

FINANCING GRADUATE EDUCATION TASK FORCE

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Executive Summary

Graduate education is a distinctive feature of the educational programs of the University of Minnesota, and excellence in graduate education is the hallmark of a great University. No other institution of higher education in the State, public or private, has the responsibility or mission for this mission-critical piece of higher education. The graduates of the University of Minnesota's graduate programs meet critical talent and highly-educated workforce needs across a wide variety of key economic and related sectors, and advance basic and applied research and technology transfer in the state, nation and world. The quality of the University of Minnesota's research depends not only on its faculty, but also on the University's ability to attract the brightest graduate students to work with them.

The current financial situation and outlook is that the University of Minnesota is caught between dramatically decreasing state revenue and rapidly rising costs for virtually all goods and services including graduate education. The University has met its financial needs partly through raising tuition and other fees and partly through internal reallocations and cost savings. It is apparent that this extreme financial pressure will continue for the foreseeable future, necessitating changing methods of operations of many of the University's functions. Thus, against this austere background, the Financing Graduate Education Task Force attempts in this report to provide guidance on the future financing options for graduate education at the University of Minnesota.

There are many misunderstandings concerning financing of graduate education; whether or not Minnesota is competitive with peer institutions in fellowships, research and teaching assistantships (RA or TA) salaries, fringe benefits and workloads. Questions have been raised about whether our programs are efficient or productive. This report attempts to put facts together to provide a reality check that the University of Minnesota is reasonably competitive with peer institutions, but that changes could be made to improve our complete mission.

The Task Force believes the University of Minnesota must choose to maintain high quality programs and work toward achieving this goal through a combination of processes. There is neither a single nor an immediate solution to the problem of adequately financing graduate education at the University of Minnesota. Adequate financial support for graduate education is best achieved through a combination of approaches, which are outlined below.

Recommendations of the Task Force

1. Request \$5 million annually in the biennial request for graduate fellowships, the money to be granted on the condition that it will be matched by private donations. (\$5 million is equivalent to the payout on a \$100 million endowment) This can be justified by attracting and retaining more talent in the state, directly benefiting the Minnesota economy. The University's research and graduate education efforts

- are—along with education of health professionals—the activities most valued by Minnesota citizens according to a recent survey conducted by University Relations.
2. Undertake a major fundraising campaign, in the colleges and centrally, for graduate fellowships to match the anticipated legislative appropriation (Recommendation 1).
 3. Use the compact process, and similar internal collegiate processes, to examine and adjust the balance between expenditures on graduate education and other expenditures, in light of college and institutional priorities and capacities.
 4. All units should also review the appropriate number of students in their graduate programs. Right-sizing of graduate programs should be driven not just by needs for TAs and RAs, but also by availability of jobs for graduates. Some aspects of right-sizing might include:
 - a. Encourage graduate programs to review their plans for admissions, in light of the appropriate size of the program. A smaller program, with fewer but higher quality and better-supported graduate students, may be a wiser choice for some programs.
 - b. In a few programs where graduate admissions are driven more by TA needs for large service courses than by the availability of high-quality students, consider using Teaching Specialists.
 - c. Encourage colleges and departments to reallocate money internally to support (or reduce support for) graduate education, in line with the priorities established by the units.
 - d. Increase the amounts of funding generated by research and training grants in those units that have the capacity. This strategy could support more RAs directly, and also provide more faculty salary support (from NIH grants), freeing other money that could then be available for graduate student support.
 - e. In cases where there are too few graduate students for the number of faculty, consider deferring faculty hiring and put the money (salary and startup) into graduate student support.
 5. Urge graduate programs to significantly improve student time-to-degree and completion rates, thereby reducing each student's need for total years of support.
 6. Close small, lower-quality graduate programs, or merge them with others to promote greater efficiency and student choice. Furthermore, the University should examine whether reallocations can be made from lower priority University activities or programs to support high priority graduate education programs, and consider consolidating small academic units to save administrative costs and minimize faculty and staff duplication.
 7. Spread fringe benefit over- or under-recovery across a rolling three-year period, instead of collecting it all in one year, and be prepared to subsidize under-recovery of fringe benefits slightly after the fact, so as to avoid disruptive fiscal oscillations.
 8. Minimize administrative time and expenses by simplifying procedures. Savings generated will be small per unit, but could be significant overall.

