to quantify each of these goals differently – for e, to project a different rate of enrollment growth or to seek to achieve	

example, to project a different rate of enrollment growth or to seek to achieve an even higher percentage of international student enrollment. The estimates below nonetheless present a general estimate of the scale of the graduate student support challenges that face the University.

## Committee Estimates of Graduate Student Support Need and Availability

An estimated \$51 million of additional graduate student support (above 2004-05 levels) will be required by 2010-11 even to maintain current levels of academic graduate student enrollment and to maintain the real value of students' net stipends.<sup>5</sup> This increased funding will be required to the extent that student fees and other charges (e.g., health insurance) increase faster than the rate of inflation in subsequent years.

Further increases to graduate student support will be required to meet the three goals described above. The amount required to achieve these goals is shown below in Table 1, below. (See Appendix D for details of these calculations.)

Table 1
Estimated 2010-11 Graduate Student Support Required
to Achieve Goals, 2004-05 Constant Dollars <sup>6</sup>

Cast(a) To Do Ashieved	Increase Over 2004-05
Goal(s) To Be Achieved	Actuals
Maintain Status Quo (current graduate enrollment & net stipends):	\$51 M
Plus Achieve Graduate Support Goals:	
Meet Grad Enrollment Goal (Goal 1)	\$131 M
Close Competitive Gap (Goal 2)	
For Current Enrollment	\$49 M
For Enrollment Growth	\$9 M
Increase Int'l Percentage (Goal 3) <sup>7</sup>	<u>\$4 M</u>
Subtotal for Goals 1+2+3	\$193 M
Total Additional Funding Required	\$244 M

The actual shortfall in graduate student support funding will be smaller than the \$244 million shown in Table 1, however, because funding for graduate student support from traditional sources can reasonably be expected to increase between 2004-05 and 2010-11. Examples of these increases include:

• Increases in UC-funded fellowships attributable to anticipated fee increases and graduate enrollment growth.

<sup>&</sup>lt;sup>5</sup> The per capita net stipend across all graduate academic students was \$13,569 in 2004-05.

<sup>&</sup>lt;sup>6</sup> Figures for 2010-11 include the 2006-07 plan to waive all nonresident tuition for doctoral students who have advanced to candidacy. Nonresident tuition is assumed to remain flat in constant dollars through 2010-11. All other student charges are assumed to increase by 61% in nominal terms (33% in real terms) between 2004-05 and 2010-11. See Appendix D for more information about these and other assumptions.

<sup>&</sup>lt;sup>7</sup> The relatively small incremental cost associated with enrolling more international students is not intuitively obvious given the high cost of nonresident tuition (12,216 in 2004-05 dollars, if held constant through 2010-11 at its current level of 14,694). Over an assumed time-to-degree of 5.5 years, however, the additional cost of enrolling an international academic doctoral student relative to a California resident would be closer to 6,700 per year in 2010-11 (assuming that the student advances to candidacy in 3 years and graduates in 5.5 years – i.e., 3 x inflation-adjusted tuition of 12,216 amortized over 5.5 years).

- Increases in TA funding resulting from increases in the undergraduate instructional budget (due to undergraduate enrollment growth) and graduate student fee increases (a portion of which is set aside for TA fee remissions).
- Increases in extramurally funded fellowships attributable to graduate enrollment growth (i.e., assuming that new students will be approximately as successful as current students in competing for these awards and new faculty are as successful in getting training grants).
- Increases in RA funding due to increases in the number of UC faculty.

Collectively, these factors are expected to generate an additional \$122 million in graduate student support funding (in 2004-05 dollars) by 2010, as shown in Table 2. This funding, while significant, pales beside the additional \$244 million that will be required for the University to meet its graduate student support goals. Consequently, without a concerted effort to improve the graduate student support outlook, the University will face a \$122 million shortfall in attempting to meet its graduate student support goals of enrollment growth, competitiveness, and international student enrollment.

Table 2		
Estimated 2010-11 Graduate Student Support Need and		
Availability, 2004-05 Constant Dollars		
	Increase	

	Increase Over 2004-
	05 Actuals
Additional Support Needed (from Table 1)	\$244 M
Less Additional Available Support	
From UC Fellowships/Grants	\$23 M
From Other Fellowships/Grants	\$10 M
From RA Support	\$35 M
From TA Support	<u>\$54 M</u>
Subtotal Additional Available Support	\$122 M
Shortfall in Available Graduate Student Support	\$122 M

The University faces a finite number of options to deal with this situation:

- The University could scale back its plans for academic graduate enrollment growth and focus instead on increasing the percentage of international students and/or improving the value of its graduate students' net stipends. As the ratio of undergraduate to graduate students gradually increased, the University would essentially be deemphasizing both the graduate education and the research components of its tripartite mission under the California Master Plan.
- The University could achieve its graduate enrollment goals by supporting its graduate students at lower levels. This would reduce the University's competitiveness and would, over time, lead to a reduction in the quality of UC graduate students, the quality of UC faculty members, the quality of the

	<ul> <li>University as a whole, and the value of the University to the State.</li> <li>The University could take steps to increase the availability of graduate student support, to reduce the student charges that graduate student support must cover, or both.</li> <li>The Committee agreed that the University must achieve all three of its graduate student support goals in order to maintain the quality of the University as an institution and its value to the State. Consequently, the first two options listed above are not acceptable. The Committee agreed that a bold plan to improve the outlook for graduate student support is required. <i>As discussed in Part III of this report, the Committee agreed upon a plan that, if implemented, would reduce the funding gap to only \$27 million.</i></li> </ul>
Recent Efforts to Improve Graduate Student Support	For the current academic year (2005-06), the University implemented two policy decisions related to graduate student support. First, the University increased the percentage of new fee revenue (the "return- to-aid") from academic graduate students to be set aside for graduate student support. The percentage was increased from 20% in 2004-05 to 50% in 2005- 06. (This 50% return-to-aid figure includes funding for teaching assistant fee remissions; the return-to-aid for fellowships was approximately 24% in 2005- 06.) This amount was estimated to be generally sufficient to cover the 2005- 06 fee increase for students whose fees were already covered, in whole or in part, by University fellowships, UC-funded research assistantships, and teaching assistantships.
	Second, the University did not increase nonresident tuition levels in 2005-06 for academic graduate or professional degree students. This decision resulted in foregone revenue of approximately \$7 million (assuming that tuition would have otherwise increased by 5%), which was judged to be a worthwhile trade-off in order to avoid further demands on limited fellowship and research assistantship funding caused by a tuition increase.
	Preliminary figures show that new academic graduate enrollment increased by 7% between Fall 2004 and Fall 2005, with new academic doctoral student enrollment increasing slightly faster than new academic master students enrollment. International student enrollment increased at a faster rate (10%) than did domestic student enrollment (6%). The change in graduate students' net stipends in 2005-06 is not yet known.

## Part II Committee Findings

In its work, the Committee identified three principal findings related to graduate student support:

1. Traditional funding sources for graduate student support are under stress. Anticipated increases in support from these sources will be inadequate to allow the University to fully achieve its twin goals of closing the competitive gap and meeting its enrollment growth targets.

Some additional support is expected to come from normal increases in three important and traditionally available sources:

- ♦ <u>Research Assistantships</u>. Expenditures from research grants to cover research assistants' fees and tuition have increased substantially in recent years. Such increases have raised concerns about faculty researchers' ability and willingness to continue to hire graduate students particularly international students as research assistants to work on their grants. As long as the federal deficit poses a continuing problem for federal funding for research, it is reasonable to project that research assistant funding will increase no faster than the growth of the faculty.
- ◆ <u>Teaching Assistantships</u>. The number of available teaching assistantships is expected to increase in proportion to undergraduate enrollment growth. Since current plans call for graduate enrollment to grow faster than undergraduate enrollment, TA funding is not expected to keep up with graduate enrollment. Contractual obligations will require the University to fully cover any systemwide fee increases for teaching assistants as well as any negotiated increases to their pay rate. The University's current practice is to provide campuses with additional funds from new student fee revenue to cover increased TA fee remission obligations as fees rise.
- ◆ UC Fellowships. Additional funding from student fee revenue for UC fellowships will be generated from future fee increases and graduate enrollment growth. Additional funding from fee increases will be sufficient to cover the fee increase for UC fellowship recipients, but will not be sufficient to improve the competitiveness of these students' awards (including changes in cost-of-living expenses). Additional funding attributable to enrollment growth is expected to be sufficient to provide the same level of fee-funded fellowships (on a per capita basis) for new students as exists for current students.

Funding from other sources is less certain. Federal and other extramural fellowships and traineeships are expected to increase at a slower rate (if at all)

than in the past and are not likely to keep pace with UC graduate enrollment growth. For example, per capita fellowship support received by UC academic graduate students from federal and outside agencies increased 20% in constant dollars between 1998-99 and 2004-05. Considerable doubt exists about whether such support will continue to grow, given federal budget priorities, the ever-increasing federal budget deficit, and the uncertain national economy. Further, while federal fellowship stipends are likely to rise to keep pace with cost-of-living increases, this growth is not likely to be sufficient to help UC close the competitive gap. Fellowships funded by private foundations are expected to increase proportional to graduate enrollment growth. Prospects for additional fellowship funding from the State are dim at this time.

The confluence of these trends suggest that the University's steps to date will not be sufficient to both improve the University's competitiveness and meet the need for new graduate student support to accompany graduate enrollment growth, and that a new set of proposals aimed at achieving specific goals is required.

## 2. The cost of covering tuition for first-year nonresident students and for international students who have not yet advanced to candidacy severely limits the extent to which UC graduate programs can compete for and enroll these students.

These students are typically among the most talented graduate students at the University. The enrollment of new international and nonresident students in doctoral programs rebounded somewhat in Fall 2005 after several years of decline. Nevertheless, the number of new international students in doctoral programs remains at its lowest level since 1999, and the number of new domestic nonresident students peaked in Fall 2002.

