#### FACULTY COMPENSATION TASK FORCE REPORT

#### INTRODUCTION

The Task Force met four times over the course of the Fall 2003 semester to respond to the Chancellor's charge to recommend a course of action to achieve competitive salaries for Berkeley faculty. The Task Force was also asked to consider how the Campus might acquire the financial means to meet this objective. The Task Force interprets "competitive salaries" to mean salaries equal to Berkeley's peer institutions.<sup>1</sup> In view of the dominant role played by the leading private universities in our recruitment and retention efforts, we have taken the salaries of these institutions to set the standard against which UC Berkeley must measure itself to retain the standing it currently holds in American higher education. The Task Force also interprets the aspiration to be competitive within the context of Berkeley's long-standing academic personnel review policies. We have sought to make recommendations that are consistent with the University's rank and step system, that preserve central campus review of all appointment, merit, and promotion actions, and that seek, in the face of strong market pressures, to maintain principles of equity. A straightforward approach to the charge would be to evaluate the present Berkeley gap to market salaries, to compute the permanent budget increment required to meet the need, and to suggest ways to acquire the necessary funds, leaving that daunting charge to others. Instead, what the Task Force has done is to determine, evaluate, and recommend the most cost-efficient means we could think of to attract and retain faculty at the most critical and productive points in their careers.

The Task Force report is organized as follows:

- 1. An overview of the present salary cost of the Berkeley faculty and current trends in that cost.
- 2. A measurement of the competitive gaps that exist between Berkeley salaries and those of our chief competitors
- 3. Proposals to address our shortfalls in faculty compensations, including estimates of their costs, including a review of the steps taken in the past four years to address Berkeley's inadequate salary scales
- 4. Cost estimates and proposals to secure the monetary means to finance the recommended salary policies.
- 5. Recommendation of other cost-effective means that should be employed to attract and retain faculty.

<sup>&</sup>lt;sup>1</sup> Which institutions are Berkeley's peers? Of the 183 tenured faculty retention cases in 2000/01 through 2003-04 (to date), 162 involved U.S. academic institutions. 75 percent of these external offers came from private universities; 89 (55%) came from just ten institutions. Listed in order of the number of offers, they are: Harvard, Yale, Stanford, Chicago, Columbia, Princeton, NYU, Caltech, MIT and Cornell. More importantly, these ten institutions account for 82% of the 38 tenured faculty who decided to leave Berkeley.

Another measure of our peers concerns those institutions from which we hire a disproportionate number of our faculty. Over the period 1984/5 through 2000/01, Berkeley hired Ph.D.s from the following institutions at least 40% more frequently than did the UC system as a whole: Stanford, Harvard, Yale, MIT, Chicago, Caltech, and Columbia.

The chief recommendations of the Task Force are that the Berkeley campus modify the operation of the university's rank and step system in two ways: with the addition of a "promotion increment" to the salaries of all faculty who are promoted to tenure, and the addition of a "market increment" to step salaries where warranted by the discipline-specific salary levels at peer institutions. The Task Force estimates the cost of these recommendations, and proposes that they be funded by a combination of measures, including faculty turnover management (reducing the average age of the faculty), endowment and endowed chair revenues, and specified student fee revenues.

#### 1. THE OVERALL COST OF FACULTY SALARIES, 2003-04

Year	FTE	<b>Total Payroll</b>	Average	Rate of	Range
		<b>(\$M)</b>	Salary	increase	adjustment
1998-99	1,382	\$123.0	\$89,001		
				5.8%	2.9
1999-00	1,393	131.2	94,185		
				3.1	3.0
2000-01	1,400	136.0	97,143		
				6.5	0.5
2001-02	1,426	147.5	103,436		
				1.2	0
2002-03	1,433	149.9	104,676		
				1.6	0
2003-04	1,440	153.1	106,320		

Over the past six years, faculty salaries at UC Berkeley have risen as follows:

Over this period the average annual increase of the salary scale (via range adjustments), has been 1.25 percent per year (concentrated in the first two years); the average annual increase in salaries (per FTE) has been 3.62 percent and, because of an expansion of the faculty by approximately 0.8 percent per year, the total faculty payroll has grown by 4.5 percent per annum. The increase in faculty salaries has exceeded the increase in the salary scales (3.62% minus 1.25% = 2.37%) for a combination of reasons:

- 1. Merit awards include a larger number of accelerations than decelerations;
- 2. Appointments and retentions include a large number of decoupled salaries;
- 3. New hires, separations, and retirements are such that the average age of the faculty is rising, increasing the average salary via normal merit awards;
- 4. A new Law School salary scale, introduced in 2000-02, increased salaries by 20-40%, depending on step.

This year, the total faculty payroll of \$153.1 million can be decomposed to the following parts:

One can imagine a "basic step salary" representing the salary for each faculty member that would be paid if they were advanced through the steps entirely on the basis of seniority (i.e., were advanced a single step at each normal review period, and did not progress beyond Prof. Step IX). The extent to which UC Berkeley's faculty salary payroll diverges from this 'basic progression' can then be broken down into three parts:

- 1. Net acceleration (or deceleration) in merit advancement;
- 2. Award of decoupled and above scale salaries;
- 3. Change in hiring and retirement patterns to cause average age to change.

At UC Berkeley, all three of the above factors have caused the faculty salary payroll to grow significantly faster than the rise in scale salaries per se.

<u>Average age</u>: The end of mandatory retirement plus the hiring of many relatively senior faculty (as opposed to junior recruitment) over the past ten years, has brought about a substantial rise in the average age of the faculty to today's average age of 52 years. In principle, an increase of the average age of the faculty by three years (from, say, 49 to 52) should be equivalent to an increase of the average faculty salary by one step. One step, at the typical median age step, Prof IV, is \$5,300 (\$7,200 for BME). Thus, *one could attribute approximately 8.4 million to the current high average age of the faculty*.

<u>Net Acceleration</u>: The step salaries of the 1,440 Berkeley faculty FTE, is now \$140.0 million. If these faculty were now all at a step representing "normal advancement," the faculty payroll would be \$132.1 million, *leaving \$7.9 million attributable to net acceleration*.

<u>Decoupled and Above Scale salaries</u>: *The decoupled increments above step salaries now total \$7.9 million. In addition, above scale salaries total to \$5.25 million in excess of the Step IX salaries.* 

To summarize:

Basic step salaries	\$123.7M	(1,440 FTE; avg. salary of \$85,900)
Accelerations Decoupling Above Scale (AS) High avg. age	\$ 7.9M \$ 7.9M \$ 5.2M \$ 8.4M	(\$3.8M, Haas and Econ.; \$4.1M, all others) 174 FTE, average AS amount: \$33K) (difference between avg. age 49 and 52)
Total	\$ 29.4M	
Total payroll	\$153.1M	(1,440 FTE; avg. salary of \$106,300)

Berkeley faculty have been awarded merit accelerations within the salary scale averaging to approximately \$5,700 per faculty member. In addition, 278 of them have decoupled salaries. For 74 faculty in Business Administration and Economics, the average value of decoupling is \$52,000; for the 204 other faculty, the average amount is \$20,000. Finally, 174 senior faculty have been advanced to above-scale salaries which now average \$33,000 above their Step IX salary. At present, decoupled and above-scale salary accounts for 8.6 percent of the total faculty payroll.

**Decoupled Salaries.** The most dynamic element in the above salary expenditures is the award of decoupled salary. Little more than a decade ago, decoupled salaries were rare (33 in 1992-93), and the campus sought to treat such salaries as a temporary aberration. It was expected that over time such salaries would "revert to scale." By 1998-99 some 180 faculty held decoupled salaries with a total value of over \$3 million. This year, 278 faculty hold decoupled salaries amounting to nearly \$8 million. *This category of expenditure now grows annually by at least one million dollars as a result of new appointments and retention cases alone.* 

In the past, the external market (via competition for appointments and external offers to our faculty) was the only justifications for the award of decoupling. In the past two years 66% of all assistant professor appointments, 60% of associate, and 40% of full professor appointments have required the offer of decoupled salaries. Last year, all Haas school appointments included decoupling (avg. amount of decoupling: \$60,600). Decoupling figures in 86 percent of Social Science appointments (avg. \$25,100), 88 percent of Physical Science, Biological Science, and Chemistry appointments (avg. \$22,800), and 34 percent of Humanities appointments (avg. \$11,600). In contrast, none of the seven appointments in Public Health, Social Welfare, Environmental Design, Education, or Law required decoupled salaries.

