The committee spent several months learning about all the components of the Technology Infrastructure Fee (TIF)—what it covers, where the money goes, who is in charge, what is and is not included, and who pays. We would like to acknowledge and thank Mike Schilling, Executive Director, UCLA Administration - Communications Technology Services, for compiling this material in extensive detail—and for presenting it to several focus groups, including: the Medical campus leadership, the College Deans, the Council of Deans (which includes all the professional schools), and the general faculty (to whom we issued an invitation to an open meeting). All of these presentations made us aware of issues and concerns that we have tried to address.

Key Findings:

1. The FTE model still seems the most appropriate and practical. (While there was not unanimous agreement on this, given the other suggestions we are making, the committee members agreed that this system could remain for the present.) We did try to understand the various economies that contribute to TIF. The campus is made up of four distinct but often overlapping economies. Many of us participate in multiple categories (e.g., teaching and research or research and clinical, or...). The current system of splitting charges among different sources based on payroll data helps to avoid charging individuals more than once.

Teaching Economy --Funding derived from student fees and state money for teaching (predominantly the college but also all those units that teach).

Research Economy --Funding derived from grants (overlaps college, medical and professional schools)

Clinical Economy --Funding derived largely from patients (hospital and clinics)

Service Economy --Funding derived from visitors and those who use dorms, parking, and other services (all of Sam Morabito's operations)

What we are currently doing is charging everyone paid by these economies and thus earning an income on campus. (That includes any students who are also employees—who make up about 17% of the 29,000 FTE that supports the TIF.¹) We

¹ Of the 29,000 average monthly FTEs used to bill the TIF, approximately 17%, or 5,023 are related to students; undergraduate (1,695) and graduate (3,328). With respect to headcount, the total number of students employed in February was approximately 10,940; undergraduate (5,415) and graduate (5,525). So a sizeable proportion of the students are actually already paying into the TIF directly as employees.

are not charging directly those who represent a funding stream but who do not themselves derive income—even though they use the service one way or another (this includes students, patients, and visitors). They are paying into the economies from which the rest of us pay the TIF. Undergraduate Students in the College also pay a course materials fee for each class (the IEI fee) and Undergraduate and Graduate Students living on campus pay for IT services in housing. We could ask if some IEI fees should be used to support the general assignment classroom network. This only represents about \$60,000 of TIF expenses—but it is fair to ask. If so, this charge would be spread across the entire teaching enterprise.

There is one group of students who we believe should pay into the TIF in some way, since they do not represent income to the campus at large, i.e., they do not pay fees to the central campus. These are students enrolled in selfsupporting programs, which at UCLA currently number about 1800 students. These include, at the present time, students enrolled in AGSM (the FEMBA, EMBA, and MFE programs); in Public Health (the MPH for Health Professionals Program); in GSEIS (the Ed.D. Program); and in HSSEAS (the M.S. in Engineering - Online program). Since the university is encouraging the development of more of these types of programs, the administration should determine how to assess TIF fees for them. The online programs that may be forthcoming will certainly use the technology infrastructure extensively. The university should determine how to include them in the TIF. The FTE model goes part of the way if the programs are hiring additional faculty to teach, but many programs pay the current faculty an additional sum to teach in these programs. This would not show up in the FTE model. When assessing these and future programs for central costs, technology should be included in the future, and the programs should be advised to plan for this cost.² A headcount charge might make most sense. For intensive users of technology (such as self-supporting online programs), some percentage of the normal TIF (50% of the \$40/month perhaps) should be charged per student. For less intensive technology programs a lesser percentage might be considered. The committee is not

² **Teaching Economy - Graduate Student Email Services for Enterprise Messaging:** As part of our efforts, we also spent time discussing the impact of the (state-funded) Teaching Economy Graduate Students being constantly moved on and off Enterprise Messaging, based on their employment status. The shift occurs quarter to quarter and results in a complex administrative process of identifying and subsequently charging for unemployed graduate students during quarters where they are not employed. Using Humanities as an example, the cost of monitoring, reporting and recharging offsets the benefit and savings achieved in moving to Enterprise Messaging. The committee therefore recommends that the (state-funded) Teaching Economy Graduate Students be provided Enterprise Messaging email without charge. Per Mike Schilling, this will not impact the financial performance of Enterprise Messaging and will likely save a significant amount of time and effort related to account provisioning and billing. Graduate students in self-supporting programs would continue to be charged the approved monthly fee if they choose to use Enterprise Messaging.

suggesting a specific amount or percentage but rather that some fee should be charged for self-supporting program students.