9. Form working groups under the aegis of the Provost and the Dean of the Graduate School and in cooperation with the collegiate deans, to move from the potential solutions listed to plans that can be consulted and implemented.
10. Establish a group to examine any significant institutional issues surrounding the financing of professional student education that the Provost feels have been left unaddressed.

It is all too easy to recommend that the University of Minnesota allocate more money for graduate education; but it is neither entirely practical nor responsible in these austere times. Nevertheless, it is critically important that graduate education be maintained through a strategic combination of allocating (reallocating) relatively more money, right-sizing programs, economizing operations, and developing productivity enhancements in a well orchestrated manner. Right-sizing is a term used in this context to mean adjusting programs to fit into the available budget while keeping critical programs strong. As such, some programs may grow while others may shrink or be eliminated. The Task Force members assert that graduate education is a critical University function, necessary for national rankings, the regional economy, and our quality of life in Minnesota.

The Report: Financing Graduate Education at the University of Minnesota

I. The Role of Graduate Education at the University of Minnesota:

Graduate education is a distinctive feature of the educational programs of the University of Minnesota, and excellence in graduate education is the hallmark of a great University. A strong graduate program is essential to a strong research program. The quality of research at the University is the key to its national reputation. No other institution of higher education in the State, public or private, has the responsibility or mission for this mission-critical piece of higher education.

The graduates of the University of Minnesota's graduate programs meet critical talent and highly educated workforce needs across a wide variety of key economic and related sectors, and advance basic and applied research and technology transfer in the state. Graduates take leadership positions in industry, business, and governmental agencies. In addition, they play an extremely important role in the state's education system as they assume faculty positions at the University of Minnesota as well as at other institutions of higher education in Minnesota. Many of the leaders of Minnesota's K-12 educational system are graduates of the university's graduate programs.

Graduate students also play a critical role within the University itself. The quality of the University of Minnesota's research depends not only on the brilliance of its researchers, but also on the University's ability to attract the brightest graduate students to work with them. The quality of teaching in undergraduate education depends not only on those professors, but also on the abilities of the graduate students who work with small sections. If we wish to remain a magnet for talent for the state of Minnesota, we need to maintain a strong graduate program. The teaching and research benefits of having strong

graduate students are synergistic in that graduate students extend the teaching capability of excellent faculty, thereby allowing them more time to conduct research, as well as directly contributing to the research effort.

The University has worked hard to recruit top faculty, especially young faculty in cutting-edge fields. As these faculty approach tenure, they will become increasingly attractive to competing universities, especially those institutions that can provide better research infrastructure, including graduate student support. Providing strong support for funding graduate students is a key factor in the retention of top faculty. Furthermore, the money spent to hire graduate students as graduate teaching and/or research assistants provides support for the graduate students and supports the undergraduate teaching and research missions of the university.

Graduate education is conducted in a national market. The competition for the best and brightest graduate students is dependent on having the best and brightest faculty members and, conversely, faculty members are attracted to a university by the opportunity to participate in a strong graduate program. Another competitive factor, in addition to the quality of the faculty, is the support offered to the student, either as a fellowship or, more often, through an offer of employment as a graduate teaching or research assistant.

Graduate education is fostered by such actions as recruiting and retaining outstanding faculty in nationally ranked professions, improving internships and fellowships, enhancing infrastructure for research and scholarship, providing summer research fellowships for fields in which students rarely have research assistantships, enhancing professional development opportunities for students, developing creative new instruction models, and instituting faculty development programs. All of these actions increase the ability of the University of Minnesota to attract outstanding students, increase the likelihood of successful completion of a graduate degree and enhance the talent that is brought to Minnesota.

II. The Current Financial Situation at the University of Minnesota:

The current financial situation and outlook is that the State of Minnesota has dramatically reduced the appropriation to the University of Minnesota. Simultaneously, rising costs for nearly all goods and services have placed considerable stress on the University's budget. Costs of new facilities, personnel, health care, technology, energy, legal services, and debt service are rising rapidly. Seeking to ease financial pressures, the University has met its budgetary needs partly through raising tuition and other fees and partly through internal reallocations and cost savings. Against this background, the Financing Graduate Education Task Force attempts in this report to provide guidance on the future financing of graduate education at the University of Minnesota.