Retention is a second factor that contributes to the diffusion of decoupled salaries among the faculty. In the past three years other institutions have made 210 offers to Berkeley faculty. Not all of these offers have brought forth a Berkeley response including a decoupled salary, but many have. Table 5 shows that 32 of 367 merit awards approved in 2002-03 involved retention cases that resulted in decoupled salaries. The average salary award in these cases was 3 to 4 times those of other merit awards.

Appointment and retention combined to generate the pattern of decoupled salaries by rank and step shown in Table 1. The "entry level" steps of the Assistant Professor rank include decoupled salary in a substantial majority of cases. For Assistant Professors as a whole 49% have decoupled salaries, while 26% of Associates and 19% of eligible Full Professors have decoupled salaries. As new appointments are made in the coming years, we have every reason to believe that the percentage decoupled will rise, especially in the lower ranks, and, in the fullness of time, will be very high across all ranks and steps. We believe it is prudent to implement policy at this time that comprehends this inevitable outcome.

# 2. THE SALARY GAP.

Salary gaps are nothing new for UC Berkeley. The methodology used by the University System to set the levels of the system-wide salary scales is based on a comparison with eight institutions (four public and four private) not all of which are Berkeley's true peers.<sup>2</sup> Consequently, even when the University salary scales are at parity with the average of the "comparison eight" – which is not now the case, and has only been achieved infrequently in recent decades – a gap remains between Berkeley and its chief competitors; a gap that is often significant. Figure 1 offers a 23-year overview of the UC system's salary levels relative to the private and public comparison institutions. It shows that the 1990s opened a gap with the private institutions that was only partially closed by 2000/01, while the absence over the past three years of any range adjustment of consequence to the University faculty salary scales has exacerbated an already serious problem. *Figure 1 also reveals a disturbing long-term trend: the average salaries of all of the public universities have fallen steadily further behind those of our peer private universities. The shortfall, which had been 8 percent in 1980, rose to 16 percent by 1990 and reached 25 percent in 2002.* While the UC system average salaries have always stood between the two averages, in 1980 they began closer to the level of the privates and now stand much closer to that of the public universities. To the extent that our sister campuses

<sup>&</sup>lt;sup>2</sup> The comparison-eight institutions are: Harvard, MIT, Yale, Stanford, Illinois, Michigan, Virginia, and SUNY-Buffalo.

compete primarily with the nation's leading public universities, they may find the current salary scales adequate; *for Berkeley, this 20-year trend represents a direct and alarming threat to our faculty quality and our national and international academic standing.* 

The problem we face is illustrated in more detail in Figure 2, which presents average salaries over the past five years for full professors at each of the comparison-eight institutions, a weighted average for the comparison eight, and the average salaries at UC Berkeley and for the UC System as a whole. This figure shows at a glance that UC and Berkeley salaries have lost significant ground to almost all of the other institutions, whether public or private, in the last three years.

Table 2 displays comparison data for 2002-03 from the same source – the annual AAUP faculty compensation surveys – for all three ranks and for a broader range of Berkeley's private competitors. They reveal gaps at the professor rank that range from 29 to 9 percent, with an unweighted average of 16.7 percent. The gap is larger at the associate professor rank, averaging 19.3 percent, and somewhat smaller at the assistant professor rank, averaging 10.6 percent.<sup>3</sup> Table 3 show Berkeley's competitive position relative to six leading private institutions (the seven listed in Table 2 minus Chicago) over the past two decades. Berkeley salaries were quite competitive overall in the mid-1980s, but deteriorated sharply thereafter, culminating in the budget crisis of the 1991-94. A major effort to restore competitiveness reduced somewhat the size of salary gap by 1998-99, but since then the gaps have grown rapidly, an in the case of associate professor salaries, are at an historic high point.<sup>4</sup>

A second important source of comparison data is provided by the annual MIT salary surveys. These surveys have the advantage of providing *discipline specific* comparative data for 7 private and 7 public institutions.<sup>5</sup> Their usefulness is limited by the fact that the only data collected are for disciplines represented at MIT. Table 4 displays the surveyed disciplines, ranked in order of the average salary for full professors at UC Berkeley. These can then be compared with the average salaries at the private and at the public institutions. The two right hand columns of Table 4 show how the Berkeley average salaries compare to the standards of the private and public institutions. The comparison data reveal that UC Berkeley salaries for full professors exceed those of an average of public institutions in nearly all fields, but that it similarly *falls short of an average of private institutions in 18 of the 23 fields included in the study*. Overall, the MIT data report a 12.6 percent salary gap relative to the private institutions for full professors. Here, too, the gap is larger for associate professors (19.5 percent), and smaller at the assistant professor level (4.3 percent).

The final two columns of Table 4 display comparison data from 1998-99. It is immediately apparent that almost all of UC Berkeley's discipline-specific average salaries have lost substantial ground relative to the private institutions over the past five years.

What is the overall size of the salary gap facing Berkeley? The gap in 2002-03 (it is larger for the current year, 2003-04) can be estimated from the several data sources presented above. The AAUP, MIT, and UC Comparisoneight methodologies differ in their estimations of Berkeley's average salaries by rank and they offer different

<sup>&</sup>lt;sup>3</sup> UCOP's official methodology for calculating the gap between UC salaries and the weighted average of those of the comparison institutions established a UC shortfall for 2003-04 of 11.2% for full professors, 15.8% for associates, and 9.2% for assistant professors.

<sup>&</sup>lt;sup>4</sup> Table 3 shows that in most years, the salary gap between Berkeley and the six private universities was somewhat smaller for associate professors than for full professors. The reason for this is that associates are an untenured rank at three of the six privates (Harvard, Yale, and Princeton), and their average salaries were significantly lower than at the other privates, and often lower than at Berkeley. In recent years this has changed. The rank remains untenured at Harvard, Yale and Princeton, but the salaries are now comparable to the other privates, and substantially above the Berkeley level.

<sup>&</sup>lt;sup>5</sup> Private institutions: Harvard, MIT, Yale, Princeton, Stanford, Caltech, Columbia; Public institutions: Illinois, Michigan (1999-00 and 2000-01 only), North Carolina, Texas, Wisconsin, UCLA, UCSD, Purdue (replaces Michigan in 2002-03).

definitions of the standard. The table below shows how much Berkeley average salaries by rank fall short of each standard, and estimates the total cost of meeting that standard for the current Berkeley faculty.

Rank	AAUP	MIT	UC Comp-8
Professor	\$19,600	\$15,000	\$13,400
Associate	14,400	14,900	12,000
Assistant	7,100	3,100	3,100

# Faculty Salary Gap (per head), 2002-03

#### Faculty Salary Gap (total cost in \$K)

Rank		AAUP	MIT	UC Comp-8
Professor (967.3 FTE)		\$18,959	\$14,510	\$12,962
Associate (270.0 FTE)		3,888	4,023	3,240
Assistant (195.6 FTE)		1,389	606	606
Total		\$24,236	\$19,139	\$16,808

The MIT data can be used to estimate the salary gap discipline-by-discipline. While a few disciplines (see Table 4) reveal no gap, most do. When the gap (negative or positive) is multiplied by the number of Berkeley faculty in each discipline, a total salary gap can be estimated. The MIT survey does not cover all disciplines offered at Berkeley. By inflating the MIT data to reach the total faculty size, an approximate total faculty salary gap emerges of \$21,675,000.

All of these data sources and methods reach broadly similar conclusions. The UC Comparison-8 method includes public institutions, and therefore yields the lowest estimates of the total gap. The others all suggest a total 2002-03 salary gap of \$19 to 24 million. In view of the increase in the number of faculty and the further erosion of UC salaries in the past year, *an estimate for this year's gap falls within the \$20 to \$25 million range*.

### 3. WHAT IS TO BE DONE?

In contemplating how the campus best can respond to the market challenges it faces the Task Force wishes to begin by outlining briefly the steps that have already been taken over the past four years and to enunciate the principles that have guided its selection of recommendations for the future.

**What has been done?** The following new policies and initiatives that address the faculty compensation problem are now in place.

<u>Business School Pilot Plan</u>. This important new program was begun in 1999-2000. The Pilot Plan
was reviewed in 2002-03, leading to revisions and a new name: the Faculty Excellence Program.
The program allows the Haas School to propose decoupled salaries for eligible faculty that are guided
by market data supplied by the AACSB (Association to Advance Collegiate Schools of Business).
The revised program establishes a family of salary scales based on AACSB data that govern the
advancement of eligible faculty. The School is responsible for the incremental cost (the additional
decoupled salary since the inauguration of the program).