Many of these students go on to make lasting contributions to the economic and intellectual vitality of the State. Nevertheless, the University's experience over the past several years suggests that it is unlikely that the State will, on its own, provide significant fellowship funding to attract these students based on these arguments alone. Increased funding from other fund sources (including, potentially, an internal reallocation of UC funds) will be required to increase enrollment of these students.

## 3. Faculty research grants cannot be relied upon both to fully cover all future tuition and fee increases <u>and</u> to help increase the University's competitiveness.

UC faculty have a strong record of receiving grants and using them to support graduate students as RAs. However, grant levels are generally locked in for the duration of the grant, making it difficult in the immediate future for Principal Investigators to cover large increases in fee and tuition costs for their RAs. Furthermore, the cost of providing nonresident tuition cannot simply be passed along to certain fund sources. Finally, in some cases, the total pool of funding for research awards may be fixed and thus faculty may need to cap the amount of their research proposal to maximize the likelihood that it will be

funded. In such cases, it may not be possible to build into the budget the full amount of RA fee and tuition costs. Absent supplemental funding from another source, the number of assistantship opportunities for students – particularly nonresident students – may decline.

These findings informed the Committee's review of proposals related to graduate student support, which are described in Part III of this report.

## Part III Proposed Strategies and Committee Recommendations

	The anticipated gap between needed and available funding for graduate student support over the next five years is so large that it cannot be met from any single source or any single change in nonresident tuition, fees, or graduate student support policy. The University needs to pursue increases in funding from all possible sources and to consider appropriate changes to nonresident tuition, fees, and policies to close this gap. Furthermore, this effort will require the collaboration of all segments of the University, from the graduate students themselves, to the faculty, to campus administrations, to the Office of the President, and The Regents. The Committee considered many proposals for addressing the need for additional graduate support. The Committee selected specific proposals to recommend for 2006-07 and subsequent years based on a set of review criteria. The review criteria and recommendations are described in greater detail below.
Proposal Review Criteria	To guide its evaluation of proposals, the Committee developed academic, financial, and other review criteria. The major criteria are the extent to which the proposals address the graduate financial support competitiveness issue by increasing net stipends, help campuses achieve their graduate enrollment plans and academic objectives, are fiscally appropriate and realistic, are likely to receive strong support from the State, and are perceived to be fair. Appendix B provides a complete list of the review criteria. It is the committee's judgment, taking these criteria into appropriate account, that the proposale helpsy heat meet the peeds of the State and the University.
Recommendations for 2006-07	that the proposals below best meet the needs of the State and the University. The Committee's first task last fall was to review the three graduate financial support items proposed for the 2006-07 Regents Budget. The Committee endorsed all three recommendations and was pleased to see that The Regents approved them. <i>Nonresident Tuition.</i> Two of the proposals related to nonresident tuition. The first was to freeze nonresident tuition at the 2004-05 level of \$14,694 for academic graduate students. The second proposal was to waive nonresident tuition for not more than three years for academic graduate students who are advanced to Ph.D. candidacy (currently nonresident tuition is reduced by 75% for such students). <i>The Committee endorsed both nonresident tuition proposals</i> . The first proposal will not exacerbate the substantial negative impact of the recent large increases in nonresident tuition on graduate

education and on faculty members' extramural research grants. The second proposal will provide some relief for students and University budgets and incentives for the students to advance and complete their degrees in an even more timely manner. It is estimated that this proposal will result in savings of \$7 million to students and graduate financial support budgets.

Strategic Sourcing. The third item in The Regents Budget proposed to provide additional funds for graduate student support derived from savings from General Fund-supported and student fee-supported programs produced by UC's new Strategic Sourcing Initiative. The Strategic Sourcing Initiative is a process to leverage the University of California's enormous buying power in the marketplace and to increase purchasing efficiency within UC with the goal of lowering the cost of goods and services in a large array of categories. While it is difficult to estimate savings from the Strategic Sourcing Initiative, they are expected to be substantial; however, savings will vary significantly among campuses depending on previous actions taken by each campus to streamline purchasing processes and how each campus implements Strategic Sourcing. The Committee endorses the recommendation that campuses allocate Strategic Sourcing savings from General Fund-supported and student feesupported programs for graduate student support, and that campuses submit an annual report on Strategic Sourcing savings and on the increases in campus funding for graduate student fellowships. The principal reasons are that Strategic Sourcing has potential for generating significant and totally flexible graduate student support dollars, which would help campuses in narrowing the competitive gap in net stipends and in achieving their graduate enrollment plans.

*Fees.* The Committee is pleased that the Governor's budget proposes to freeze the Educational and Registration Fees at their 2005-06 levels by providing the University with sufficient funding to avoid the fee increase of ten percent previously proposed by The Regents.

Recommendations Related to Nonresident Tuition and Fees

## 1. Nonresident Tuition

<u>Background.</u> The quality of the University's educational and research programs depends upon our attracting outstanding students to our graduate programs. In particular, it is important that, like other major research universities, the University of California seek out and recruit applicants, regardless of residence, who are truly exceptional and whose presence at UC improves the overall quality of our teaching and research. International students, in particular, have an important educational impact on both graduate and undergraduate U.S. students by raising their knowledge of global issues and other societies and nations. About fifty percent of international graduate students remain in California after graduation, contributing to California's society and to the State's economy, and many of those who return home remain connected to California in ways that benefit our State's economy and culture.

UC and other major research universities compete for the best students, in part

by paying their nonresident tuition and fees and providing a stipend to cover their living expenses. Much of the funding to pay these costs comes from University funds, including fellowships, teaching assistantships budgets, and faculty research grants.

Funding nonresident tuition for students from outside of California presents a great challenge for the University. The problem has been compounded by the recent large increases in nonresident tuition resulting from the deep cuts to the University's budget in response to the State's budget crisis. Despite the influx of campus discretionary funds and endowment income, the need to cover nonresident tuition for these students has strained fellowship, departmental teaching, and faculty research budgets, reducing funding for other types of graduate student support and other research program needs. Lack of sufficient funding to cover the high cost of nonresident tuition also has resulted in programs substantially reducing the number of out-of-state (particularly international) graduate students that they admit, and may well discourage highly qualified out-of-state students from attending UC.

In February 2006, these and other concerns led the Academic Assembly to initiate a Memorial to The Regents requesting that The Regents "structure and advocate a budget for the University that eliminates non-resident tuition for academic graduate students." Academic Senate faculty subsequently voted to approve the Memorial, which passed with strong support on all campuses: 83% of the ballots cast supported the proposal.

The decisions to waive nonresident tuition for advanced Ph.D. students beginning next year and to freeze nonresident tuition in the current and next year are important contributions to addressing the problem, but they are only a start. The Committee believes the problem is so serious that it recommends immediate and bold action.

<u>Proposal</u>. The Committee considered several proposals to address the nonresident tuition problem:

- Reducing nonresident tuition to various levels (e.g., to zero, to half of its current level, or to the marginal cost of instruction).
- Reducing or eliminating nonresident tuition for various groups: academic doctoral students beyond their first year and not advanced to candidacy, first-year academic doctoral students, first-year academic graduate students, all academic graduate students, and Teaching Assistants.

After applying the review criteria and considering each proposal's advantages and disadvantages, the Committee concluded that, from the perspective of graduate program quality, it would be best for the University to eliminate nonresident tuition for all academic doctoral students. *The Committee recommends that the University eliminate nonresident tuition for all academic doctoral students in two phases, starting with continuing academic doctoral students in 2007-08 and adding first-year doctoral students in 2008-09, if possible.*  The Committee anticipates that implementation of this recommendation will be accompanied by an assessment of its effectiveness in helping the University to achieve its graduate student support goals and its impact on the University.

The recommendation's scope is limited to academic doctoral students and thus focuses on those students for whom competition is greatest and who are most central to the University's core mission under the Master Plan to provide doctoral education. The recommendation is further limited to domestic out-ofstate and international academic doctoral students, whose enrollment at UC and relocation to California represent a "brain gain" for the University and for the State as a whole. The quality of UC graduate students would improve because departments would no longer be forced to turn away the best domestic out-of-state and international students for cost reasons. Depending on implementation details, the per capita net stipend for students would potentially rise, thereby attracting higher-quality students. Graduate programs could admit more students, which would help campuses achieve their graduate enrollment plans. Eliminating nonresident tuition has the potential to improve graduate student performance by reducing financial worries of out-of-state students who are not fully supported. Charges against research grants would be reduced substantially, thereby freeing up grant funds to increase graduatestudent researcher stipends, fund additional graduate student researchers, or use for other research program needs.

The Committee's recommendation has implications for the current State policy regarding nonresident tuition; the University's budget, which relies upon nonresident tuition revenue; and the ability of the University's graduate programs to compete successfully for talented students. These implications are discussed below.

#### Special Considerations Related to The Committee's Recommendation

<u>State Policy Related to Nonresident Tuition</u>. The Committee acknowledges the State policy on nonresident tuition, which applies to all public California postsecondary institutions, and was developed over several years and signed into law (Chapter 792) in 1990. It states in part:

As California's public postsecondary education segments annually adjust the level of nonresident tuition they charge out-of-state students, the nonresident tuition methodologies they develop and use should take into consideration, at a minimum, the following two factors: (1) the total nonresident charges imposed by each of their public comparison institutions and (2) the full average cost of instruction in their segment.

Under no circumstances should a segment's level of nonresident tuition plus required fees fall below the marginal cost of instruction for that segment.

In addition, each segment should endeavor to maintain that increases in the level of nonresident tuition are gradual, moderate, and predictable, by providing nonresident students with a minimum of a ten-month notice of tuition increases. Each governing board is directed to develop its own

## methodology for adjusting the level of nonresident tuition, but those methodologies should be consistent with this recommendation.