III. Key Findings and Recommendations:

Clearly, graduate education is a priority for the University of Minnesota. However, directing resources to this priority has been a challenge. The University (along with its

partners in the State) needs to sustain a substantial commitment in support of graduate education. The recent dramatic increase in tuition and fringe benefit rates has driven up costs and has impaired our ability to offer an adequate number of competitive graduate student fellowship packages. It also has strained collegiate and departmental budgets, which have not kept pace with inflation or increased costs. And it may have had an adverse impact on the financial competitiveness of our grant requests to external funding institutions. More resources should be devoted to the most important graduate education programs through a thoughtful and rigorous combination of obtaining more total funding from the State, from federal research grants, and from private donations; reallocating internal resources from lower priorities to give graduate education support commensurate with its high priority importance to our mission; reviewing our policies and practices to ensure that our existing resources for graduate support are used as effectively as possible with a minimum of bureaucracy; reviewing our existing graduate programs for quality, centrality, and efficiency; and regularly reviewing our competitive position in recruiting graduate students to each of our graduate programs, as well as our placement records for students who complete those programs.

The University needs to optimize the utilization of central resources available for graduate education. The University will make decisions on where it should continue to provide support based on the other funding sources for the programs (e.g., graduate student tuition, grants and contracts, endowments), the costs of the programs (e.g., costs of instruction, administration, student support) and the collateral purposes served by the programs (e.g., research, teaching assistance, stature and intellectual vitality of the unit) in light of the criteria in the Strategic Planning Document. Those criteria are centrality to mission; quality, productivity and impact; uniqueness and comparative advantage; enhancement of academic synergies; demand and resources; efficiency and effectiveness; and development and leveraging of resources. Therefore, each graduate program should be reviewed to determine whether it is operating at the optimum size in light of the criteria in the University's strategic planning process, program quality and need, and the resources available to support the program. Measures for evaluation of graduate programs are listed in Appendix 5. Most of these data are already collected by the Graduate School; they should be used more regularly and systematically to evaluate and allocate support to graduate programs.

To build greater understanding and support in the State of the importance of graduate students and graduate education, the University should strive to better articulate the ways in which our graduates meet critical talent and workforce needs across a wide variety of key economic and related sectors. The University can better articulate the role of graduate and professional education in advancing basic and applied research and technology transfer, and the important role that graduates play in the state's education system (at the undergraduate level at the University of Minnesota, as faculty in other institutions of higher education in Minnesota, and in providing graduate training to K-12 educators). Legislative efforts and private fundraising efforts can be supported by appropriate public relations strategies surrounding the importance of graduate education.

IV. The Essence of the Problem and the Scope of our Considerations:

Graduate and professional students and their programs reside in very different contexts within the University. It is important to understand that any set of issues and solutions will impact some units and students directly, some indirectly, and some not at all. This report does not attempt to address every issue in every program. The University had 16,305 students pursuing post baccalaureate degrees or certificates in fall 2003. These students were enrolled across 53 different degree programs and 20 recognized certificate programs. Every college on the Twin Cities and Duluth campuses has graduate or professional students, with the exception of General College. In total, these students paid over \$150 million in tuition (or the tuition was paid on their behalf), just under 40% of the total tuition collected by the University in 2003-04.

Approximately 10,000 of the 16,000 graduate and professional students are formally admitted by the Graduate School. The other 6,000 are in professional programs in Law, Medicine, Dentistry, and the like, but also in large degree programs such as the Masters of Education and Masters of Business Administration. Slightly fewer than 7,200 students are pursuing an M.A., M.S., or Ph.D., meaning a majority of our post-baccalaureate students are seeking a wide variety of other degrees and certificates.

Likewise, collegiate units operate in very different environments. More traditional graduate school colleges such as CLA and CBS hire many graduate students, have most of their students in M.A., M.S., or Ph.D. programs, but are not highly dependent on tuition from these students. Tuition paid by or on behalf of these students generally makes up 10-25% of a college's overall O&M budget in these types of colleges. Other schools, such as the Medical School, Carlson School of Management, and Education and Human Development, also hire a significant number of graduate students, but have a variety of programs both within and outside of the Graduate School. These schools might secure between 35-60% of their O&M budget from tuition from post-baccalaureate students. While these colleges compete on a national scale for the best graduate students, they may also have programs that are highly competitive in local and regional markets, and may have different tuition pressures, student expectations, and hiring patterns.