- 2. <u>New Law School salary scale</u>. System-wide discussions led in 2000-01 to the first of two consecutive adjustments to the salary scale for UC law schools, including Boalt. The new scale raised the lowest steps of the Law School scale very substantially (Step I by \$33,500, or 42 percent) and the higher steps by smaller amounts (Step V, by \$27,000, or 24%; Step IX by \$18,600, or 12%). The campus is responsible for the funding of the new scale, which added a net \$670,500 to the Law School's faculty payroll when implemented in 2000-02. Its implementation had the effect of "submerging" all but one decoupled salary within the new scale.
- 3. <u>Revision of decoupling policy</u>. Until 2001, all faculty with decoupled salaries were informed in their appointment/promotion/merit letters that it was campus policy to remove the decoupled salary in future merit reviews. Actual practice was by then no longer consistent with this, and a new statement of policy was drafted. [http://apo.chance.berkeley.edu] Current practice is that, unless poor performance warrants the reduction or removal of decoupling, it will be continued as a fixed dollar amount through successive merit advancements.
- 4. <u>New guidelines for setting assistant professor salaries</u>. In September 2002 the restrictions on awarding decoupled salaries to assistant professors were revised. Until then, salaries were set by the appointment step except when it was necessary to match or approach a formal competing offer. The new policy allows market information in a given discipline to be used in justification of appointment salaries in excess of the step salary. In addition, the salaries of existing assistant professors can now be raised in response to the same information, and the higher salaries of new appointments. (See Appendix I for the text of this policy).

5. <u>Targeted Decoupling Initiative</u>. In September 2003 a three-year program was established to award decoupled salary increments to eligible tenured faculty. The intention of the initiative is to identify highly accomplished faculty who are retention risks, but have not (yet) received decoupled salaries. The program has a funding limit of \$1.5 million, to be distributed over three years.

These recent initiatives are focused on two problems of the University's salary scales: their failure to keep up with the academic market in general, and their limited ability to acknowledge the growing divergence of academic salaries at the discipline level.

**Principles that guide our recommendations.** The problem of faculty compensation is a serious threat to the continued maintenance of Berkeley's preeminent faculty. The problem of uncompetitive salaries nestles within the larger problem that the cost of living, and especially of housing, in the Berkeley area is one of the highest in the nation, and that public services in the immediate area are far below the standards expected by most faculty. There are no grounds for complacency.<sup>6</sup> However, it is unrealistic to expect that an immediate solution to this problem is within reach, and this understanding shapes some of the principles listed below.

- 1. We prefer a policy that can be introduced gradually, in stages, to one that requires a sudden, major change in institutional organization and/or financial resources.
- 2. New compensation policies should be broadly consistent with the step system we use in the assessment of merit and in academic salary administration.
- 3. To be effective, any new policy must acknowledge that equity as we have understood it in the past (cross-disciplinary salary comparability across the campus) is impossible to maintain. It should, however, convey to the faculty that the departures from that standard are based on reason and necessity, and are not arbitrary. Our policies should seek to preserve the integrity of the academic community even when they cannot preserve salary equality across disciplines.
- 4. The salary gap should be approached primarily by discipline rather than across the board.
- 5. The salary scale should incorporate some acceleration in the "mid-career" area where we are most vulnerable to losing our best faculty in retention battles.
- 6. While salary is certainly the most important element of overall compensation, faculty wellbeing should be considered holistically and not simply as a function of salary. Other cost-effective means should be explored and implemented to increase faculty wellbeing and family satisfaction to attract and retain faculty.

**Proposal: A Modified Salary Scale For UC Berkeley.** The Task Force recommends that the campus implement a new faculty salary policy incorporating two specific features: one affects salary acceleration at the time of promotion, and the second affects the determination and review of decoupled salaries. These changes are conservative in that they are elaborations on current practice and work within the existing rank and step structure. In addition, they seek to establish current practice on a firmer footing of adequate information and

<sup>&</sup>lt;sup>6</sup> An illustration of the effect of differential housing costs is provided by data from http://www.homefair.com Housing comparable to that accessible to someone earning \$100,000 per year in Berkeley, would require the following income in the cities of the comparison 8 institutions:

o monutations.	
Palo Alto, CA	\$140,108
Cambridge, MA	98,923
New Haven, CT	60,538
Ann Arbor, MI	70,314
Champaign, IL	52,955
Charlottesville, VA	51,182
Buffalo, NY	49.486

consistent application. It is important to be aware of the fact that continuation of our current practices will certainly result in at least the level of salary growth we have experienced in the last several years. However, these same practices will intensify perceptions of inequity, and will condemn us to continual response to the standards set by our peer institutions, which will keep us forever on the defensive in the recruitment and retention of faculty.

1. <u>Promotion increment</u>. The Task Force recommends that faculty promoted to Associate Professor (i.e., to a tenured appointment) be advanced the equivalent of one step in addition to any merit advancement that would normally accrue. For example: An assistant professor at Step V is reviewed for tenure. Tenure is granted, and the performance is judged to warrant a one-step advancement, to associate professor Step II. At present this results in an increase in salary (in the "Professor Series") from \$57,300 to \$60,200. The proposed promotion increment would add to the faculty member's salary a dollar amount approximately equivalent of the next step -- \$3,500. (A fixed dollar amount is preferred to the actual step value, so that all promoted faculty receive the same amount, regardless of the precise path of their promotion.) This promotion increment is to be treated as a decoupled salary (or, an addition to existing decoupled salary) rather than as advancement to the next step.

<u>Discussion</u>. The intention of this recommendation is to incorporate some salary acceleration into the University salary schedules at the point that faculty achieve promotion to a tenured appointment and at a time when they are most vulnerable to outside offers. The Task Force believes that such acceleration characterizes the salary setting behavior of our peer institutions, and that this is reflected in the fact that the largest overall gap between Berkeley salaries and those of our peer institutions occurs at the rank of associate professor. The fact that the University salary schedules provide for a linear growth of salaries (constant percentage rate of increase) throughout the ranks and steps makes us most vulnerable at the career point when our competitors are most active in recruiting tenured faculty. Table 5 presents a distribution of the ages of the Berkeley faculty who have received external offers in the past three years. It is clear that retention cases become most frequent in the age range (36-40) when faculty are most often achieving tenure status. The Task Force recommends what in effect is an acceleration in the salary scale at this point of maximum vulnerability.

Should the promotion increment be automatic or discretionary? All other Task Force recommendations involve decoupling based on disciplinary or individual circumstances. Consequently, this is the only component of our report that involves a salary increase applicable to all Berkeley faculty. This should be seen as a modest but still important gesture in the direction of addressing the salary gap faced by nearly all Berkeley faculty.

Should the promotion increment be restricted to promotion to Associate Professor, or applied also to promotion to Professor? Including a second point of acceleration in the salary scale would considerably strengthen the overall competitiveness of Berkeley salaries in the "mid-career" range [see Table 6]. The Task Force does not recommend it at this time, both for reasons of practicality and of principle. A one-step increment at promotion to Professor is more costly than the promotion increment to Associate Professor, amounting to 7.7-8.1 percent of a higher absolute salary amount. The issue of principle is this: we believe that the promotion to tenure is a campus decision that should be made when the candidate has met high standards of performance that are appropriately rewarded monetarily by more than only a normal merit increase. The promotion to Professor also represents a real achievement, but it is much more variable in nature and in timing. An automatic acceleration is not necessarily warranted, and the Task Force recommends that the Campus address this type of merit in the context of decoupling policy, discussed below.

2. <u>Market Increment</u>. The Task Force recommends that the salary of new appointments be set at the step appropriate to the candidate's career achievements plus a decoupled salary – the market increment –

indicated by market salaries in the relevant discipline. This is current practice for assistant professor appointments (see Appendix I), but the consistent application of the policy is limited by the information available to establish fairly the appropriate market increment. At present, the campus relies in too many cases on ad hoc and anecdotal information. Consequently, the Task Force believes that the implementation of this and the following recommendation will depend on the commissioning by the campus of a disciplinebased salary survey of peer institutions.