The legislation also contains the proviso that "in the event that State revenues and expenditures are substantially imbalanced due to factors unforeseen by the Governor and the Legislature," nonresident tuition will not be subject to the bill's provisions.

In line with this policy, the State of California provides State funds to cover the instructional costs of resident students but expects the University to cover the instructional costs of nonresident students with nonresident tuition and fee revenue.

The Regents have approved changes in nonresident tuition consistent with the State policy since its inception. For instance, the elimination of nonresident tuition for students advanced to candidacy was possible to achieve within the current policy because it was based on the factor in the policy calling for consideration of the "nonresident charges imposed by each of [UC's] public comparison institutions," all of which provide reduced nonresident charges for such students. In contrast, eliminating tuition for all nonresident graduate academic doctoral students is not achievable within the current policy because all of UC's public comparison institutions charge nonresident tuition to students who have not advanced to candidacy.

Committee members believe the recommendation to eliminate nonresident tuition makes sense for the taxpayers of California, based upon arguments provided earlier in this report about the value to the State of educating the top students worldwide. However, members acknowledge that doing so would require a fundamental change in the State's nonresident tuition policy that may not be viewed as acceptable by the State, that could not be renegotiated without involving the other public segments who are also governed by the policy, and that would result in broad repercussions on State funding for the University if implemented without the approval of the State.

The position of the Committee as a whole is that *if eliminating nonresident tuition proves infeasible, the Committee recommends that the University introduce a return-to-aid on nonresident tuition that ensures an equivalent benefit to programs seeking to enroll nonresident students.* 

The details of the return-to-aid approach would need to be further developed but should reflect the following key principles:

- Total dollar benefit to students and financial support revenue sources (e.g., departmental budgets and research grants) would equal the benefit derived from the elimination of nonresident tuition.
- The new return-to-aid funds would be used for nonresident tuition waivers for nonresident academic doctoral students to reduce the current disincentive for departments to enroll nonresident students, especially international students.

• In order to make the waivers an effective recruiting tool (equivalent to the elimination of nonresident tuition), the nonresident tuition waivers would be committed to students at the point of their admission and guaranteed to recipients for as long as the recipients are charged nonresident tuition (e.g., until the recipients advance to candidacy) or until they are eligible to establish residency (e.g., during the first year of enrollment for domestic nonresident students).

The simple elimination of nonresident tuition, as recommended by the Committee, offers several advantages over using an equivalent return-to-aid. Eliminating nonresident tuition is simple to understand and clearly demonstrates to prospective and current students, to faculty, to administrators, and to the public the high priority the University assigns to recruiting the best academic doctoral students, regardless of their residency status. For this reason, the Committee felt that it would also be more difficult to undo at a later date, if and when the University faced serious budget difficulties. Eliminating tuition would also reduce workload for accounts receivable, accounting, contract and grant administration, and graduate financial support offices.

The Committee recognizes that an equivalent return-to-aid, following the above principles, could be designed to provide the same benefit to students and the same relief to faculty research and training grants as the preferred elimination of nonresident tuition. However, a return-to-aid would be more complex for campuses to administer. More important, compared to eliminating or significantly reducing tuition, this method would be easier to undo in future years; although some may see this as a positive feature, the potential reversal of this policy at some future date might reduce its effectiveness, since departments may be less likely to make multi-year commitments or to admit more nonresident or international students than if nonresident tuition were simply eliminated.

<u>Budgetary Implications of the Committee's Recommendation</u>. Estimating the cost of this recommendation is complex, in part because University sources are used to pay much of the nonresident tuition for academic doctoral students.

The estimated net cost of eliminating nonresident tuition for academic doctoral students beyond the first year and not advanced to Ph.D. candidacy – the first step of the Committee's recommendation – ranges from \$22.8 million (if the \$16 million of UC fellowship funds currently used to pay nonresident tuition are reallocated to reduce the required cuts to the General Fund) to \$38.7 million (if UC fellowship funds that currently cover tuition remain budgeted for UC fellowships, thus improving the competitiveness of students' net stipends). Both cost estimates assume net benefits of \$2.3 million to currently unsupported students, \$6.7 million to extramural fellowship agencies that cover nonresident tuition, and \$13.8 million to faculty research grants, some of which might be "recycled" by faculty researchers to support additional students or to increase wages for students supported by their grants.

Expanding the proposal to include first-year students as well – the second step of the recommendation – results in an additional net cost of between \$14.0 million (if \$26.5 million of first-year students' fellowship funds were

reallocated to reduce the proposal's net cost) to \$40.5 million (if all fellowship funds remained budgeted for graduate student support). This component of the proposal would provide additional net benefits of \$4.1 million to currently unsupported students, \$5.8 million to extramural fellowship agencies that cover nonresident tuition, and \$4.2 million to faculty research grants.

Consequently, the funding "gap" created by eliminating nonresident tuition revenue for these students depends in part upon the extent to which UC fellowship funds either remain budgeted for graduate student support or are reallocated to offset the lost nonresident tuition revenue. Table 3, below, depicts the costs associated with the proposal if none (0%), half (50%), or all (100%) of the UC fellowship funds that currently cover nonresident tuition are retained for graduate student support. (All cost estimates are based on 2003-04 enrollments. More details on the cost analysis are provided in Appendix C.)

Pct of UC Fellowships Retained for	Academic Doctoral Students Affected		
Graduate	Continuing	First-Year	Combined
Support	(Phase 1)	(Phase 2)	(Phase 1+2)
	\$22.8 M	\$14.0 M	\$36.8 M
0%	UC Fell: + \$0.0 M	UC Fell: + \$0.0 M	UC Fell: + \$0.0 M
	Res Grants: + \$13.8 M	Res Grants: + \$4.1 M	Res Grants: + \$17.9 M
	Extr Fell: + \$6.7 M	Extr Fell: + \$5.8 M	Extr Fell: + \$12.5 M
	Self Supp: + \$2.3 M	Self Supp: + \$4.1 M	Self Supp: + \$6.4 M
	\$30.7 M	\$27.3 M	\$58.0 M
50%	UC Fell: + \$8.0 M	UC Fell: + \$13.2 M	UC Fell: + \$21.2 M
	Res Grants: + \$13.8 M	Res Grants: + \$4.1 M	Res Grants: + \$17.9 M
	Extr Fell: + \$6.7 M	Extr Fell: + \$5.8 M	Extr Fell: + \$12.5 M
	Self Supp: + \$2.3 M	Self Supp: + \$4.1 M	Self Supp: + \$6.4 M
	\$38.7 M	\$40.5 M	\$79.2 M
100%	UC Fell: + \$16.0 M	UC Fell: + \$26.5 M	UC Fell: + \$42.5 M
	Res Grants: + \$13.8 M	Res Grants: + \$4.1 M	Res Grants: + \$17.9 M
	Extr Fell: + \$6.7 M	Extr Fell: + \$5.8 M	Extr Fell: + \$12.5 M
	Self Supp: + \$2.3 M	Self Supp: + \$4.1 M	Self Supp: + \$6.4 M

The Committee is not making a recommendation about possible University fund sources to fully cover the cost of eliminating nonresident tuition for academic doctoral students or a return-to-aid equivalent. While acknowledging the importance of this issue, the Committee feels that decisions about how to distribute the costs across different functions were beyond the purview of the Committee. They feel that the development of a funding plan should involve broad consultation. Moreover, the campuses may wish to maintain flexibility in deciding how to distribute the costs across different functions.

Consistent with this view, the Committee is not proposing a specific recommendation regarding the extent to which current, flexible UC fellowship funding used to cover nonresident tuition should be reduced in order to fund a

portion of the proposal's net cost. Because most campuses allocate fellowship funds to departments as block grants, departments can decide how best to use the money to meet their distinctive needs: increase the net stipends offered to their best candidates, admit additional students, etc. Moreover, unless some portion of current fellowship funding is maintained, the proposal merely shifts flexible fellowship funding to a nonresident tuition "discount" without increasing the competitiveness of UC's net stipend among UC fellowship recipients.

The Committee recognizes that the impact of the proposal at each campus will be different, due to differences in the number of nonresident and international academic doctoral students that campuses enroll. The Committee agreed that any funding plan should acknowledge this difference and be structured so as to avoid any cross-campus subsidization, whether the proposal is implemented as an elimination of nonresident tuition or as an equivalent return-to-aid.

Consequently, the Committee agreed that the development of a funding plan that fully covers the cost of the proposal, permits campuses to improve the competitiveness of their graduate student support offers, and also minimizes any cross-campus subsidization that might be created by the proposal, is a necessary prerequisite to implementing the proposal.

Recommendations Related to University Student Aid Program (USAP) Funding

### 2. USAP and Teaching Assistant Fee Remission

<u>Background</u>. The University has had a long-standing practice of setting aside a portion of the revenue from student fee increases to provide financial aid to needy students. This return-to-aid (RTA) amount, which is added to the USAP budget each year, increased from 16% of systemwide fee revenue to 33% between the late 1980s and 1994, remained at 33% through 2003-04, and has ranged from 20% to 50% since then. Historically, USAP funding has been used by campuses for fellowships and need-based grants. In most years prior to 2003-04, USAP funding from graduate academic and professional students was allocated to campuses based strictly on budgeted enrollments.

Between 1990 and 2002, the University also phased in TA fee remission for graduate students with TA appointments of at least 25% time. Full TA fee remission is now a condition of the University's contract with teaching assistants. Prior to 2003-04, funding for TA fee remission came from a variety of discretionary UCOP and campus sources. At the time of the first of the large fee increases in 2003-04, no new funds were available to cover associated required increases in UC's TA fee remission. As a result, campuses were given the flexibility to use their USAP allocations, which have been the only significant source of new systemwide funding for graduate financial support since 2002-03, to cover their additional TA fee remission obligations. In recognition of this new use for USAP, the previous formula for allocating USAP based on graduate enrollment was modified to also account for undergraduate enrollments so that campuses could cover the new TA fee remission obligations.