We have construed our charge to focus primarily on the issues surrounding the approximately 4,000 to 5,000 graduate and professional students who are employed by the University and paid by various types of funding or who receive fellowships. As a result of their employment or of receiving a fellowship, these students receive tuition and health benefits through the graduate student fringe benefit pool. In fiscal year 2003-04, the University spent over \$111 million in salary and fringe benefits on these student employees. It should be noted that there are 11,000 to 12,000 other graduate and professional students who are not employed by the University as graduate assistants, most of whom do not receive University support for tuition or health benefits.¹ There are financial issues involving these students, as well; we do not address them here, other than

¹Some students who are not employees or receiving fellowships are, however, receiving scholarships or other forms of aid. Some may be receiving direct payment of their tuition, health insurance costs, U of M fee, or other costs.

to point out the serious burden that increasing tuition and fees places on these students, and the adverse impact this burden may have on our ability to recruit them and on their future ability to contribute to the State.

The Task Force has addressed the issues raised by the rapidly rising fringe benefit rates for graduate assistants. In one sense, this is a very simple problem: tuition rates and health insurance costs, both of which are funded by the University through fringe benefit charges for graduate students who are also graduate student employees, have risen faster than departmental and collegiate budgets. The increase in tuition rates -- one of the solutions to the University's budget problems of the past few years -- has produced unintended consequences in the form of increased costs for the associated fringe benefits for graduate student employees.

Below is a table showing salary and fringe expenditures on graduate assistants over the past five fiscal years in CUFS objects 7005 (salaries) and 7102 (fringe). This table represents all funds, sponsored and non-sponsored. It does not include expenditures on graduate fellowships.

System-Wide	FY1999-2000	FY2000-01	FY2001-02	FY2002-03	FY2003-04
Salary	\$56,931,039	\$61,545,335	\$64,599,420	\$ 67,944,034	\$ 68,853,068
Fringe	\$20,953,874	\$24,049,816	\$33,174,347	\$ 40,512,020	\$ 42,835,464
Total	\$77,884,913	\$85,595,151	\$97,773,767	\$108,456,054	\$111,688,532

Period 14 (end-of-year) totals, from CUFS/data warehouse

Total expenditures on salaries have increased 20.9% over the past five years. Over the same time period, expenditures on fringe benefits (including the tuition benefit) have increased 104%!

V. How the Present System Works

University of Minnesota support for graduate students who are employed as Research Assistants or Teaching Assistants (RAs or TAs) includes partial or full tuition payment. Those employed for more than 5 hours per week (12.5% time) during the semester receive a tuition benefit for that semester that is double the percentage of employment time. Thus a 25% time RA or TA receives 50% tuition coverage and a 50% RA or TA receives 100%. The cost of this program is borne by a fringe benefit charge; for the 2004-05 year, the employing unit pays a fixed amount per hour to this fringe pool for every hour a graduate assistant works; their actual tuition is then paid out of that pool. Non-resident graduate assistants employed 25% or more also receive a waiver of the non-resident portion of their tuition; this waiver is not booked in the accounting system as either a charge to the pool or as tuition revenue. Graduate assistants employed more than 25% time also receive subsidized health insurance. The cost of this subsidy is paid from a

fringe benefits pool and is funded by the employing unit as a percentage of the actual salary, together with other fringe benefit costs, such as Social Security and Medicare taxes. The fringe pool charges are levied against all RA and TA salaries, whether or not the particular individual is receiving a particular benefit. The charging rate for the present year is \$10.39 per hour to cover the tuition benefit program plus 14% of the salary to support the health insurance and other programs. Tuition and health benefits for recipients of Graduate School Fellowships are paid directly by the Graduate School rather than as part of the fringe benefit pool. The cost implications are parallel to those for the fringe benefit pool.

VI. Three Interconnected Problems

On closer examination, we find that there are distinct, but interconnected problems. They require separate presentation.