<u>Discussion</u>. This component of our faculty compensation recommendation introduces a systematic differentiation in faculty compensation by discipline (or relevant field that may cross Berkeley's departmental boundaries). At present, our separate salary scales for Business Management, Engineering, and Law seek to accommodate differences in academic labor markets. In the case of Business Administration, the scale's inadequacy has led to the development of the Pilot Plan and now the Faculty Excellence Program. In addition, for several years now new junior appointments in Economics have been offered salaries based on market information rather than individual competing offers. This proposal envisions the extension of this practice – based on improved salary survey data – to every major discipline. In some disciplines it will be found that the university salary scales remain adequate to recruit the faculty we desire to bring to Berkeley but we expect that in many others some amount of decoupling (the market increment) will be found necessary.

The Task Force recommends that the acquisition of the necessary salary data be pursued by seeking an integration of the existing MIT salary survey, the Engineering Big 10+ annual salary survey, and AAU Data Exchange salary survey to encompass all disciplines. This will require high level discussion and approval among the Chancellors and Provosts of the institutions with which we wish to exchange faculty salary data. There may be reluctance from the private institutions to participate, given the earlier court action related to the price fixing and the setting of tuition and fees. A full description of this recommendation can be found in Appendix II.

3. <u>Review of decoupled salaries</u>. The market increment and promotion increment will, over time, insure that all Berkeley faculty hold salaries with both a scale and a decoupled component. The Task Force recommends that the policies now governing the review of decoupled salary components be revised to include periodic adjustment. At present, decoupled increments are set – at appointment or in response to an external offer – at an absolute dollar amount. These amounts are not subject to range adjustments (a principal the Task Force recommends continuing) and they are not subject to upward revision at successive merit and promotion reviews (absent an external offer). The Task Force recommends that <u>any existing decoupled increment be reviewed</u> at the time of promotion to associate, promotion to professor, and advancement to professor, Step VI. In addition, when warranted by evolving market conditions, <u>market increments may be introduced</u> at these promotion and advancement reviews. These reviews should be occasions to recalibrate the "market increment" to current market conditions as revealed by salary survey data.

<u>Discussion</u>. This recommendation seeks to provide opportunities for periodic recalibration of the market increment to the discipline-specific salaries paid by peer institutions. An alternative, often advocated by faculty holding decoupled salaries, is to apply range adjustments to the entire salary, and not only the scale component. There is some sentiment in favor of this approach among members of the Task Force. An objection to range adjustment of decoupled salaries, apart from the technical difficulties of implementation, is that it does not necessarily provide a better approximation of market realities than continuation of decoupling as a fixed dollar amount. Periodic recalibration appears to be a reasonable, and workable, measure to address the longer-term variable ability of the university salary scale to offer competitive salaries.

Operationalizing this policy requires clarity on two points. First, is the market increment to be set *independent of individual merit*? That is, should the overall salary information for a discipline be applied to all faculty in that discipline, such that, for example, all associate professors in Political Science received a market increment of, say, \$10,000, or should distinctions be made relative to the individual? The second and related issue is: what discipline categories should be used? In this example, do all Political Scientists form a relevant market category, or should further distinctions be made by subfield?

The Task Force believes that market increments should be set in a routine way, independent of merit, while merit should be acknowledged in decisions about step.<sup>7</sup> However, we acknowledge that this will be easier to achieve for junior appointments than for senior appointments and the reviews of decoupled salary proposed above. While junior faculty participate in relatively broad and visible (if not transparent) markets, more senior faculty are typically highly differentiated by specialty and performance record. It becomes progressively more difficult to distinguish discipline-based market considerations from merit considerations. These reflections notwithstanding, the Task Force expects the market increments will primarily reflect disciplinary differences in salary rather than individual merit.

The question of what discipline categories to use seems daunting at first—how do you collected and maintain the relevant data for the wide range of disciplines represented on the Berkeley campus? How much will that cost? Who should decide what discipline categories to choose and how should they be adapted over time? However, the Task Force believes that a relatively coarse collection of categories could be used effectively and recommends they be determined by the administration based on input from a number of sources, including the relevant deans and department chairs. The Task force also notes that these categories will not correspond to campus unit structure in all cases. For example, if an appropriate category were deemed to be 'Experimental Physical Sciences' or 'Nanosciences and Nanoengineering', faculty from a number of campus units would be candidates for these cohorts.

Summary Regarding Salary: These Task Force proposals, taken together, foresee faculty salaries with three component parts:

- 1. Salary scale and "promotion increment": for *all Berkeley faculty*, conveying the campus commitment to equity;
- 2. Step advancement: reflecting individual merit;
- 3. A "market increment": reflecting discipline-specific market conditions.

In addition to these steps towards salary equity and retention, the Task Force considered a number of other factors that may play an important role in the lives of faculty and their families that should be considered seriously by Campus and promoted heavily where appropriate.

4. <u>High Value of UC Benefits</u>. While the UC salary levels have become increasingly

<sup>&</sup>lt;sup>7</sup> The recently revised Faculty Excellence Program (FEP) for the Haas School answers these questions as follows: first, not all faculty are eligible for the equivalent of a "market increment," only faculty of demonstrable excellence; second, the relevant market category is the subfield. Annual surveys of academic salaries at peer business schools are commissioned to acquire the subfield market data, and the Haas school must make a case, based on performance, for the eligibility of individual faculty members for participation in FEP.

uncompetitive, the *benefits* offered to the UC faculty remain very attractive. They should be better promoted in the recruitment and retention of faculty. The Task Force recommends that the Office of the President establish a website that allows a side-by-side comparison of faculty benefits with other institutions. Also, our campus should have on staff a person equipped to explain how UC benefits compare with other institutions in specific cases, as well as overall.

<u>Discussion</u>. Comparing benefit programs across employers is no easy task. Moreover, it is unlikely that a 30 year old assistant professor can be persuaded that a handsome retirement income 40 years from now should compensate for a seriously under-market salary now. However, the current "out of pocket" costs of our benefits programs are at the low end of the range of our peer institutions, and this should be of interest to younger faculty. Table 7 provides relevant comparison data which confirm the relatively low cost to faculty of UC Berkeley benefits and the very high value of expected retirement benefits.

5. Other Programs to Enhance Faculty Recruitment and Retention: As well as the specific salary and traditional benefits options provided by the Campus, it is clear that other factors often play a key role in determining a faculty member's willingness to accept an offer to come to Berkeley, or to remain on the faculty. Many of these factors are family and lifestyle related and must be considered very seriously in this increasingly competitive environment. For example, for faculty in their child-bearing years, the availability of affordable, reliable, and high-quality child care is often an important element in a decision-making process. While the Campus provides some access to a high-quality childcare program for faculty and staff, there are certainly not enough places to meet Campus needs. The Campus might also consider a larger subsidy of these programs as well. Another important factor that has come up in retention cases we have lost is family access to College. A number of our most competitive peers have programs that pay for faculty children to go to College fees and tuition could be a cost-effective way of attracting or retaining faculty as an adjunct to other, more traditional benefits. A simple way of addressing this issue is to guarantee the equivalent of a monetary Cal Grant when the faculty does not qualify on the basis of salary. These and other 'soft' benefits can make the difference when a case is close, and are often much less expensive that a significant salary increment.

The Campus should consider forming a faculty task force to consider and recommend such 'soft' benefits that are important to specific constituencies and are likely to be highly cost effective relative to faculty salary.

# 4. WHAT WILL THESE RECOMMENDATIONS COST AND HOW CAN THEY BE FUNDED?

# What will it cost?

- 1. <u>Promotion Increments</u>. The \$3,500 increment at the time of promotion, continued throughout a faculty member's remaining career adds 3.4 percent to the career salary cost per FTE. Each year, this salary increment would be applied to approximately 40 newly tenured faculty. Each year, \$140,000 would be added to the salary base. In the fullness of time after, say, 30 years—this policy would cost \$4,375,000 annually (1,250 tenured faculty \* \$3,500).<sup>8</sup>
- 2. <u>Market Increments</u>. Cost estimates for this policy recommendation are difficult to make with great accuracy, since the discipline-specific data remain inadequate. Moreover, we must be aware that campus

<sup>&</sup>lt;sup>8</sup> A full professor promotion increment would add about \$220,000 to the salary base each year. In steady state, after 30 years, this policy would cost \$5,500,000 (1000 full professors \* \$5,500). Note that this is not now a formal recommendation of the Task Force, largely due to the added costs it would entail. The Task Force believes that the associate professor promotion increment is the more important initial investment.

policy <u>already</u> adds salary costs each year in an effort to respond to market conditions via the award of decoupled salaries. An rough estimate of the annual cost of market increments follows:

(a) New Appointments:	<ul><li>75 per year.</li><li>25 no increment above step salary</li><li>25 average of \$10,000 increment</li></ul>	\$0 \$250,000
	25 average of \$25,000 increment	\$625,000
(b) Decoupling reviews:	120 per year 60 no increment adjustment	\$0
	60 average of \$10,000 increment increase	\$600,000
Total		\$1,475,000

However, only a portion of this cost (b) is new. The campus already set salaries of new appointments (a) with the informal equivalent of market increments. Only the decoupling reviews are a true innovation. Put differently, the campus is currently adding approximately \$1.0 million in decoupled salary per year for recruitment and retention. The incremental cost of the proposed policy can be estimated – tentatively, but reasonably -- at about \$600,000.