In 2005-06, the return-to-aid for academic graduate USAP funding was

increased to 50% of new academic graduate fee revenue to reflect the increased funds needed to cover both TA fee increases and fee increases for UC fellowship recipients. Sufficient funding to cover TA fee increases was allocated to campuses as described above. The remaining portion – approximately 24% of the new fee revenue – was allocated to campuses based upon their estimated need to cover the 2005-06 fee increase for UC fellowship recipients and UC-funded research assistants.

<u>Removal of TA Fee Remission Funds from USAP Funds</u>. The Committee believes that the University and graduate education would be better served by separating TA fee remission funds from USAP funds. Such a separation would clarify how much money is being allocated for fellowships at the systemwide level and how much money is being allocated to enable campuses to cover TA fee remission.

The Committee recommends that the portion of USAP funds that the Office of the President allocates for TA fee remission be removed from the USAP allocation and that it be placed in a separate budget category with the label "TA fee remission" that makes it distinct from graduate return-to-aid.

#### 3. USAP Allocation Methodology

In reviewing the current USAP allocation methodology, the Committee considered three different approaches that could be adopted to guide the allocation of funds generated from the systemwide funds. Each approach reflected a different assumption about the role of UCOP and the role of campuses related to graduate student support.

- Option 1: Allocate the entire pool of academic graduate and professional University Student Aid Program (USAP) dollars on the basis of combined graduate and professional student enrollment. This approach reflects the principle that campuses are individually responsible for achieving their graduate student support needs and goals (e.g., closing the competitive gap with regard to net stipends, covering fee increases for students to whom we have committed to do so, etc.). Under this principle, systemwide graduate student support funding should be allocated to campuses so that all students have equal opportunity to benefit from it.
- Option 2: Allocate Systemwide program funds to level the playing field among campuses by providing more funding to campuses with greater student support needs (as occurs at the undergraduate level). This approach reflects the principle that the adequacy of the financial support students receive should not vary across campuses. Some standard measure of "adequacy" would need to be adopted so that systemwide allocations could equalize adequacy across campuses.
- Option 3: Allocate systemwide graduate student funding to meet additional campus need for funding associated with systemwide actions and commitments (e.g., systemwide fee increases, TA fee remissions, etc.) for students who have been historically funded with UC funds.

Implicit in this approach is the principle that responsibility for meeting campus graduate support needs is split between systemwide and campus funding sources. The role of systemwide funding sources is to mitigate the impact of systemwide policy decisions and legal commitments. Campuses have responsibility for achieving graduate support needs that are not directly affected by systemwide actions. Under this approach This principle has guided the allocation of the permanent funding added to USAP since 2002-03 in response to the increased need generated by systemwide fee increases.

The Committee discussed each option and agreed with the approach reflected in Option 1, with the proviso that academic doctoral enrollment be given special weight. *The Committee recommends that future increases to USAP fellowship funds (i.e., excluding funds allocated to campuses in accordance with their need to cover TA fee increases) should be allocated to campuses based upon their enrollment of academic graduate students, with greater weighting assigned to academic doctoral students.* Funds provided to help campuses cover TA fee increases would continue to be allocated based on undergraduate enrollment.

The Committee believed that this methodology would be simpler and more transparent than the current allocation methodology (Option 3). Committee members also felt that campus allocations should not be influenced by the extent to which campuses currently cover students' fees with UC fellowships or research assistantships, which is a feature of the current methodology. The proposed method acknowledges the generally higher priority to provide competitive awards to academic doctoral students relative to academic masters students.

### 4. Return-to-Aid for UC Fellowship Funding

TA fee remission allocations will grow proportional to (1) any increases in fees and (2) changes in the number of teaching assistants. Because undergraduate enrollment growth is projected to be less than graduate growth over the next decade, the percent of academic graduate fee increases needed to cover TA fee remission increases (26% in 2005-06) may decline in future years.

In 2005-06, after excluding the USAP funds allocated to cover TA fee remissions, 24% of the fee increase revenue was set aside to cover the fee increase for UC fellowship recipients and UC-funded research assistants. *The Committee recommends increasing the fellowship return-to-aid (including UC-funded research assistants) over time to 33% of revenue from fee increases in order to generate substantial new graduate student support funding to meet in part the competitive gap.*  Impact of Recommended Systemwide Actions on the Need for Graduate Student Support As noted earlier, the University cannot achieve the three graduate support goals articulated by the Committee unless the University addresses the growing need for additional graduate student support. This could occur by increasing the availability of graduate student support and/or reducing the student charges that graduate student support must cover. The Committee's three major recommendations regarding systemwide tuition, fee, and return-toaid policies would, if implemented, do both.

The impact of these recommendations is illustrated in Table 4 on the following page. The extent to which each individual recommendation helps close the projected "base case" gap of \$122 million is shown in the last row of the table. The collective impact of all three proposals is shown in the last column. (Note that the collective impact of \$95 million is slightly less than the sum of the impact of the individual proposals due to interaction effects – e.g., freezing systemwide fees diminishes the impact of increasing the return-to-aid on new fee revenue.)

Note that even if all of these recommendations were implemented, an estimated gap of \$27 million (in 2004-05 dollars) would remain between the amount of graduate student support needed and the amount available in 2010-11. Consequently, additional funding from outside sources (reflected in the Committee's proposal for new State-funded graduate student researcher positions) and from elevating graduate student support funding among campuses' many priorities will be required to fully achieve the University's graduate support goals.

Recommendation Related to New State Funding

#### 5. New State-Funded Graduate Student Researcher Positions

The Committee recommends that the University develop a large research budget initiative for the State that includes a significant component for graduate student researcher positions.

The Office of the President and the campuses have had considerable discussions about the need to develop a large new research initiative that addresses many of the State's compelling economic, environmental, health, social, and cultural needs. Because of the critical role that graduate student support plays in the University's research programs, it is important that a significant component of any new initiative provide funding for graduate student researcher positions. Consequently, the Committee endorses the speedy development of such an initiative to be proposed to the State of California at such time as the State's budget climate permits. If \$50 million in permanent new funding is proposed for the full research initiative, a request for half of that amount (\$27 million) for graduate student researcher positions, including salary and tuition-and-fee remission, would be appropriate. The Committee also recommends seeking matching monies from industry as part of a University-State-industry partnership.

# Table 4Estimated 2010-11 Impact of Selected Committee Recommendations<br/>on Graduate Student Support Required to Meet<br/>All Three Graduate Support Goals, 2004-05 Dollars<sup>8</sup>

	Increase (Decrease) Over 2004-05 Actuals			
	If No Proposal Implemented	If All Net Chang Proposals Due to Implemented Proposals		
Estimated Graduate Support Required	Implemented	Implemented	110003813	
To Maintain Status Quo (current graduate enrollment & net stipends):	\$51 M	(\$68 M)	(\$119 M)	
Plus Achieve Graduate Support Goals:	φ01101	(000 101)	(@11310)	
Meet Grad Enrollment Goal (Goal 1) Close Competitive Gap (Goal 2)	\$131 M	\$108 M	(\$22 M)	
For Current Enrollment	\$49 M	\$49 M		
For Enrollment Growth	\$9 M	\$9 M		
Increase Int'l Percentage (Goal 3)	<u>\$4 M</u>	<u>\$1 M</u>	<u>(\$3 M)</u>	
Subtotal for Goals 1+2+3	\$193 M	\$147 M	(\$25 M)	
Total Additional Funding Required	\$244 M	\$99 M	(\$145 M)	
Estimated Graduate Support Available (Assuming	all UG and GR e	nrollment goals	are achieved)	
Additional Available Support				
From UC Fellowships/Grants	\$23 M	(\$8 M)		
From Other Fellowships/Grants	\$10 M	\$10 M		
From RA Support	\$35 M	\$35 M		
From TA Support	\$54 M	\$37 M	( , , , , , )	
Subtotal Additional Available Support	\$122 M	\$73 M	(\$49 M)	
Shortfall in Available Graduate Student Support	\$122 M	\$27 M	(\$95 M)	

In addition to making serious progress on the State's needs, this initiative can be of significant assistance in attracting to California truly outstanding graduate students, many of whom will remain in California after graduation and thereby continue to contribute to the State's economic vitality.