1. Research assistants (RAs). The University has approximately 2,100 research assistants, for which the University spent \$37.9 million in salary and \$21.7 million in fringe all funds – sponsored and non-sponsored. Nearly two-thirds of the funding for RA compensation (\$38.0 million of \$59.6 million) – comes from grants and contracts; about 18% (\$10.8 million) comes from O&M and State Special funding. The remaining compensation comes from a mixture of sources, including private donations, endowment income, foundations, and business and industry. The concerns about RAs are raised largely by the Principal Investigators (PIs) who hold the research grants, and are concerned about competitiveness and about their ability to hire enough RAs within their grant budgets.
 - a. Some PIs, particularly in the biological sciences, feel that our fringe benefit costs make their grant applications financially uncompetitive. Our investigation finds this concern is not substantiated and that our rates overall for a 10 month appointment are comparable to those at other Big 10 institutions and lower than at most major private research institutions. However, there may be some differences with respect to summer tuition and other details that make our overall rates higher.
 - b. Other PIs with longer term grants that do not include adequate inflationary adjustments to cover the substantial increases find that they must reduce the numbers of research assistants or otherwise reallocate their expenditures. A similar concern is expressed by those who face funding caps in grant applications, who cannot fund the number of RAs whom they need to employ to get the research accomplished. In addition, some funding agencies are now capping the total amount the agency will pay for a graduate assistant salary and/or fringe; some agencies specifically will not pay tuition.

- c. Some granting agencies will not allow direct charges for tuition. This means that the cost of the tuition fringe must come from non-sponsored accounts—difficult in this era of dwindling departmental support.
2. Teaching assistants (TAs). The University employs approximately 2,250 teaching assistants for which the University spent \$27.7 million in salary and \$19.5 million in fringe all-funds – sponsored and non-sponsored. Over 95% of their funding comes from O&M funds (\$45.1 million out of a total of \$47.2 million). These individuals provide valuable instructional service to the undergraduate curriculum. However, their costs have risen faster than available resources. To take only one example: In CLA, allocations to the collegiate O & M budget have increased 30% over 4 years, but costs for a steady number of TAs have risen by 60% because of rapidly rising fringe rates. cross the University, units have responded to this pressure in different ways. Some have decreased the number of TA positions, placing more work on fewer individuals (and thus reducing financial support for graduate students); others have held the number of positions relatively constant by keeping salary levels at the minimum to help to offset increasing fringe costs; and still others have squeezed other departmental expenditures or collapsed faculty positions to support TA costs. The basic problem for TA support is the level of O&M support for the units.

Note that an additional \$4.9 million was spent in FY2004 on administrative fellows, legal project assistants, and other types of graduate assistantships throughout the University. Though not examined in detail, these positions are also funded primarily with O&M funds, and we suspect the issues surrounding these student appointments are very similar to those found for TAs in general.

3. Graduate fellowships. There is a variety of fellowship programs: The Graduate School awards about 130 fellowships to the most highly qualified candidates for graduate study, including stipend, tuition, and health benefits. These competitive fellowships are essential to obtaining a class of entering students of the quality that we expect. Individual graduate programs also award fellowships from funds provided by Graduate School block grants and from departmental funds (largely O&M, supplemented with private funds). The combined Graduate School budget for its direct fellowships and for block grants is \$5.7 million. Over the past 5 years, the number of students who could be fully supported through the direct fellowships and the block grants has fallen by more than 25%, from 253 to 187. (Total fellowship expenditures, including departmental sources, are about \$8.2 million.) The basic problem with graduate fellowship funding is the level of O&M and endowment income to support the program. Some other Big 10 universities with which we compete have twice the amount of fellowship support from institutional funds.

Appendix 6 examines these three sources of support from a related point of view. It notes that determining the number of graduate assistants and their pay rates is a very decentralized process, in which a vast majority of the decisions on number of graduate

assistants and their compensation are made at the faculty, department, and college level, where these investments are necessarily weighed against other academic investments and priorities.

Private funds, professional association funds, and other miscellaneous sources also provide some support in the forms of scholarships, prizes, travel grants, and so on. In addition, direct payment of some costs (e.g., graduate student travel, books, and laboratory supplies) may be provided in some cases. These sources of support are welcome, and certainly help to augment the three major categories of TA-ships, RA-ships, and fellowships. However, they are typically smaller, onetime amounts.