2. There are two areas that are currently not covered by the TIF services that should be included in order to maximize the common email and backbone systems:

The medical enterprise email system

The cost of connecting off campus medical center/clinical operations

The medical enterprise email system is unique in its needs for security (national regulations and requirements for patient privacy and security). It cannot, therefore, be the same as or merged with the general campus email system. But since all the rest of us paying the TIF have our email included in TIF services, it seems only fair that the campus should add the medical email system to TIF coverage. This would cost about \$1.4 million (more on how we would suggest covering this cost below). The same argument holds for the connection of the Santa Monica medical center and outlying clinics to the UCLA backbone. The medical enterprise seems to be the only group that pays an extra charge for connectivity. If covered by TIF in the future, this would cost about \$400,000.

We were very concerned with holding the TIF charge where it is for as long as possible. So we would suggest taking up our suggestions in 2011-12. By that time, Mike Schilling believes he can find another \$400k in savings (by forwarding duplicate email addresses thus saving on storage, and other measures). This would offset the medical backbone costs. To cover the cost of the medical enterprise's email, we would suggest using some funds currently in TIER (a separate sub-set of the TIF of about \$2,100,000). More on this below.

3. TIER (Technology Infrastructure for Instruction and Research) funds should disband as a subset fund and become part of the regular TIF used for common good infrastructure services that are operational. Once new common good services have moved into production, TIF should be the fund source for the cost of operations and maintenance. TIER funds as a subset of the TIF have been used as matching funds to create incentives for consolidation of network services and, more recently, as campus IT planning funds. But we all feel that these funds are too small to serve as genuine planning funds, which the campus desperately needs. The funds should continue to be used for common good infrastructure services—but will be used up very soon (particularly if we carve the medical enterprise email cost of \$1,400,000 out of the \$2,100,000 currently in TIER). About \$102,000 from TIER should also be allotted as TIF costs since they represent continuing operational expenses for network services developed in TIER. Allowing the TIER funds to fold into the general TIF will likely prevent increases in the TIF for a while.

We are very impressed that Mike Schilling and CTS have managed to contain the costs of the TIF so far—by reducing staff, increasing efficiency, and beginning to eliminate redundancy. But it seems unlikely that this can continue indefinitely. Because existing services are very closely managed, any increase in requirement or scale will increase costs. The faculty and staff (and therefore the FTE pool) will shrink in the future but our computing needs will surely increase. It is highly likely that the TIF will have to increase in the future. This may be delayed by diverting the TIER funds gradually to the general TIF needs, but this will only hold the costs down for a few years at best.

HOWEVER, if we allow the TIER funds to become general TIF funds, then we feel our next suggestion is crucial.

4. The University should create a substantial fund for technology planning across the whole campus. This should be separate from the TIF funds and should probably be taken centrally as a set-aside. Once new systems are in production, their operational costs would move to the TIF set of supported maintenance. But developing and maintaining such systems will require more resources than are available in the current TIF system. The whole committee agrees that we need an investment strategy for campus IT Planning. IT Planning will certainly include systems and technology planning but it must also have enough scope to include process initiatives like digital citizen and campus innovation, inventories, business, funding and human resource analysis, peer university studies, and IT Planning management, governance and consultation. Such planning efforts will become increasingly important as we move forward, and they desperately need to be funded differently from the limited resources in the TIF. Such funds and an investment strategy would allow the campus to have a predictable set of resources to deal with increasing technology needs as well as to plan for renewal of campus systems.

(Current TIER funds not expended in the ways we suggest above should continue to be used for campuswide IT planning until they are all finally expended in ongoing maintenance of those campuswide projects. But that probably won't take long.)

5. Help in getting TIF Direct Costs accepted in Research Grant Proposals. In our meetings with faculty, some researchers reported having no problem including the TIF as part of direct costs in research proposal budgets. And although they don't love this system—they have adjusted to it. Other faculty said that their grants' program managers were having the TIF disallowed as part of direct costs, either during or after proposal evaluation. The Office of Contracts and Grants (OCGA) should determine the best budgetary or proposal language for making these costs allowable to external agencies, and this language should be made available to all PIs.

6. Any changes being considered in the TIF in the future should come to the Information Technology Planning Board (ITPB) for review, comment, and approval. This level of oversight includes approval of the nature of future projects to be supported and the future distribution of TIF resources, and is consistent with the original designation of ITPB responsibilities for TIF's governance.

This covers our major points. Some of us were amazed that we could come to agreement on these—but the committee did. We believe these suggestions will make the system fairer without driving up costs immediately. We would hope it could stay in place for 5 years before being reviewed again. If our economic outlook has changed by then—or if, as we expect, the costs of technology infrastructure rise—we would want to look at all this again. We value the transparency (some of us more than others...) and the consultation involved in this evaluation. The chair would like to thank all the committee members for their willingness to see beyond their own specific needs and desires to the good of the campus as a whole. I didn't really think we could reach agreement—thanks for proving me wrong!

TIF Review Committee:

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