The Committee envisions that this initiative would promote the continued

<sup>&</sup>lt;sup>8</sup> Assumes that upon implementation of the reduction in nonresident tuition, UC fellowship funding is reduced by approximately \$21 million in nominal dollars (which, in 2010-11, will be worth \$18 million in constant 2004-05 dollars), equivalent to half of the \$42.5 million of fellowship funds that previously covered nonresident tuition. The remaining half is assumed to remain budgeted for graduate student support. In addition, all RA funds currently used for graduate student support are assumed to remain budgeted for graduate student support once non-resident tuition is eliminated; this assumption may be unrealistically optimistic and thus may overestimate the available graduate student support funding associated with eliminating nonresident tuition.

	success of the University's research programs, increase the number of individuals with advanced training in areas of critical importance to the State, enable the University to attract a greater share of outstanding students in these fields, facilitate students' timely completion of their degree programs, and meet a substantial portion of the graduate student support needs that would be generated by the University's graduate enrollment growth over this period. The Committee also acknowledges that funding from the research initiative would be targeted to certain topical areas of high interest to the State. The Committee anticipates that the additional funding would nevertheless benefit students in other disciplines, albeit indirectly, through internal campus reallocation of discretionary funds.			
Recommendations Related to Campus Actions	The preceding sections set forth the need for additional graduate student support on a University-wide basis and provide recommendations for systemwide actions to increase graduate student support and help alleviate some of the stresses caused by the recent large tuition and fee increases. Action only at the University-wide level, however, will be insufficient to meet the full need for additional graduate student support to close the gap in funding and to meet our enrollment goals.			
	Achieving our graduate financial support goals requires the collective action of the Office of the President and the campuses. The Committee recommends that campuses take the following actions.			
	1. Campus Graduate Student Financial Support Plans.			
	The Committee recommends that campuses develop (or update), implement, and annually review graduate student financial support plans.			
	Campuses are strongly encouraged to develop (or update if they already have a plan), implement, and annually review graduate student financial support plans. Components of such plans would include an articulation of the campus's support goals, an analysis and calculation of total support needs, identification of fund sources for increased funding, and a plan of actions and timeline for fully realizing the support goals.			
	2. Support Packages.			
	The Committee recommends that campus academic officials set an expectation for all Ph.D. programs to offer multi-year awards to entering Ph.D. students and facilitate programs' ability to do so by providing central analytical services to assist programs in developing multi-year awards and by creating a reserve fund to back up program commitments.			
	To students contemplating five to six years in a Ph.D. program, the duration of financial support commitments is usually as important as the net stipend or level of support. Standard practice among some University of California biological sciences, health sciences, and chemistry programs is to offer a package of support at a specified stipend level for five to six years to all Ph.D.			

students. Letters offering such packages sometimes say, "It is our intent to provide you with funding at a stipend level of \$XXX for the duration of your doctoral studies up to a maximum of six years, as long as you remain in good academic standing and make satisfactory academic progress. While we cannot guarantee this stipend level because of the uncertainties of research grant funding, in the past we have always been able to meet this commitment." The practice of offering support packages in other disciplines varies significantly by campus and by discipline. Some campuses provide "insurance" (essentially no-interest loans) to departments to make over-offers of graduate student support packages to new graduate students.

Providing multi-year awards to entering Ph.D. students is a very effective strategies that campuses can adopt to attract outstanding graduate students, and campuses are strongly encouraged to develop the necessary infrastructure to provide such multi-year awards to new students in all Ph.D. programs.

#### 3. Campus Funding for Graduate Student Financial Support.

The Committee recommends that campus funding for graduate student financial support be given a high internal priority through automatic annual increases, through review of all funding increases that come to the campus, and through other means that encourage the use of discretionary funding for graduate student support.

Campus funding for graduate fellowships is absolutely critical to the University of California's ability to provide competitive graduate student support.

Since OP decentralized graduate fellowship programs in 1997, most campuses have increased campus funding for graduate fellowships, but the percentage and dollar increases vary significantly among the campuses. At a minimum and as part of their standard budgetary process, campuses need to provide automatic increases in campus funding for graduate fellowships to cover fee and nonresident tuition increases, other cost-of-living increases (housing, food, books), and graduate enrollment growth.

Further, where additional increases in campus funding for fellowships are set forth in the campus graduate student support plan, campuses are encouraged to review all increases in funding that come to the campus and make graduate student support a high priority for their use.

It is anticipated that campuses will provide automatic increases in TA FTE allocations concomitant with undergraduate enrollment growth. Increases in TA fee remission will continue to be required to cover undergraduate enrollment growth and any growth in graduate fees. Some or all of TA fee remission increases may be paid from the instructional budget in order to provide more funding for graduate fellowships.

Many faculty receive attractive recruitment or retention packages. Campuses can encourage these faculty to use part of these packages for RAships, which assist both the faculty in conducting their research and the student in gaining valuable research experience and in having a excellent form of support.

#### 4. Private fund raising for graduate fellowships.

## The Committee urges Chancellors, Executive Vice Chancellors, and Deans to make a strong commitment to raise private funds for graduate fellowships and to translate that commitment into definitive and sustained action for the long term at all levels of the organization.

Aggressive private fund raising is a key component of the University's plan for closing the competitive gap in stipends and meeting our enrollment goals. Universities can raise substantial funds for graduate fellowships as evidenced by the successful \$200 million graduate fellowship campaigns of Stanford University and the University of Wisconsin. Successful fundraising requires a strong commitment and dedicated efforts by universities' top leadership.

## 5. Scholarship eligibility.

## The Committee recommends that eligibility for endowed scholarships be reviewed and, where possible, broadened to include graduate students.

The University, and particularly the more mature campuses, have many endowed scholarships. Over time, campuses may have restricted eligibility for some awards more than is required by the terms of the endowment. To provide as much flexibility in fellowship funding as possible and to perhaps expand the amount of money available for graduate fellowships, campuses are encouraged to review the terms of all graduate and undergraduate endowments and expand eligibility to include graduate students wherever possible.

#### 6. Extramural Fellowships.

### The Committee recommends that campuses take additional steps to increase the number of students applying for and receiving extramural fellowships.

National graduate fellowships, such as the National Science Foundation and Fulbright Fellowships, offer great prestige to the campus, the graduate program, and the student. In addition, many of UC's international students are supported by their home country governments or overseas foundations. Although student-initiated awards constitute less than 5% of all UC graduate student support, both national and international fellowships are important sources of graduate student support funding because of their prestige and their contribution to overall graduate student support in the University of California. Applying for extramural fellowships also provides students with valuable experience in writing proposals.

While it is recognized that the global pool of funding is quite limited, graduate offices and departments can take additional steps to increase the number of highly-qualified students applying for and receiving awards. Such actions can include a central office offering information and advice on applying for extramural fellowships and faculty identifying and encouraging the most promising students to apply for the awards, reviewing and offering advice on their statements of purpose, and writing strong letters of recommendation. Some universities offer incentives to students applying for and receiving extramural fellowships and to faculty assisting students with such application.

## Appendix A

## Table 1Enrollment by Registration Status, Residency, and Program TypeAcademic Years 2001-02 to 2004-05Academic Graduate Students

			Academic Year			
			2001-02	2002-03	2003-04	2004-05
All Academic	Continuing	California Resident	13,815	14,618	15,584	16,172
	Students	International	3,961	4,757	5,069	5,032
	New Students	California Resident	2,770	3,319	3,644	3,384
		Domestic Non-resident	1,761	2,034	2,069	1,866
		International	1,979	1,740	1,515	1,217
Academic	Continuing	California Resident	12,244	12,918	13,760	14,282
Doctoral	Students	International	3,688	4,349	4,747	4,726
	New Students	California Resident	1,729	2,019	2,120	1,988
		Domestic Non-resident	1,420	1,669	1,599	1,505
		International	1,487	1,375	1,137	896
Academic	Continuing	California Resident	1,571	1,700	1,824	1,890
Masters	Students	International	273	408	322	306
	New Students	California Resident	1,042	1,300	1,524	1,396
		Domestic Non-resident	341	365	470	361
		International	492	365	379	322

# Table 2Academic Graduate Student Support fromResearch and Teaching Assistantships, 2000-01 to 2004-05(Not Adjusted for Inflation)

						% Increase	% Increase
	2000-01	2001-02	2002-03	2003-04	2004-05	Since 00-01	Since 03-04
Research Assistantships	\$160.9 M	\$187.7 M	\$215.8 M	\$247.0 M	\$264.5 M	64%	7%
RA Earnings	\$122.3 M	\$140.2 M	\$159.6 M	\$173.7 M	\$176.2 M	44%	1%
RA Fee Remissions	\$22.7 M	\$27.5 M	\$32.3 M	\$46.1 M	\$55.1 M	143%	20%
RA Tuition Remissions	\$11.8 M	\$15.2 M	\$17.9 M	\$19.3 M	\$24.4 M	106%	26%
RA GSHIP Remissions	\$4.1 M	\$4.9 M	\$6.0 M	\$7.9 M	\$8.8 M	114%	11%
Teaching Assistantships	\$120.4 M	\$131.3 M	\$149.2 M	\$174.4 M	\$190.0 M	58%	9%
TA Earnings	\$97.5 M	\$103.5 M	\$113.2 M	\$121.6 M	\$125.9 M	29%	4%
TA Fee Remissions	\$18.3 M	\$22.1 M	\$29.2 M	\$43.0 M	\$54.1 M	195%	26%
TA GSHIP Remissions	\$4.7 M	\$5.7 M	\$6.9 M	\$9.8 M	\$10.0 M	116%	2%

# Table 3Academic Graduate Fellowship Support by Fund Source, 2000-01 to 2004-05(Not Adjusted for Inflation)

						% Increase	% Increase
Fund Source	2000-01	2001-02	2002-03	2003-04	2004-05	Since 00-01	Since 03-04
Private Gifts	\$12.2 M	\$13.9 M	\$13.5 M	\$16.4 M	\$18.4 M	51%	12%
General Funds	\$20.1 M	\$26.3 M	\$27. M	\$29.6 M	\$30.9 M	54%	5%
Sales and Service	\$2.2 M	\$1.7 M	\$2.1 M	\$2.6 M	\$3.2 M	47%	25%
Ed Fee/State Fin Aid	\$49.8 M	\$53.1 M	\$59.4 M	\$67.5 M	\$73.2 M	47%	8%
Federal	\$34.7 M	\$38.8 M	\$46.8 M	\$52.9 M	\$63.1 M	82%	19%
Other	\$39.9 M	\$40.3 M	\$43.2 M	\$46.1 M	\$46.3 M	16%	0%
Total	\$158.7 M	\$174.1 M	\$192.1 M	\$215. M	\$235.2 M	48%	9%

# Table 4Trends in Academic Net Stipends<sup>\*</sup> by Level, 2000-01 to 2004-05<br/>(Constant 2004-05 Dollars)

		Academic Year										
	2000-01	2000-01 2001-02 2002-03 2003-04 2004-05										
All Academic	\$13,020	\$13,199	\$13,324	\$13,075	\$13,569							
Doctoral	\$14,332	\$14,563	\$14,860	\$14,932	\$15,466							
Academic Masters	\$5,726	\$5,624	\$5,055	\$3,494	\$3,303							

<sup>\*</sup> Includes funding from all sources: fellowships, teaching assistantships, and research assistantships.