In the sections that follow and in the appendices, we discuss the historical development of this problem over the past decade, and some of the financial and technical aspects of the problem. We then make our recommendations. We note here, however, that there are no quick fixes to this problem. Graduate education needs greater financial support, both through funds channeled through the Graduate School and through funds directed to departments. We do recommend some minor technical changes, but they would only serve as a palliative against volatility and would not solve the fundamental issue of meeting the rapidly rising fringe benefit rate.

VII. The Most Important and Strategic Problems

The budget for the University of Minnesota has been sharply reduced by the State of Minnesota, resulting in severe direct and indirect pressure on all academic and non-academic financial systems. Since graduate education requires strong departments, recent budget cuts have had a profoundly negative effect on academic departments, which in turn have had a profoundly negative effect on graduate students, TA-ships, RA-ships and fellowships.

1. Tuition has gone up for both graduates and undergraduates to compensate for decreases in state funding, but graduate students are not eligible for state financial aid to offset increased tuition.
2. Fringe fluctuations, due to annual over- or under-estimation of rates needed for full recovery, and rapid and sometimes unpredictable increases in tuition rates and health care costs are alarming to PIs because multi-year grants are too inelastic to absorb rapid increases in tuition and health insurance. Tuition and fringes sometimes have had to be covered or supplemented by other unit funds, which have also suffered financial stresses.
3. For colleges and departments, the increase in fringe costs has strained budgets. Budget additions have not kept pace with this aspect of costs. In addition, the U of M central tax on tuition revenues means that employing a TA who gets the tuition benefit is no longer a zero-sum exercise, but instead is an added cost to the unit. This may mean, among other things, that some units pay TAs at the base and work them increasingly hard, which may lessen a units' competitive position.

4. Grad School Fellowship and Diversity of Views and Experiences (DOVE) Fellowship funds have not kept pace with the cost of fellowships, so the number of fellowships that can be offered—important to attract the best students—has gone down substantially.
5. External fellowships increasingly do not come with adequate cost-of-education allowances to cover tuition, health, and fees. The difference generally comes from Graduate School Fellowship funds or other funds provided by the unit. Furthermore, endowments that support graduate fellowships are providing lower returns and growing at a slower pace than in past years.
6. Managing graduate student support resources has become increasingly complex, as various programs of funding have unique restrictions and policies. Departmental chairs, directors of graduate study, and unit administrators struggle to stay current with these rules. Packages of support for graduate students are frequently pieced together from several different sources; much staff and faculty time is involved in creating and implementing these packages and in explaining them to the graduate students.
7. Multi-year packages of support are needed to recruit and retain the very best graduate students in the most competitive programs. Decreases in funding, increases in costs, and changing rules have increased the level of uncertainty; many units are reluctant to offer multi-year packages because they cannot confidently predict how they will meet the conditions of those packages in the coming years.

VIII. What are some possible solutions?

It is easy to recommend that the University of Minnesota allocate more money for graduate education; but it is neither entirely practical nor responsible for this committee to make this recommendation under current fiscal realities. Nevertheless, it is critically important that graduate education be maintained through a strategic combination of allocating (reallocating) relatively more money, right-sizing programs, economizing operations, and developing productivity enhancements in a well orchestrated manner. Right-sizing is a term used in this context to mean adjusting programs to fit into the available budget while keeping programs strong. As such, some programs may grow while others may shrink or be eliminated. All senior University administrators realize that graduate education is a critical University function, necessary for national rankings, the regional economy, and our quality of life in Minnesota.

Major Recommendations:

There is neither a single nor an immediate solution to the problem of financing graduate education. Graduate student support is best obtained through a combination of approaches.

1. Request \$5 million annually in the biennial request for graduate fellowships, the money to be granted on the condition that it will be matched by private donations. (\$5million is equivalent to the payout on a \$100 million endowment.) This can be justified by attracting and retaining more talent in the state, directly benefiting the Minnesota economy. The University's research and graduate education efforts are—along with education of health professionals—the activities most valued by Minnesota citizens according to a recent survey conducted by University Relations

Of the various financial challenges that face graduate education at the University of Minnesota, the one that seems most likely to garner help from the state is matching money for fellowships. Fellowships respond directly to the argument that the University is a magnet for talent, since fellowships are used to attract the best students in national and international competition with other research universities. The fellowship money goes to the student, not to the institution, which is in accord with an increasingly popular philosophy about support for higher education. The need for additional fellowship money is clear, since our existing fellowship funds have lost about 1/3 of their purchasing power relative to ten years ago, and several of our Big 10 competitors have double or more the amount of fellowship funding that we have.