The cost of the proposed policies is estimated in Table 8. The two new increments combined, add an annual salary cost of \$740,000. The cumulative addition to permanent faculty costs would total \$3.7 million after five years and \$7.4 million after ten. In addition, the market increments included in the salaries of new appointments can be estimated to continue at their current level of \$875,000 per year, cumulating to \$8.75 million at year ten. Thus, after ten years, the faculty payroll would rise from \$153.1 million to \$169.25 million (\$7.4 million for promotion and market increments for existing faculty plus \$8.75 million in market increments for new appointments), an increase of \$16.15 million. The increase in costs would decelerate in later years, as most of the market increments to existing faculty would have been distributed. These projections assume an important *ceteris paribus* condition: that the salary gap identified above remains constant. In reality, of course, the market conditions we seek to approach are a moving target: the average salary of full professors at the six leading private institutions has been increasing at a quite steady 4.12% per annum since 1991.

Will such a gradual policy be effective in addressing the problem? The Task Force believes that this approach will be more effective than an across-the-board increase in all salaries since it will direct new resources to where they are most needed, and to faculty who are most deserving. The Task Force also believes that a gradual program is both more realistic and more appropriate for policy changes of this nature than a sudden change in compensation levels, given the budgetary constraints facing the campus and the nature of the changes proposed.

*However, these recommendations have one serious drawback.* Faculty will find their salaries improved by these policies as they are hired and promoted. It will do little to address the salary deficiencies of current tenured faculty, especially full professors, who are two-thirds of the ladder rank faculty. They will continue to endure the so-called "loyalty penalty." Moreover, faculty promoted to associate professor shortly before the introduction of the "promotion increment" will have reason to bemoan their premature promotions as they suffer from the "transition anomaly": their slightly junior colleagues will always have \$3500 more in annual salary than they.

The Targeted Decoupling Initiative, now underway, seeks to address the loyalty penalty problem by adding the equivalent of "market increments" to the salaries of the most meritorious tenured faculty. Approximately 150 faculty will share \$1.5 million of increased salary as this initiative is carried out over the next three years. This is a limited response to the "loyalty penalty" problem, but it can also be addressed, over time, via the periodic reviews of market increments of all faculty as they are promoted to full professor and advanced to Step VI.

The transition anomaly might be addressed in two ways: it could be removed altogether by providing the promotion increment not only to newly promoted faculty, but to all currently tenured faculty. This has the effect of achieving immediately (or over a three-year review cycle), what otherwise would take a generation to complete. Its immediate cost would be considerable, adding some \$4.2 million to the annual faculty payroll. Alternatively, the campus could consider a program akin to the current Targeted Decoupling Initiative, assigning \$500K to \$1.0 million to a selective award of salary increments to associate professors. This could be interpreted as a targeted anomaly reduction initiative. The cost of this initiative is added to the total cost estimates in Table 8 under the column labeled "TDI."

The net additional cost of all our recommendations after ten years is approximately \$10 million. When the ongoing cost of new decoupled salaries for new appointments and for retention cases is added, (approximately \$1.0 million per year, cumulating to \$10 million over ten years), the overall addition to faculty salaries totals to some \$20 million – the size of the salary gap identified earlier in this report.

#### How can these recommendations be funded?

As recounted in the many faculty compensation task force reports that precede this one, identifying the resources to support more competitive faculty salaries is no simple task. While the Task Force makes recommendations it believes have a realistic chance of being fruitful, it does not possess the expertise to offer a detailed budget program. It does venture to offer the following suggestions, all of which will require considerable refinement.

1. Faculty Turnover. The campus funding of faculty salaries depends on the release of funds by retiring senior faculty and their replacement by (less expensive) junior faculty. At present the average faculty age is very high (52), and a large number are of "normal" retirement age (around 150 faculty are 65 and above; in addition, an annual average of 45 current faculty will turn 65 every year for the next 15 years). We expect that turnover *can fund a substantial part of our recommendations in the initial years, if the campus is disciplined in limiting its senior hiring*. This is a permanent solution only if the campus can keep the average age permanently at the lower level but, at the very least, it permits a transition while other funding solutions are pursued. A rough estimate of the resources that can be freed for salary enhancements in the next several years is provided by the exercise discussed in the first section of this report. If the campus is able to reduce the average faculty age from the current level of 52 to 49 over a five-year period, the average faculty salary, *ceteris paribus*, is reduced by approximately one step of the salary scale. \$6K\*1440 FTE = \$8.6 million.

Another approach to estimating the resources available through management of faculty turnover is:

(a) <u>New separations</u>			0 0
Retirements	50	*\$125K	\$6.25 million
Other separations	20	*\$ 95K	\$ 1.9 million
Total salary reduction per	· year		\$8.15 million

(b) New appointments Assistant Prof	50 * \$ 75K	\$3.75 million
Tenured	20 * \$110K	\$ 2.2 million
Total new salary commitments		\$5.95 million
Net new resources		\$ 2.2 million

Sustained for five years, this would generate \$ 11.0 million for use to enhance faculty salaries.<sup>9</sup>

Another cost factor that deserves consideration is start-up cost. The average start-up package for new appointments currently exceeds \$250,000. They range from \$50,000 or less for junior appointments in many social science and humanities fields to \$1.0 million and more for senior appointments in chemistry and physics. The only prospect for reducing the start-up costs faced by the campus is the reduction of new appointments, and the only way this can be done without suffering a contraction of the size of the faculty is to reduce non-retirement separations. At present approximately 20 faculty separate for reasons other than retirement. Over the past three years retention failures have accounted for about 15 of these separations per year. If more competitive salary levels could achieve a reduction of retention separations from 15 to 8 per year, the campus would avoid an annual expenditure of at least \$2.0 million in start-up commitments every year.

2. Fundraising: Endowed Chairs and Distinguished Professorships. Endowment funds to support faculty positions have been discussed for some time. Advocates foresee three primary uses for the annual income from such endowment funds, only one of which directly supports the goal of financing higher faculty salaries. The traditional use of endowed Chair (and Distinguished Professorship) funds is

<u>New separations</u>			
Retirements	27.75	\$124,464	\$ 3.45 million
Other separations	22.6	\$ 94,587	2.14
Total Salary reductions			5.59
New appointments			
Non tenure	59.4	\$ 73,468	\$ 4.36 million
Tenure	18.0	\$113,062	2.04
Total new salary commitments			6.40
Net new resources			- 0.81 million

<sup>9</sup> This scenario sketched above differs significantly from current reality. This past year, the picture looks like this:

The chief differences between this past year and the above model are 1. the model assumes new hiring equal to total separations (no growth), while this past year we added 27 net new faculty; 2 the model assumes a substantial increase in the number of annual retirements.

However, in the current year, separations more closely approximate the model:

Retirements	50	\$116.7	\$ 5.835 million
Other separations	22	85.0	1.870
Total			7.705

to supply the faculty who are awarded the chairs with an annual income that supports research, *including the payment of summer compensation*. Summer compensation is an important supplement to the base salary of almost all faculty and is paid for variously by external grants, by the campus, schools, colleges and departments (for administrative assignments and often as part of start-up and retention packages), and by endowed chairs. In the past year Berkeley faculty received nearly 1,900 summer-ninths. The total of summer compensation was in excess of \$23 million. Although it is beyond the direct purview of this committee, summer compensation is important to the competitive position of the campus.

A second use of endowment funds is *to establish non-state funded FTE*. Revised UCOP policies, codified in APM 190, Appendix F, make it possible to supplement state-funded FTE by up to 15% with FTE supported by non-state funds. One such FTE, in linguistic anthropology, is now supported in this manner by an endowed chair.