# Table 5Systemwide Fee LevelsAcademic Years 1998-99 to 2005-06Graduate Students(Not Adjusted for Inflation)

						Academi	c Year			
			1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Academic	California Resident	Ed/Reg	\$3,799	\$3,609	\$3,609	\$3,609	\$3,744	\$5,219	\$6,269	\$6,875
	Non-Resident	Ed/Reg	\$3,799	\$3,799	\$3,799	\$3,799	\$3,934	\$5,464	\$5,464	\$7,142
		NRT	\$9,384	\$9,804	\$10,244	\$10,704	\$11,132	\$12,245	\$14,694	\$14,694
Professional	California Resident	Ed/Reg	\$3,799	\$3,799	\$3,799	\$3,799	\$3,934	\$5,464	\$5,464	\$6,770
Fee-Paying	Non-Resident	Ed/Reg	\$3,799	\$3,799	\$3,799	\$3,799	\$3,934	\$5,464	\$5,464	\$6,770
Students	-	NRT	\$9,384	\$9,804	\$10,244	\$10,704	\$11,132	\$12,245	\$12,245	\$12,245
otadento	Professional Fees	Medicine	\$5,376	\$5,376	\$5,376	\$5,376	\$5,776	\$8,549	\$13,049	\$13,440
		Dentistry	\$5,000	\$5,000	\$5,000	\$5,000	\$5,400	\$8,060	\$12,560	\$12,937
		Veterinary Medicine	\$4,000	\$4,000	\$4,000	\$4,000	\$4,350	\$6,565	\$10,565	\$10,882
		Law	\$6,376	\$6,376	\$6,376	\$6,376	\$6,776	\$9,849	\$13,649	\$14,058
		Business	\$6,000	\$6,000	\$6,000	\$6,000	\$6,400	\$9,360	\$13,860	\$14,276
		Business (Riverside)	\$5,000	\$5,000	\$5,000	\$5,000	\$5,400	\$9,360	\$13,860	\$14,276
		Optometry	\$3,000	\$3,000	\$3,000	\$3,000	\$3,250	\$4,875	\$8,675	\$8,935
		Pharmacy	\$3,000	\$3,000	\$3,000	\$3,000	\$3,250	\$4,875	\$8,675	\$8,935
		Nursing	\$1,800	\$1,800	\$1,800	\$1,800	\$1,950	\$2,925	\$2,925	\$3,013
		Theatre, Film, & TV	\$2,000	\$2,000	\$2,000	\$2,000	\$2,150	\$3,185	\$5,785	\$5,959

# Appendix **B**

# CRITERIA FOR THE REVIEW OF PROPOSALS FOR GRADUATE STUDENT FINANCIAL SUPPORT (GSFS)

## A. Academic Criteria

The extent to which the proposal:

- 1. <u>Addresses the GSFS competitiveness issue</u> by increasing net stipends and thereby attracting more outstanding students.
- 2. <u>Helps campuses achieve their graduate enrollment plans</u> by increasing total graduate student support and thereby enabling campuses and departments to admit more students.
- 3. <u>Is unrestricted funding</u> that gives campuses and programs maximum flexibility in designing competitive GSFS packages tailored to their specific campus and program needs.
- 4. <u>Improves the available composition of support</u> to achieve a better balance among fellowships, research assistantships, and teaching assistantships.
- 5. Assists with recruitment of "a diverse pool of highly qualified students", including
  - California residents, and/or
  - domestic non-California residents, and/or
  - international students, and/or
  - students from underrepresented groups.
- 6. Encourages retention and timely degree completion;

e.g., by providing adequate support so students do not need to be employed outside the University, by providing incentives to advance to candidacy and complete degree programs on schedule, and by encouraging continuous registration of students until degree completion.

- 7. <u>Has the potential to improve graduate student performance;</u> e.g., by freeing up students to concentrate on their academic work free of financial worries.
- 8. Does not provide undesirable academic incentives;

e.g., does not encourage the preferential appointment of international students over U.S. students as TAs, which can have negative impacts both on the international TAs and the undergraduate students they are teaching; does not encourage better support packages, on average, going to new students than to continuing students in good standing and within departmental support limits, which can contribute to poor morale and undesirable attrition; does not encourage premature advancement to candidacy.

# **B.** Financial Criteria

The extent to which the proposal:

- <u>Is funded with new money</u> for the University as opposed to is funded from a <u>reallocation of</u> <u>internal UC funds</u>, thereby requiring cuts or smaller funding increases for instructional and other <u>programs</u>; i.e., reduces funding available for faculty/staff salary increases, libraries, deferred maintenance, undergraduate financial aid, or other items.
- 2. <u>Limits or reduces the burden on extramural research grants for paying RA/GSR tuition-and-fee</u> remission.
- 3. <u>Results in loss of extramural monies which currently fund core University programs;</u> e.g., if nonresident tuition were reduced substantially, UC would lose (a) all extramural research grant funds currently used to pay RA/GSR tuition remission and (b) extramural fellowships funds currently paying nonresident tuition for fellows and trainees.
- 4. <u>Limits or reduces tuition and fee burden on self-supporting students</u>. <u>Alternative: Results in loss of tuition and fee income from self-supporting students</u>.
- 5. Uses "freed-up" funds for new high-priority graduate student financial support or for "backfilling" University programs whose budgets would otherwise be reduced; e.g., if nonresident tuition were reduced substantially, UC funds currently paying nonresident students tuition that would be "freed up" (a) could be used for new graduate student support to help address the competitiveness issue or to increase graduate enrollments, (b) could be pulled back from the financial-aid budget and used to "backfill" instructional and other University programs to make up in part for the loss in nonresident tuition income, or (c) could be used for a combination of (a) and (b).
- 6. <u>Does not negatively impact UC's negotiations with the State for UC's operating and capital budget</u>.

# C. Other Criteria

The extent to which the proposal:

- 1. <u>Is perceived to be fair</u> from the viewpoint of graduate and undergraduate students, faculty, Regents, governmental officials, the general public, etc.
- 2. <u>Helps to improve equity across campuses and programs;</u> the corollary is <u>Does not further exacerbate inequities among campuses and programs</u>.
- Has the potential to garner the strong support of or be highly attractive to funders of the University;
   e.g., the State, federal government, industry, private agencies and individuals.
- 4. Is straightforward to understand, implement, and administer.

#### Appendix C, Table 3-1 Cost Implications of Eliminating NRT or Introducing a Comparable Return-to-Aid for <u>Continuing</u> Academic Doctoral Students

FIGURES ARE IN MILLIONS OF DOLLARS AND ARE BASED ON 2006-07 TUITION AND 2003-04 ENROLLMENTS AND SUPPORT PATTERNS (figures may not add due to rounding)

		Α	В	С	D	E		F	G	н
	CENARIOS THAT ELIMINATE NON- ESIDENT TUITION (NRT)	Lost NRT Revenue	Freed Up UC Fellowship	Benefit to Self- Supported Students	Benefit to Extramural Fellowships		Research Funds Other Expenses	Change in USAP from Current Levels	Net Change in Available UC Fellowships	Net Cost / Cut to Other Programs (B+C+D+E+F)
1	Maximize benefit to Graduate Student Support					13.8		0	+ 16.0	38.7
2	Intermediate cost: Keep half of freed-up UC fellowships allocated to Graduate Student Support; reduce USAP to offset remainder	38.7	16.0	2.3	6.7		Divided between		+ 8.0	30.7
3	Intermediate cost: Offset all freed up UC fellowships by reducing USAP	30.7	10.0	2.0	0.7	RA support & other expenses at PI discretion		-16.0 <sup>2</sup>	0	22.8
4	Minimize cost: Offset freed-up UC fellowships and research grant funds by reducing USAP							-29.7 <sup>3</sup>	- 13.8	9.0

<sup>1</sup> USAP is reduced to offset half (8.0) of newly freed up UC fellowships (16.0)

<sup>2</sup> USAP is reduced to offset newly freed up UC fellowships (16.0)

<sup>3</sup> USAP is reduced to offset both newly freed up UC fellowships (16.0) and the benefit to research grants (13.8)

	ENARIOS THAT USE A RETURN-TO-AID TA) <sup>1</sup> ON NON-RESIDENT TUITION	NRT Revenue Returned to Aid	Newly Available UC Fellowship	Benefit to Self- Supported Students	Benefit to Extramural Fellowships	Freed Up R Fui RA Support	Other	Change in USAP from Current Levels	Net Change in Available UC Fellowships	Net Cost / Cut to Other Programs (A)
	Additional UC fellowships w/same net cost as (1) above (RTA=35.6%)	38.7			,			+ 38.7	+ 38.7	+ 38.7
2)	Additional UC fellowships w/same net cost as (2) above (RTA=28.1%)	30.7		strictly to offsettin	id funds could be ng NRT for acader	nic doctoral		+ 30.7	+ 30.7	+ 30.7
3)	Additional UC fellowships w/same net cost as (3) above (RTA=20.9%)	22.8		students, or (b) uso benefit, directly or the				+ 22.8	+ 22.8	22.8
4)	Additional UC fellowships w/same net cost as (4) above (RTA=8.3%)	9.0						+ 9.0	+ 9.0	9.0

<sup>1</sup>The RTA level specified in each scenario, when applied to all graduate academic NRT, would result in the same net cost as the equivalent scenario that eliminates nonresident tuition in the first section above.