The idea of matching private fellowship donations with state money has a successful precedent in the 21st Century Fund, in which about \$45 million of University revenue from an anti-AIDS drug has been matched by private donations in about four years. The President has proposed matching private donations with state funds for an on-campus football stadium, so a state-private matching strategy for fellowships is not novel.

We propose that the University's biennial request include \$5 million recurring annually for graduate fellowships, with the assumption that this will be matched by the income from a \$100 million privately-raised endowment after 10 years. This fund-raising goal seems feasible, given the precedent of the 21st Century Fund. A total of \$10 million per year in fellowships, at the \$25,000 current stipend, tuition, and fees, corresponds to 400 new fellowships, which would provide an enormous boost to our ability to attract top graduate students to Minnesota.

2. Undertake a major fundraising campaign, in the colleges and centrally, for graduate fellowships to match the anticipated the legislative appropriation described in Recommendation 1.

3. Use the compact process, and similar internal collegiate processes, to examine and adjust the balance between expenditures on graduate education and other expenditures, in light of college and institutional priorities and capacities.
4. All units should also review the appropriate number of students in their graduate programs. Right-sizing of graduate programs should be driven not just by needs for TAs and RAs, but also by availability of jobs for graduates. Some aspects of right-sizing might include:
 - a. Encourage graduate programs to review their plans for admissions, in light of the appropriate size of the program. A smaller program, with fewer but higher quality and better-supported graduate students, may be a wiser choice for some programs.
 - b. In a few programs where graduate admissions are driven more by TA needs for large service courses than by the availability of high-quality students, consider using Teaching Specialists.
 - c. Encourage colleges and departments to reallocate money internally to support (or reduce support for) graduate education, in line with the priorities established by the unit.
 - d. Increase the amounts of funding generated by research and training grants in those units that have the capacity. This strategy could support more RAs directly, and also provide more faculty salary support (from NIH grants), freeing other money that could then be available for graduate student support.
 - e. In cases where there are too few graduate students for the number of faculty, consider deferring faculty hiring and put the money (salary and startup) into graduate student support.
5. Urge graduate programs to significantly improve student time-to-degree and completion rates, thereby reducing each student's need for total years of support. Consider setting a maximum number of years for graduate assistant support appropriate to each program, thereby encouraging prompt completion.
6. Close small, lower-quality graduate programs, or merge them with others to promote greater efficiency and student choice. Furthermore, the University should examine whether reallocations can be made from lower priority University activities or programs to support high priority graduate education programs, and should consider consolidating small academic units to save administrative costs and minimize faculty and staff duplication.
7. Spread fringe benefit over- or under-recovery across a rolling three-year period, instead of collecting it all in one year, and be prepared to subsidize

under-recovery of fringe benefits slightly after the fact, so as to avoid disruptive fiscal oscillations.

8. Minimize administrative time and expenses by simplifying procedures. Savings generated will be small per unit, but could be significant overall.
9. Form working groups under the aegis of the Provost and the Dean of the Graduate School and in cooperation with the collegiate deans, to move from the potential solutions listed to plans that can be consulted and implemented.
10. Establish a group to examine any significant institutional issues surrounding the financing of professional student education that the Provost feels have been left unaddressed.

In summary, the solution to adequately supporting excellent support graduate education is complex under the current circumstances. The long term state support for higher education has not kept pace with inflation or rising costs, the Higher Education Price Index (HEPI). In addition, in recent years very substantial reductions in funding have occurred. In response, the University of Minnesota must reevaluate its position, choosing to maintain quality programs and achieving this goal through a combination of processes.

APPENDIX MATERIALS

APPENDIX 1: The Cost of Graduate Fellowships at the University of Minnesota

APPENDIX 2: Enrollments, Costs and Expenditures by Object Codes.

APPENDIX 3: Graduate Student Salaries and Benefits by Funding Source

APPENDIX 4: Historical Analysis: How Did We Get to Where We are Today in the GA Tuition Recovery System

APPENDIX 5: Measures of Graduate Program Performance

APPENDIX 6: Budgeting and Paying for Graduate Assistants