MEMO TO: Larry Travis, Manly Draper
FROM: Ralph Stromquist
SUBJECT: Campus Computing and Communications Reorganization Suggestions
COPY: Tad Pinkerton

A few days ago, when I was first thinking about writing this memo, there were several factors I wanted to point out as contributors to the fiscal crisis at MACC. Since then, I have been given a copy of MACC Memo #84A, from Larry Travis to Bernard Cohen, which aptly describes why we are facing this severe crisis, so I will not repeat what Larry has said, but I agree with him. My intent is to suggest some actions that should save money while establishing an improved campus service structure for computing and telecommunications.

There are a tremendous number of departmental machines on campus. Many rival the main computers at MACC in their power. Naturally, they draw customers away from the central facility. There are still reasons to believe money can be saved by centralizing staff and facilities, particularly when many departments besides MACC are offering the same services with the same hardware and software. Some computing services sites using Digital Equipment VAX computers like those at MACC include Physical Sciences Laboratory, Demography and Ecology, Chemistry, Math Research Center, and Astronomy. There are many more.

For example, PSL offers general computing services to campus users in direct competition with MACC at comparable charging rates. We have two installations, each paying for the same type of hardware, software, maintenance and staff to deliver the same services to the same customers. How can this type of duplication make sense to campus administrators? Surely a single service source would save money; we are told money is in short supply.

I would like to take this reasoning a step further and consider campus computing and telecommunications services for both academic and administrative applications. Although MACC and Administrative Data Processing serve different customers to a large extent, there is getting to be an increasing amount of overlap. Electronic communications and networking applications such as mail and word processing are prime examples; microcomputer support and user training are others. General networking services (physical cabling as well as applications), computer-output printing services, efficient use of microcomputers with mainframes, some statistical and database processing, all would benefit from the two organizations reporting to the same campus administrator.

The opportunity for sharing staff and facilities is becoming greater now than it ever was in the past because of major improvements in hardware and software, and also because MACC and ADP operations soon will be physically located in the same building complex. IBM-based computer services could be supplied off the same mainframe, if desired. Both the MVS operating system used by ADP and the CMS operating system used by MACC can be run simultaneously under VM on one computer. Part of the solution of a new computing organization could include discontinuing one IBM computer and combining
operations, systems programming, and communications staffs to support all MACC and ADP systems. There should be opportunities for saving money.

MACC, PSL, and ADP have people working on computer communications facilities and services. The campus Telecommunications Office also provides communications services (telephones). Modern telephone systems can carry both voice and data communications. More development and coordination is needed with computing service groups. These four groups are at least partially duplicating effort, but even if they were not, the campus would have a better coordinated effort if they had a common director.

I will not go into great detail to analyze the groups that I have used as subjects for consideration. The point I am trying to make is that there is a level of duplication of services on campus that goes far beyond what makes sense, if you consider what is necessary to deliver high-quality services. A reorganization at the levels indicated should deliver services at least as good as we have now, and possibly better. There should be a considerable amount of money saved which can be applied to services the campus customers demonstrate that they want from MACC, but either are unwilling to pay out of departmental budgets, or MACC has no reasonable way to collect.

Redirecting the reporting structure of the service groups to a single campus administrator in charge of computing and telecommunications should solve many of the problems I have described. There also should be some change from past practice of doling out a large portion of the capital equipment money for computing to deans, directors and department chairmen. Centralized computing, at least for academic support, is dwindling away. Is a campus with no significant central academic computing facility the right solution? Is the campus served as well by fragmented and scattered services as it would be by at least some of these services being centralized? What are the hidden costs of all these computer systems with similar support staff, software, maintenance, and space requirements? MACC has been left to deliver the non-paying services to customers of departmental computer systems, while losing the computer use sales that paid for expenses.

I propose an expanded Office of Information Technology, or appointment of a new Vice Chancellor, with line responsibilities and authority that encompasses the functions I have described. This office should have some degree of control over computing expenditures for the whole campus to achieve a better balance between departmental and central facilities.

I have created a brief organization chart on the next page to summarize some of what I am proposing. This is not meant to be an exhaustive definition, but a short example of the kind of structure that might work well for the campus and provide enough money to solve academic computing's fiscal problems.
Campus Computing and Telecommunications Organization Proposal

Office of Information Technology

or

Vice Chancellor for Computing and Telecommunications Services

Director, Academic Computing Services
Has previous MACC and PSL computing services except communications, maintenance facility, and computer operations. Add some microcomputer support and training functions from ADP.

Director, Administrative Computing Services
Has previous ADP functions except some training and microcomputer support activities, computer operations, systems programming, and communications support.

Director, Computing and Telecommunications Operations
Operates all computers and related equipment that remains from MACC-PSL computing services merger, plus ADP equipment. Provides all systems programming support. Encompasses the campus Telecommunications Office plus MACC and ADP communications and maintenance activities.