A final use of endowment funds is to allocate a portion of endowment, including endowed chair income, *for salary support*. There are many questions about how such a policy would work in practice. Obviously, it would be inconsistent with campus policy to grant higher academic salaries to chair-holders than to other faculty simply because they hold the chair. However, to the extent that such endowment funds can contribute to a campus-wide pool of salary funds, the Task Force recommends that this be pursued. At present, many chairs are supported by endowments that have grown significantly larger than needed to generate the flow of annual income expected for research purposes. In recent years it has been campus policy to divide such chairs, thereby creating new chairs. An alternative policy would be to allocate, say, 50 % of the annual payout to a salary pool which would supplement state funds to pay faculty salaries. The campus as a whole currently possesses 329 endowed chairs whose endowments have a cumulative market value as of 30 June 2003 of \$319 million. The annual payout varies, but is presently 4.7%, or \$15.1 million.

The Task Force also believes the campus should explore ways in which <u>federal grants and contracts</u> may be structured to supplement faculty salaries. We do so with some hesitancy, since it is not our intention to establish a class of regular faculty dependent on grant funding. But there may be ways in which grants can supplement our salary revenue sources without compromising the status of the affected faculty.

**3. Increased student fees; high-fee professional programs**. The contemplation of permanently reduced levels of state support has led the campus to consider funding models which feature a greater reliance on student fees, and a greater market-sensitivity in setting fees for various degree programs. There are two general ways in which such fee generation can assist in funding faculty salaries.

<u>Professional school fees</u>. Several professional degree programs have the theoretical market power to charge fees well above the general UC level. To the extent they are allowed to exercise this power, resources are available to improve the quality of their programs, including the attraction of excellent faculty through the payment of competitive salaries. The Haas School Pilot Plan (now, Faculty Excellence Program) is an example of such an approach to faculty compensation. The Pilot Plan allows Haas School faculty to be paid salaries at the level of peer institutions in exchange for the School's commitment to fund the decoupled portion of these salaries from revenues generated by its high-fee degree programs (such as the Executive MBA). If campus professional schools are given the ability to raise fees (and, most importantly, to retain

the revenue), there may be additional opportunities to finance the "market increments" recommended by the Task Force. The Task Force is also cognizant of the danger of this approach: that the differential level of fees rather than the quality and performance of the faculty will dominate in the determination of faculty compensation. The Task force envisions different fees, applied to different cohorts of the various professional programs, as determined by the unit in consultation with the Campus and perhaps system-wide. For example, while Engineering might consider a fee increase for graduate students only, Business might consider levying a differential fee to both MBA students as well as undergraduates.

<u>Campus-wide fees and tuition</u>. To the extent that the campus is able to establish higher fees, and, perhaps, to increase the number of high-fee paying non-California students, a portion of the incremental revenue should be earmarked to supplement the pool of funds available for faculty compensation. Since the first draft of this report, the Governor's budget proposal has set its sights on this revenue source to help close the gap in the state budget. Clearly there are multiple claimants to student fees and tuition: the campus, the system, and the state. However, if the principle can be established that each UC campus has the right to retain the non-resident tuition paid by its own students, the basis could be formed for a permanent fund to supplement faculty salaries.

We confine this exercise to undergraduate students. The Berkeley campus currently enrolls 2,431 non-resident undergraduates, whose non-resident tuition totals \$33.4 million. The current proposal to raise non-resident tuition by 20 percent, or \$2,746, would generate an additional \$6.7 million. If Berkeley's enrollment of non-resident undergraduates were to rise above the self-imposed 10% cap to 15%, the non-resident tuition revenue would rise by \$16.7 million, under current rates, and by \$20.0 million under the rates proposed for 2004-05. This represents a significant change in system policy, and, as noted above, there are many other important claimants to augmented fee revenues, but there should be some appeal to striking a bargain with the system and the state: we increase the number of non-state students, and in exchange for keeping the revenue supplied from this source fund the salary differentials needed to preserve Berkeley's standing as the nation's premier public university – a benefit to the state and its students that it is unable or unwilling to finance.

#### Conclusion

Berkeley has suffered for some time from salary scales that are uncompetitive with our chief competitors. This problem has intensified in recent years and now threatens Berkeley's standing. The academic market place has become more stratified as competition for scarce talent intensifies. This is occurring at a time when Berkeley will need to attract a large number of new faculty to accommodate its recent expansion in student enrollments and the coming retirement of many hundreds of faculty now in their 60s and 70s. To maintain its enviable standing in the face of these challenges it is imperative that it be able to recruit faculty from a position of strength. In the face of these problems the campus has developed a number of expedients that allow it to compete for talented faculty. This report advocates converting those ad hoc measures, step-by-step, into a structure of enhanced faculty compensation that will allow the campus to offer

competitive salaries in recruitment, to reward existing faculty adequately for excellent performance, and to reduce the annual number of retention crises. The report also identifies way in which the campus can finance the additional cost of the recommended measures. Some of these cannot be put into place for some years, but an active management of faculty "turnover" can provide the financial means to begin now with the implementation of the Task Force recommendations.

Respectfully submitted,

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### **APPENDIX I**

#### Policy on Assistant Professor Salary-setting

12 September 2002

#### DEANS AND CHAIRS

Re: Recommending salaries for appointments to, and advancements in, the rank of assistant professor.

This memo reviews the verbal announcement I made at the deans' and chairs' retreat on 20 August 2002.

#### Background

The determination of appropriate salary offers in junior recruitments has been a frequent source of disagreement in recent years. In many cases the faculty salary scales provide competitive salaries, and the only issue is determining the appropriate step for appointment. However, in a growing number of cases, the salary scales do not allow us to make appropriate salary offers. This has given rise to disagreement between department chairs and deans on the one hand and higher levels of review, especially the Budget Committee, on the other, which felt the need to adhere to a policy of permitting deviations from the salary scales – i.e., decoupled salaries – only when this was needed to respond to competing offers from peer institutions.

This policy placed the university at a competitive disadvantage in junior recruitments and led to anomalies and inequities in the remuneration of junior faculty. Discussions on this topic in the course of the past year led the Budget Committee to propose new guidelines. They are in accord with the views developed by the Provost and Vice Provost, and will now guide salary policy for untenured faculty appointments and advancements.

#### Policy

The salary offered for an untenured appointment will be that identified by the appropriate step and salary scale, except when:

1. The appointee can be shown to be equivalent in attainments and promise to other recently recruited junior faculty members in the same department or discipline who did have outside offers from peer institutions. Such outside offers, made in the same year or in the very recent past, can be taken into consideration in establishing the appropriate salary to be offered to the new recruit.

- 2. The salaries paid to junior faculty can be shown, by recent compilations of comparable salary data from peer institutions, to require deviation from the university's salary scale.
- 3. Such evidence should not be anecdotal, but based on systematically assembled data, preferably from professional associations. Such evidence may be more difficult to evaluate than that of exception 1, above, but can be useful in cases where there are no recent appointments at Berkeley to establish the market salary.

The advancement of junior faculty, just as that of all faculty, has been limited to the salary increases provided by the steps of our salary scales except in cases of retention, where an outside offer from a peer institution can be used to justify salary decoupling. Policy will now provide for an additional justification for recommending decoupling in the case of untenured faculty:

In cases where junior faculty experience "salary inversion" (salaries no higher than those paid to more recently hired comparable junior faculty), such inversion can be taken into consideration to justify decoupling, or further decoupling, the salary of junior faculty. Such requests should be made only when the record of the junior faculty is wholly satisfactory, such that there can be no doubt that the salary distinctions are derived from recent market developments rather than from performance.

#### Conclusion

The new policies outlined above allow new types of evidence to be introduced to the process of setting the salaries of junior faculty. It is only to be expected that the implementation of these guidelines will lead to differences of interpretation and questions about the adequacy and relevance of specific pieces of information. Department chairs should be in contact with their deans when preparing cases that invoke the new policies. The new policies also leave unaddressed the comparable problems faced in the recruitment and compensation of tenured faculty. While the problems are comparable, the solutions are more complex. We hope to be able to address them in the future. Meanwhile, the policies described in this memo are an important step to making Berkeley more competitive in the recruitment and retention of the outstanding junior faculty on which our future depends.