#### Appendix C, Table 3-2 Cost Implications of Eliminating NRT or Introducing a Comparable Return-to-Aid for <u>First-Year</u> Academic Doctoral Students

FIGURES ARE IN MILLIONS OF DOLLARS AND ARE BASED ON 2006-07 TUITION AND 2003-04 ENROLLMENTS AND SUPPORT PATTERNS (figures may not add due to rounding)

		Α	В	С	D	E		F	G	н
-	CENARIOS THAT ELIMINATE NON- ESIDENT TUITION (NRT)	Lost NRT Revenue	Freed Up UC Fellowship	Benefit to Self- Supported Students	Benefit to Extramural Fellowships		Research Funds Other Expenses	Change in USAP from Current Levels	Net Change in Available UC Fellowships	Net Cost / Cut to Other Programs (B+C+D+E+F)
11	Maximize benefit to Graduate Student Support					4.1 Divided between RA support & other expenses at PI discretion		0	26.5	40.5
2	Intermediate cost: Keep half of freed-up UC fellowships allocated to Graduate Student Support; reduce USAP to offset remainder	40.5	26.5	4.1	5.8			-13.2	13.2	27.3
3	Intermediate cost: Offset all freed up UC fellowships by reducing USAP	40.5	20.5	4.1	5.6			-26.5	0	14.0
4	Minimize cost: Offset freed-up UC fellowships and research grant funds by reducing USAP							-30.7	-4.1	9.8

<sup>1</sup> USAP is reduced to offset half (13.2) of newly freed up UC fellowships (26.5)

<sup>2</sup> USAP is reduced to offset newly freed up UC fellowships (26.5)

<sup>3</sup> USAP is reduced to offset both newly freed up UC fellowships (26.5) and the benefit to research grants (4.1)

-	CENARIOS THAT USE A RETURN-TO-AID TA) <sup>1</sup> ON NON-RESIDENT TUITION	NRT Revenue Returned to Aid	Newly Available UC Fellowship	Benefit to Self- Supported Students	Benefit to Extramural Fellowships		earch Grant nds Other Expenses	Change in USAP from Current Levels	Net Change in Available UC Fellowships	Net Cost / Cut to Other Programs (A)
1)	Additional UC fellowships w/same net cost as (1) above (RTA=37.3%)		T cilowship	oldenia	i chowsnips		Expenses	+ 40.5	+ 40.5	40.5
2	Additional UC fellowships w/same net cost as (2) above (RTA=25.2%)	27.3		New Return-to-Aid funds could be (a strictly to offsetting NRT for academ				+ 27.3	+ 27.3	+ 27.3
3	Additional UC fellowships w/same net cost as (3) above (RTA=11.0%)	14.0		students, or (b) used as flexible UC fellowships to benefit, directly or indirectly, any combination of these categories.				+ 14.0	+ 14.0	14.0
4	Additional UC fellowships w/same net cost as (4) above (RTA=9.8%)	9.8						+ 9.8	+ 9.8	9.8

<sup>1</sup>The RTA level specified in each scenario, when applied to all graduate academic NRT, would result in the same net cost as the equivalent scenario that eliminates nonresident tuition in the first section above.

#### Appendix C, Table 3-3 Cost Implications of Eliminating NRT or Introducing a Comparable Return-to-Aid for <u>All</u> Academic Doctoral Students

FIGURES ARE IN MILLIONS OF DOLLARS AND ARE BASED ON 2006-07 TUITION AND 2003-04 ENROLLMENTS AND SUPPORT PATTERNS (figures may not add due to rounding)

		Α	В	С	D	E		F	G	н
-	CENARIOS THAT ELIMINATE NON- ESIDENT TUITION (NRT)	Lost NRT Revenue	Freed Up UC Fellowship	Benefit to Self- Supported Students	Benefit to Extramural Fellowships		Research Funds Other Expenses	Change in USAP from Current Levels	Net Change in Available UC Fellowships	Net Cost / Cut to Other Programs (B+C+D+E+F)
1	) Maximize benefit to Graduate Student ) Support					17	7.9	0	+ 42.5	79.2
2	Intermediate cost: Keep half of freed-up UC ) fellowships allocated to Graduate Student Support; reduce USAP to offset remainder	79.2	42.5	6.4	12.5		Divided between RA support & other		+ 21.2	58.0
3	) Intermediate cost: Offset all freed up UC fellowships by reducing USAP	13.2	72.0	0.4	12.0	expenses at PI discretion		-42.5 <sup>2</sup>	0	36.8
4	Minimize cost: Offset freed-up UC ) fellowships and research grant funds by reducing USAP							-60.4 <sup>3</sup>	- 17.9	18.8

<sup>1</sup> USAP is reduced to offset half (21.2) of newly freed up UC fellowships (42.5)

<sup>2</sup> USAP is reduced to offset newly freed up UC fellowships (42.5)

<sup>3</sup> USAP is reduced to offset both newly freed up UC fellowships (42.5) and the benefit to research grants (17.9)

	ENARIOS THAT USE A RETURN-TO-AID TA) <sup>1</sup> ON NON-RESIDENT TUITION	NRT Revenue Returned to Aid	Newly Available UC Fellowship	Benefit to Self- Supported Students	Benefit to Extramural Fellowships		earch Grant nds Other Expenses	Change in USAP from Current Levels	Net Change in Available UC Fellowships	Net Cost / Cut to Other Programs (A)
11	Additional UC fellowships w/same net cost as (1) above (RTA=72.8%)	79.2						+ 79.2	+ 79.2	79.2
2)	Additional UC fellowships w/same net cost as (2) above (RTA=53.3%)	58.0		New Return-to-Aid funds could be (a strictly to offsetting NRT for academi				+ 58.0	+ 58.0	+ 58.0
3)	Additional UC fellowships w/same net cost as (3) above (RTA=33.8%)	36.8		students, or (b) used as flexible UC fellowships to benefit, directly or indirectly, any combination of these categories.				+ 36.8	+ 36.8	36.8
4)	Additional UC fellowships w/same net cost as (4) above (RTA=18.1%)	18.8						+ 18.8	+ 18.8	18.8

<sup>1</sup>The RTA level specified in each scenario, when applied to all graduate academic NRT, would result in the same net cost as the equivalent scenario that eliminates nonresident tuition in the first section above.

# Appendix D

## Estimating Graduate Student Support Need and Availability

The purpose of this projection is to depict the anticipated 2010-11 need for academic graduate student support and the estimated graduate student support funds that will be available, given various goals and assumptions. To the extent that support needed to achieve the University's goals for graduate student support goals exceeds the available support, the university cannot expect to achieve its goals.

Table D-1 (below) depicts the estimated need for graduate student support, the estimated availability of graduate student support, and the difference between the two for the 2010-11 academic year and for each of the Committee's graduate student support goals. Table D-2 shows the impact of several of the Committee's proposals on the University's ability to meet all three of the Committee's graduate support goals. A description of the various assumptions used to create these tables appears below.

#### Assumptions Related to the Need for Graduate Student Support

*Student fees, tuition, and other charges.* Student charges are expected to increase faster than the rate of inflation between 2004-05 and 2010-11. For purposes of this analysis:

- Non-resident tuition is assumed to remain constant (and hence to decline in constant dollars) between 2004-05 and 2010. In addition, the model assumes that the 25% of nonresident tuition charged to international students who have advanced to candidacy is eliminated beginning in the year 2006-07.
- Systemwide fees are assumed to remain flat in 2006-07, followed by annual increases of 10% (in nominal dollars) each year through 2010-11. The net result is a cumulative nominal increase of 61% over 2004-05 levels and an increase of 33% in constant dollars.
- Campus and GSHIP fees are assumed to increase at the same average annual rate as systemwide fees (8.3% each year), resulting in a cumulative nominal increase of 61% over 2004-05 levels and an increase of 33% in constant dollars.

Total charges for 2010-11 are calculated by multiplying the projected average charges for international and domestic academic graduates by the projected enrollment of these students, given overall enrollment levels and the mix of international and domestic students at each campus. This method implicitly assumes that the ratio of advanced-to-candidacy to precandidacy students at each campus remains constant.

*Net stipend level.* The model assumes that the per capita net stipend for all graduate students must be maintained at least as high as the real value of the 2004-05 per capita net stipend at each campus. This method implicitly assumes no changes in the ratio of Ph.D. students to all academic graduate students, the distribution of students by discipline, or current variations in net stipends across types of students and across campuses.

*Total support necessary*. Total support necessary in 2010-11 is calculated by multiplying, by campus and student type (domestic versus international), the sum of the per capita charges and estimated net stipends by the projected campus enrollment. This calculates the total amount of

support that would be mathematically necessary in order to achieve the stipulated enrollment levels, percentage international, and net stipend goals above, given assumptions about fee increases, cost-of-living increases, and campus and department choice to use the funds in these particular ways.

#### Assumptions Related to the Availability of Graduate Student Support

To calculate the estimated support available from traditional sources, the model relies upon the systemwide total dollars of support awarded in 2004-05 divided into four categories: UC fellowships and grants; other fellowships and grants; research assistant support; and teaching assistant support. Each category has separate assumptions which govern the amount expected under the status quo in 2010-11.

Note that several fund sources are expected to increase at the same rate as the Consumer Price Index (CPI). CPI estimates are only available through 2006-07. For subsequent years, the model assumes that CPI will increase at the same average annual rate (3.2%) as it increased during the years 1999-00 through 2006-07 (estimated). The CPI is expected to increase overall by 21% for the period 2004-05 through 2010-11.

*UC Fellowships/Grants.* This support is divided into USAP and "Base" support (which, for purposes of this analysis, includes decentralized graduate student support block grant, campus discretionary funds, and fellowships funded by all UC gifts and endowments). USAP fellowship is assumed to increase by 25% of projected increases in mandatory systemwide fee revenue (educational fee and registration fee). "Base" fellowship support is assumed to grow by CPI.

*Other Fellowships/Grants.* Other fellowships and grants combine portable fellowships, such as NIH and NSF, as well as training grants. The model assumes that every new student at a given campus has the same chance of earning one of these fellowships as a current student at that campus. Hence, the value of fellowships awarded to UC graduate students at each campus will increase with graduate student enrollment. The model does not assume the fellowships will pay fully for all mandatory fee increases because of funding constraints faced by extramural fellowship agencies. The model does assume that the total value of each award will increase by CPI.

*Research Assistant Support.* Research Assistants are typically supported by faculty research grants. The model assumes that the CPI-adjusted value of graduate student support available from research grants is proportional to the number of faculty, and that the student/faculty ratio will remain fixed for the projection period. The model does not assume that the research grant will fully cover the cost of fee increases, due to funding constraints on total funds available for research projects and the possibility that, as fees increase, some faculty members might choose to hire postdocs in place of some graduate student researchers to keep their costs down. (Graduate and undergraduate enrollment growth was projected as described below; see *Goal #1: Achieving the University's Graduate Enrollment Targets.*)

*Teaching Assistant Support.* Teaching assistant funds are expected to increase from two sources. First, TA salary support from instructional budgets is assumed to increase by CPI and by the percentage increase in undergraduate enrollment. Second, additional funding for TA fee remission is expected from allocating approximately 25% of projected increases in systemwide mandatory fee revenue (educational and registration fees) to cover TA fee remission increases. (Undergraduate enrollment growth was projected as described below; see *Goal #1: Achieving the University's Graduate Enrollment Targets.*)

*Total Support Expected.* Total support expected is calculated by summing the total support expected from each individual fund source, according to the assumptions listed above.

# Modeling the University Graduate Student Support Goals

*Goal #1: Achieve the University's Graduate Enrollment Targets.* A reasonable estimate of 2010-11 graduate student enrollment can be developed by applying the anticipated percentage increase in budgeted general campus graduate FTE enrollment at each campus to each campus's actual 2004-05 graduate headcount<sup>\*</sup>. Such an approach predicts relatively greater growth at Irvine, Riverside, Merced, San Diego and Davis, and relatively less growth at Berkeley, San Francisco, Los Angeles, Santa Cruz and Santa Barbara. Using this approach, systemwide graduate headcount is expected to increase by 18%. (Similarly, undergraduate enrollment – which influences the estimated amount of available TA and, indirectly, RA funding – was projected by applying the percentage increase in budgeted undergraduate FTE enrollment between 2004-05 and 20010-11 to actual 2004-05 headcount. Using this approach, systemwide undergraduate enrollment is expected to increase by 16%.)

*Goal #2: Close the Competitive Gap.* The 2004 Graduate Student Support Survey indicated that the systemwide difference between UC net stipend offers to admits and their top-choice non-UC offers was \$2,081, when adjusted for differences in cost of living. Although some campuses have different relative position with respect to this statistic, the overall cost of raising the UC net stipend to a competitive level is calculated by the cost of increasing the per capita net stipend by \$2,081 in 2004-05 constant dollars. This assumes that competitors' net stipends will increase at the level of CPI.

*Goal #3: Eliminate Disincentives to Enroll International Academic Graduate Students.* The percentage of new international graduate students fell precipitously in recent years and has rebounded somewhat in 2005-06. In spite of this, the overall percentage of international academic graduate students has fallen much more slowly due to the high number of international students already enrolled.

The model sets the overall international graduate student enrollment goal at 25%, the same level achieved in 2002-03 and the highest percentage of international students achieved in recent years. (In contrast, international students represented only 23% of graduate academic students in 2004-05). Note that the cost of achieving this goal is relatively minor compared to achieving either of the other two goals articulated by the Committee; hence, even a much more ambitious target (e.g., 28%) would not dramatically change the overall outlook for graduate student support.

## Note:

Many Merced assumptions are drawn from average values for Riverside, since Merced does not yet have an adequate population for modeling purposes.

<sup>\*</sup> For purposes of this analysis, headcount is calculated based on students' full-year equivalent enrollment. For example, a student enrolled for only two quarters during the academic year would count as 0.67 students. In contrast, budgeted FTE enrollment reflects the aggregate budgeted unit load across all students divided by a standard expected number of units per full-time student. By applying the planned increase in budgeted FTE enrollment to campus headcount figures, this analysis assumes that increases in the aggregate number of budgeted FTE enrollment is proportional to the increase in the headcount of enrolled students.

# Table D-1 Estimated Need for and Availability of Graduate Academic Student Support Associated with the University's Graduate Academic Student Support Goals

			2010	-11 Projected (	Constant 2004-	05 \$)
		0004.05	N 4 - 1 - 4 - 1 -	Goal 1:	Goal 3: Increase	Goals 1+3: Increase Int'l % and
		2004-05 Actual	Maintain Status Quo	Enrollment Growth Only	International Pct.	Enrollment Growth
	Student Charges			<u> </u>		
	Resident Fees	\$177 M	\$236 M	\$281 M	\$236 M	\$281 M
	Non-Resident Tuition	\$96 M	\$73 M	\$86 M	\$76 M	\$91 M
	Campus-Based Fees	\$12 M	\$16 M	\$19 M	\$16 M	\$19 M
Estimated Need for	GSHIP Fees	<u>\$35 M</u>	<u>\$47 M</u>	<u>\$55 M</u>	<u>\$47 M</u>	<u>\$55 M</u>
Estimated Need for Graduate Student	Req'd to Cover Student Charges	\$320 M	\$372 M	\$441 M	\$375 M	\$446 M
Support	Req'd to Maintain Net Stipend	<u>\$370 M</u>	<u>\$370 M</u>	<u>\$430 M</u>	<u>\$370 M</u>	<u>\$430 M</u>
	Subtotal (excl. competitive gap)	\$690 M	\$741 M	\$871 M	\$745 M	\$876 M
	Goal 2: Close Comp. Gap	<u>\$49 M</u>	<u>\$49 M</u>	<u>\$58 M</u>	<u>\$49 M</u>	<u>\$58 M</u>
	Total Support Needed	\$739 M	\$790 M	\$929 M	\$794 M	\$934 M
	Available Support					
	UC Fellowships/Grants	\$162 M	\$175 M	\$185 M	\$175 M	\$185 M
Estimated	Other Fellowships/Grants	\$73 M	\$74 M	\$83 M	\$74 M	\$83 M
Availability of Graduate Student	RA Support	\$264 M	\$293 M	\$299 M	\$293 M	\$299 M
Support	TA Support	<u>\$190 M</u>	<u>\$233 M</u>	<u>\$244 M</u>	<u>\$233 M</u>	<u>\$244 M</u>
	Total Available Support	\$690 M	\$775 M	\$812 M	\$775 M	\$812 M
Estimated Surplus	Maintain Competitive Gap		\$34 M	(\$60 M)	\$30 M	(\$65 M)
(Gap) to Achieve Goals	Goal 2: Close Comp. Gap	(\$49 M)	(\$16 M)	(\$118 M)	(\$19 M)	(\$122 M)
Enrollment (Headcount)		27,940	27,940	33,052	27,940	33,052

# Table D-2Estimated 2010-11 Impact of Selected Committee Recommendations onGraduate Student Support Required to Meet All Three Graduate Support Goals, 2004-05 Dollars\*

		2010-11 Pro	jected to Meet All	Graduate Suppor	rt Goals (Constar	nt 2004-05 \$)
		Base Case: No Proposal Implemented	Eliminate NRT for Academic Doctoral	Freeze System Fees	Increase Fellowship RTA from 25% to 33%	Implement All Three Proposals
Estimated Need for Graduate Student Support	Student Charges Resident Fees Non-Resident Tuition Campus-Based Fees GSHIP Fees Req'd to Cover Student Charges Req'd to Maintain Net Stipend Req'd to Close Competitive Gap <i>Total Support Needed</i>	\$281 M \$91 M <u>\$55 M</u> \$446 M \$430 M <u>\$58 M</u> \$934 M	\$281 M \$16 M \$19 M <u>\$55 M</u> \$371 M \$430 M <u>\$58 M</u> \$859 M	\$211 M \$91 M \$19 M <u>\$55 M</u> \$377 M \$430 M <u>\$58 M</u> \$864 M	\$281 M \$91 M \$19 M <u>\$55 M</u> \$446 M \$430 M <u>\$58 M</u> \$934 M	\$211 M \$16 M \$19 M <u>\$55 M</u> \$301 M \$430 M <u>\$58 M</u> \$790 M
Estimated Availability of Graduate Student Support	Available Support UC Fellowships/Grants Other Fellowships/Grants Research Assistant Support Teaching Assistant Support Total Available Support	\$185 M \$83 M \$299 M <u>\$244 M</u> \$812 M	\$167 M \$83 M \$299 M <u>\$244 M</u> \$793 M	\$168 M \$83 M \$299 M <u>\$227 M</u> \$777 M	\$196 M \$83 M \$299 M <u>\$244 M</u> \$823 M	\$154 M \$83 M \$299 M <u>\$227 M</u> \$763 M
Estimated Surplus (Gap) to Achieve Goals	Surplus (Gap) of Available Support Improvement vs. Base Case	( \$122 M )	( \$66 M ) + \$58 M	(\$87 M) + \$35 M	(\$112 M) + \$10 M	( \$27 M ) + \$95 M

<sup>\*</sup> Assumes that upon implementation of the reduction in nonresident tuition, UC fellowship funding is reduced by approximately \$21 million in nominal dollars (which, in 2010-11, will be worth \$18 million in constant 2004-05 dollars), equivalent to half of the \$42.5 million of fellowship funds that previously covered nonresident tuition. The remaining half is assumed to remain budgeted for graduate student support. In addition, all RA funds currently used for graduate student support are assumed to remain budgeted for graduate student support once non-resident tuition is eliminated; this assumption may be unrealistically optimistic and thus may overestimate the available graduate student support funding associated with eliminating nonresident tuition.