Jan de Vries Vice Provost for Academic Affairs and Faculty Welfare

# APPENDIX II RECOMMENDATIONS FOR FACULTY SALARY SURVEYS

Currently, Berkeley participates in three faculty salary surveys: 1.) AAUP; 2) MIT, and 3) AAU Data Exchange (AAUDE). The University of California Office of the President provides the Berkeley data for these surveys. In addition, some colleges and departments may participate in annual or ad hoc professional association salary surveys

The <u>AAUP salary survey</u> collects salary and headcount data for full-time, tenure and tenure track faculty by academic rank, gender and contract (9-month and 12-month). Only institutional-level data is collected; no information is collected by discipline or department. Faculty in clinical and pre-clinical programs at medical schools are excluded.)

The <u>MIT salary surveys</u> collects salary and FTE data for selected disciplines that exist at MIT. Institutions participating include: MIT, Harvard, Yale, Princeton, Stanford, Caltech, Columbia, Illinois, Michigan (in prior years), North Carolina, Texas, Wisconsin, UC Berkeley, UCLA, UC San Diego, and Purdue in 2002-03 to replace Michigan. Data collected includes:
Salaries: Minimum, maximum, mean salaries By rank (asst. associate, full)
Faculty headcount by rank and discipline (not for new hirers)
Average age by rank and discipline
Salary dispersion (25%ile, 50%ile, and 75%ile)—most institutions do not submit salary dispersion data

Data is reported by MIT department with a public and private comparison (no institutions can be identified in summary reports).

The <u>AAUDE salary survey</u> collects salary and FTE data for all disciplines. Although all institutions in the AAU are encouraged to participate, only 5 private institutions participated in 2002-03 (MIT, Emory, Cornell, Duke, Washington) as well as 39 public institutions including Illinois, Michigan, Virginia, Buffalo, North Carolina, Texas, Washington, and Wisconsin. The salary survey data resides on the AAUDE server, located at MIT. In 2002-03, public institutions participated. Data collected in the AAUDE survey include:

Salaries: High, Low and Average faculty salaries for all faculty and new hires

by academic rank,

by contract period (9 month and 12 month),

by CIP code -defined academic department or discipline.

CIP = Classification of Instructional Programs

Faculty FTE, by rank and discipline (Total and New Hires) Average Age by rank and discipline. Includes:

- all full-time faculty (including chairs and department heads) holding faculty rank but who do not hold other administrative titles, who have current appointments and are on the payroll, who may be on sabbatical (reported at their regular salary).
- full-time visiting faculty and replacement faculty for those on leave without pay who meet all other criteria.

Excludes:

- instruction paid by a source outside the university's fiscal control.
- Excludes administrators with titles of asst dean or higher with academic rank, if their total assignment is administration.

Data reported: Salary data exists in the AAUDE data warehouse which allows for the inter-institutional comparisons (i.e., institutions can be identified in the database but cannot be reported under AAUDE guidelines).

# **Recommendation**:

- 1. MIT and AAUDE salary survey be integrated into one survey
- 2. Salary survey would reside on the AAUDE server located at MIT. Standard summary reports would be generated by MIT.
- 3. Additional guidelines and restrictions access and reporting of salary data would probably need to be established to encourage private participation in the salary survey.
- 4. Following established guidelines and principles, institutions would be allowed to view other institutional data for internal peer comparison.
- 5. Additional data elements should be added to the salary survey to include data on:
  - All disciplines offered at the institution
  - New hires by rank
  - Salary dispersion indicators (e.g, 25-75%ile, standard deviation)
  - Salary for new promotions (this could be difficult to collect)
  - Cost of living data such as that provided by Runzheimer Inc. This data is currently used at Cornell, Illinois, and other AAU institutions.
- 6. Implementation of these recommendations will require approval at the Provost and/or Chancellor/Presidential level. As such, Chancellor Berdahl and Executive Vice Chancellor and Provost Gray are encouraged to begin discussion with their counterparts to implement the proposed salary survey.

# Table 1Decoupling by rank

Rank/Step	FTE	On	Off scale	Decoupled	Percent decoupled	Percent on scale
Asst						
II	22.30	4.00	1.00	17.30	0.78	0.18
III	48.25	10.85	10.33	27.07	0.56	0.22
IV	58.24	13.30	13.00	31.94	0.55	0.23
V	49.05	14.60	17.85	16.60	0.34	0.30
VI	32.40	7.30	16.10	9.00	0.28	0.23
Assoc						
Ι	7.65	0.65	1.00	6.00	0.78	0.08
II	30.80	9.50	10.30	11.00	0.36	0.31
III	63.60	18.30	23.40	21.90	0.34	0.29
IV	91.90	37.40	34.00	20.50	0.22	0.41
V	74.60	26.00	37.60	11.00	0.15	0.35
Prof						
Ι	12.05	1.05	5.00	6.00	0.50	0.09
II	37.50	12.50	14.00	11.00	0.29	0.33
III	68.70	19.70	32.00	17.00	0.25	0.29
IV	107.04	51.04	32.00	24.00	0.22	0.48
V	147.50	48.50	77.00	22.00	0.15	0.33
VI	66.80	19.80	35.00	12.00	0.18	0.30
VII	98.80	28.80	53.00	17.00	0.17	0.29
VIII	99.09	35.09	48.00	16.00	0.16	0.35
IX	130.43	65.43	43.00	22.00	0.17	0.50
AS	174.64					
Total	1421.34	423.81	503.58	319.31	022	0.30

SOURCE: 2002-03 ACADEME

Table 2
Berkeley Campus Comparson Institutues
Annual Compensation and Benefits
American Association of University Professors

Institution		Professor	Lag	Associate	Lag	Assistant	Lag	Overall Average	Lag	Benefit %
Harvard	Base	150,800	29%	88,800	19%	79,300	18%	119,700	21%	
	Total Comp	179,400	14%	105,300	3%	93,000	1 %	142,200	7%	19%
Stanford	Base	137,300	17%	97,800	31%	76,300	13%	116,700	18%	
	Total Comp	172,100	10%	122,000	20%	101,600	10%	147,400	11%	26%
Princeton	Base	138,600	18%	88,900	19%	68,100	1%	107,000	9%	
	Total Comp	168,900	8%	109,400	7%	84,300	-9%	130,900	-1%	22%
Caltech	Base	131,400	12%	92,200	24%	84,300	25%	111,800	13%	
	Total Comp	160,400	2%	112,700	10%	101,000	9%	136,100	2%	22%
Yale	Base	137,200	17%	79,500	7%	63,800	-5%	100,400	2%	
	Total Comp	164,900	5%	98,500	-3%	78,600	-15%	121,600	-8%	21%
Chicago	Base	134,700	15%	88,100	18%	70,300	4%	99,400	1%	
	Total Comp	160,800	2%	110,100	8%	89,800	-3%	121,900	-8%	23%
MIT	Base	127,600	9%	87,000.	17%	79,200	18%	105,300	I7%	
	Total Comp	158,100	1%	110,700	9%	101,000	9%	132,000	-1%	25%
Berkeley	Base	117,300		74,600		67,300		98,600		
	Total Comp	157,000		102,000		92,500		132,800		35%

SOURCE: 2002-03 ACADEME

UC Berkeley average salaries compared to the average salaries of six private universities, 1984/5 to 2002/3. AAUP annual data, by rank.

Year	Gap between UC Berkeley and unweighted average of six private universities							
	Professor	Associate	Assistant					
1984	4.9%	5.7%	1.6%					
1985	3.2	4.1	- 3.3					
1986	2.1	0.7	- 4.9					
1987	8.0	7.0	1.4					
1988	8.3	9.3	2.9					
1989	8.5	8.8	5.0					
1990	9.7	9.4	9.4					
1991	12.6	8.5	6.9					
1992	15.1	11.4	9.3					
1993	24.9	19.3	15.6					
1994	23.3	18.7	13.2					
1995	18.0	12.4	8.0					
1996	18.8	12.3	11.0					
1997	n/a	n/a	n/a					
1998	10.8	6.3	6.1					
1999	10.3	7.3	5.2					
2000	10.2	9.6	8.5					
2001	13.5	14.8	7.9					
2002	16.9	19.3	11.7					

6-privates: Harvard, Yale, Princeton, Stanford, MIT, Caltech.

# MIT Faculty Salary Survey Data, 2002-03 Rank: Professor

Fields arranged in ascending order of UC Berkeley salaries Percentage										
	Average	salary (000)		Percer	ntages	1998-99	Change since			
Field	Private	UC Berkeley	Public	UCB/Private	UCB/Public	UCB/Private	1998-99			
Architecture	118.30	102.10	86.20	86.31	118.45	91.21	-4.90			
History	127.30	108.60	101.40	85.31	107.10	93.38	-8.07			
Foreign Lang & Lit	115.30	109.10	85.60	94.62	127.45	99.63	-5.01			
Civil Eng	115.60	109.40	106.50	94.64	102.72	102.72	-8.08			
Mech Eng	121.40	109.60	111.30	90.28	98.47	97.34	-7.06			
Music & Theater Arts	117.40	112.30	87.10	95.66	128.93	93.28	2.38			
Political Science	137.40	112.90	113.50	82.17	99.47	87.58	-5.41			
English	127.10	114.00	92.00	89.69	123.91	98.01	-8.32			
Linguistics	113.20	114.20	98.60	100.88	115.82	109.34	-8.46			
EECS	126.40	114.60	115.90	90.66	98.88	100.16	-9.50			
Biology	125.70	118.10	98.20	93.95	120.26	95.37	-1.42			
Earth & Pl Sci	119.40	118.80	97.50	99.50	121.85	105.02	-5.52			
Mathematics	133.50	118.90	103.90	89.06	114.44	93.39	-4.33			
Urban Studies	118.70	119.40	94.20	100.59	126.75	96.62	3.97			
Anthropology	117.70	121.60	93.10	103.31	130.61	106.21	-2.90			
Nuclear Eng	126.70	122.80	120.50	96.92	101.91	102.64	-5.72			
Physics	130.30	123.90	104.30	95.09	118.79	99.80	-4.71			
Materials Science	115.20	125.10	118.70	108.59	105.39	101.30	7.29			
Chem Eng	129.00	129.00	120.70	100.00	106.88	107.48	-7.48			
Philosophy	130.10	129.90	94.60	99.85	137.32	102.56	-2.71			
Chemistry	135.20	130.80	111.30	96.75	117.52	101.78	-5.03			
Economics	163.00	141.50	130.50	86.81	108.43	90.18	-3.37			
Business Admin	187.80	149.70	140.70	79.71	106.40	81.24	-1.53			

### Retention, 2000-2003

Age distri	bution of f	faculty		
Receiving	outside of	ffers	Average Ages	
	Ν	%*		
26-30	2	15.4	Humanities 47.4	4
31-35	13	14.0	Biological Sci 45.0	0
36-40	34	20.7	Physical Sci 45.2	2
41-45	28	15.1	Social Sci 41.4	4
46-50	28	13.0		
51-55	21	9.1		
56-60	9	3.8	Business Admin 43.4	4
61+	1	0.3	Chemistry 44.8	8
			Engineering 41.0	6
			Law 37.0	6
Total	136		All other 45.2	2

\* Percentage of faculty in age group. This is an understatement of the actual percentage, since the sample (136 faculty) excludes approximately 40 retention cases in this period for which age data have not been retrieved.

#### Merit Awards, 2002-03

	Retention Cases			Non Retention			
	Ν	Avg.	Total	Ν	Avg.	Total	
Assistant	2	\$11,350	\$22,700	57	\$3,283	\$187,150	
Associate	7	17,086	119,600	68	5,157	350,700	
Professor	18	26,700	480,600	167	9,375	1,565,595	
Above Scale	5	42,280	211,400	43	11,559	497,050	
Total	32		834,300	335		2,610,495	

Of \$3.44 million in merit awards in 2002-03, 32% went to 32 retention cases. The remaining 68% went to the remaining 335 cases.

Model of Proposed Salary Scale with Promotion Increments and Market Increments

Prof.	salary scal	.le	Promotic	on Ir	icrement	Total Salary	7 Total Salary	Accelerated
Market Increme	nt							
Rank/step	Years	Salary	AssociateProfe	essor	Current	Associate	Associate -	+ Prof.
Asst III	2.00	51.70	)		103.40	) 103.40	103.40	appointment: possible decoupling
Asst IV Asst V Assoc II	2.00 2.00 2.00	54.60 57.30 60.10	)		109.20 114.60 120.20	) 114.60	114.60	
Assoc III Assoc IV Assoc V/P	2.00 3.00 3.00	63.50 67.40 72.60	) 3.50	5.50	127.00 202.20 217.80	) 212.70	212.70	
Prof III Prof IV Prof V	3.00 3.00 3.00	78.60 85.30 92.60	) 3.50 ) 3.50	5.50 5.50 5.50	235.80 255.90	$\begin{array}{c} 246.30 \\ 266.40 \end{array}$	262.80 282.90	promotion: decoupling reviewed
Prof VI Prof VII Prof VIII	3.00 3.00 3.00 3.00	100.40 109.10 118.10	) 3.50 ) 3.50	5.50 5.50 5.50	301.20 327.30	) 311.70 ) 337.80	328.20 354.1	barrier step: decoupiing reviewed 30
Prof IX	4.00	128.30		5.50			<i>E</i> 40	
Totals	38.00				3259.90	) 3371.90	3509.40	)
Average salaries Index					\$ 85.787 100.00			

Table	7: Estimated Mont	ly Cost of Ben	efits						
Assumptions									
	Started in 1987 at a	ge 30 as Asst. I	Professor makir	ng \$50,814 (av	g. salary for				
	new asst. prof.) Receives standard r	parits and is pro	moted in year	viv and twelv	e to associate				
	and full prof.	herns and is pro	Smoled in years	s six and twerve	e to associate				
	Contributes 5% of s	alary to option	al 403B plan ar	nd 5% to Optio	nal				
	Supplemental Retir			1					
	Retires at age 65								
		Berkeley	Harvard	MIT	Stanford	Columbia	Michigan	Illinois	Wisconsir
Retirement									
	Basic	\$167	\$0	\$0	\$0	\$0	\$417	\$667	\$433
	Opt. suppl retir.				\$417				
	403B	\$417	<u>\$417</u>	<u>\$417</u>	\$417	\$417	\$417	\$417	\$417
	Total	\$583	\$417	\$417	\$833	\$417	\$833	\$1,083	\$850
								-	
Medical									
(lowest	self	\$22	\$34	\$75	\$41	\$15	\$0	\$37	\$29
cost									
	family	\$75	\$91	\$242	\$83	\$142	\$537	\$93	\$29
program)									
Dental									
	self	\$0	\$11	\$0	\$0	\$13	\$0	\$0	\$19
	family	\$0	\$32	\$38	\$0	\$28	\$0	\$0	\$40
	10								
Vision	self	\$0	\$20	\$20	\$20	\$20	\$13	\$0	\$20
	family	\$0	\$40	\$40	\$40	\$40	\$34	\$0	\$40
Parking		\$53	\$56	\$43	\$11	\$58	\$51	\$29	\$33
Farking		\$33	\$30	\$43	\$11	\$20	\$51	\$29	
Total Cost									
CUSI	self	\$659	\$538	\$555	\$905	\$523	\$897	\$1,149	\$951
	family	\$712	\$636	\$780	\$967	\$685	\$1,455	\$1,205	\$992
Est. Retireme nt	Def. Benefit	\$2,024,431		\$789,046	\$789,046			\$2,461,825	\$1,445,255
(min.)	Def. Contribution	\$315,619	\$873,741			\$1,454,127	\$2,367,139		
. /	Supplement Ret.				\$1,578,093				
	<u>403B</u>	\$789,046	\$789,046	\$1,578,093	\$789,046	\$789,046	\$789,046	\$789,046	\$789,040
	Total	\$3,129,096	\$1,662,787	\$2,367,139	\$3,156,185	\$2,243,174	\$3,156,185	\$3,250,871	\$2,234,301
		- /	. ,	. /		- /		- /	
				= estimated data unavaila	as program not	offered or			
				autu unavalla					

# Cost estimate of recommended faculty salary enhancements

	in thousands of dolla	ars per year			
Year	Promotion	Market	Subtotal	TDI	Total
	Increment	Increment			
1	140	600	740	500	1240
2	280	1200	1480	1000	2480
3	420	1800	2220	1500	3720
4	560	2400	2960	2000	4960
5	700	3000	3700	2500	6200
6	840	3600	4440	2500	6940
7	980	4200	5180	2500	7680
8	1120	4800	5920	2500	8420
9	1260	5400	6660	2500	9160
10	1400	6000	7400	2500	9900
	continues for c. 20 years	diminishes in later years		6-year program	

# FIGURE 1



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FIGURE 2

