The use of electronic tools to create, maintain, and access information has become a critical aspect of all operations in any institution of higher education. This information may be used for educational, research, or administrative purposes, but this categorization masks the extensive interdependence of these programs with regards to UAB’s basic information system infrastructure and the availability of basic information system resources. This infrastructure ranges from the physical wiring that carries the information, to the computer hardware and software that process the information and deliver it to us, to the technical support staff that assist us in maintaining and accessing these resources, to the information itself. All of these resources must work in concert to produce an organized, collaborative environment.

The efforts of the people involved in the strategic planning process with regards to information systems have been directed at providing an overall review of information system technology at UAB. The goal of this review has been to derive a series of recommendations to support the use of this technology in all aspects of university life. These efforts have been carried out by university personnel representing the faculty, administration, and staff. In addition to members of the strategic planning workgroups, these efforts have involved the Campus-wide Information Systems Committee and its subcommittees, the UAB Libraries, and the UAB Departments of University Communication Services, The University Computing Center, and Data Communications/Network Services. These groups have worked together to analyze the current computing environment on campus to identify and prioritize needs for the future, and to consider present and future technologies and the costs involved in their implementation. As appropriate, standards, policies, guidelines, and/or recommendations are then developed to address solutions to these issues.

It must be emphasized that this is an ongoing process. Some areas have been fully addressed, while others have been barely looked at. It is extremely important that ongoing efforts continue to evaluate the technical aspects of meeting the information system needs of UAB. It is equally important that an oversight structure be established that can coordinate all aspects of information systems technology on campus to ensure that a functional, collaborative environment exists to evaluate and meet these needs in the future.

Below we describe some of the areas in which substantial progress has been made in the past year, and also list some of the areas that still require a substantial amount of work.

**Current Progress**

**Information Access**

The University Computing Center is developing a data warehouse software application that should allow easy access to UAB administrative information. The user fills out a Windows-based form that indicates the information they wish to retrieve, and this form is then submitted to the data warehouse which retrieves and presents the requested information. The site-license for the necessary software tools have been purchased, and the client application is under development. This system should be available in the next several months.

**World-Wide Web Services**

There is now a clear line of responsibility at UAB for creation and maintenance of its central World-Wide Web (WWW)-based information. The basic responsibility for the design of the pages is through the Office of Public Relations and Marketing. The Lister Hill Library has the responsibility of the technical aspects of
web page creation and serving the web page to the internet. LHL can also serve web-based information for individual UAB departments and units. The office of Public Relations and Marketing, along with the Department of Photography and Instructional Graphics can provide assistance with the creation of departmental web pages, while Human Resources provides classes in the creation of World-Wide Web pages.

**Network Connection Policy**

To ensure that the basic wiring backbone that forms the critical, shared infrastructure for movement of all electronic communications on and off campus remains reliable and supports continued future growth, Data Communications/Network Services has developed a Network Connection Policy that defines the rules that must be followed for the installation of new wiring and connection of devices to the network.

**Remote Access**

To provide efficient, reliable, and cost-effective dial-in access to UAB’s information system network, and also to the world-wide internet, UAB has contracted with MCI to offer these services to UAB students, faculty, and staff. MCI will establish a dial-in account that can be used either from home, or over long-distance phone lines to connect a computer to the internet and directly to UAB’s network. MCI will provide the required software for both Microsoft Windows-based computers, and Macintosh computers. This service currently provides TCP/IP based internet access, and eventually should provide Novell and AppleTalk access to the campus network. Finally, MCI provides toll-free access to technical support personnel to answer questions and solve problems.

The cost of the MCI service is a one-time $10 sign-up fee, and $12 per month for 60 hours of connect time. After 60 hours, the charge is $0.95 per hour. Currently, there is no charge for connections from 1 AM to 6 AM. Individuals can sign-up for this service by contacting MCI at 1-888-801-9105.

**Email**

A set of guidelines has been developed by the Campus-wide Information Systems Networking subcommittee. These guidelines provide a set of standards for Email and Electronic communication systems, and an overview of the factors that should be considered when a department or unit is selecting such a system. The goal of these guidelines is to ensure that any such system used on campus is as compatible as possible with other systems both on and off campus.

Because of there is such a wide variety of investment in computer systems and support for these systems among departments on campus, it is not possible to provide one overall recommendation for an Email solution, short of suggesting that UAB adopt and fund an institution-wide common messaging system. Therefore, the Email guidelines provide recommendations for provision of Email services to three different categories of users:

- **Users without a local Email system that require central services.**
- **Users with a local, departmental system that provides basic services.**
- **Users with a local, departmental system that provides a complete messaging system.**

These standards should ensure any student, faculty, or staff member at UAB be able to easily send messages and formatted documents to one another. The Email system should work well on a variety of computer systems, be simple to use, and allow communication and collaboration with colleagues outside of UAB. The components of the recommended Email systems include:
Information Technology Update

- Adherence to international standards (SMTP/MIME)
- Standardized office-suite software (Microsoft Office)
- An Email account for all UAB personnel
- Access to the necessary hardware and software to utilize the Email account
- A single electronic, university-wide directory
- Technical assistance necessary to support this system

Of course, the ideal solution to providing seamless communication services across campus would be to adopt one common messaging system. Any such consideration needs to address not only the capabilities of the chosen system and its immediate software costs, but must also consider the costs of providing the computer hardware necessary to provide the backbone for this system. In addition, the provision of technical support to install, maintain, and administer this system will be crucial to its success.

Electronic Directory

While no one universal Email directory exists on campus, UAB’s Data Post Office has established a WWW accessible directory that is based upon information from Human Resources and Student Records. This directory can be accessed through any WWW browser at the URL http://www.dpo.uab.edu. This directory provides capabilities to search for UAB personnel and locate basic directory information such as campus address, phone, and Email address. In addition, individual users can create Email aliases—short, unique names that when appended to @uab.edu form a basic Email address that allows mail sent to this address to be forwarded to the user’s actual Email account.

Work in Progress

While the above list demonstrates that a great deal of progress has been made in certain areas of concern, there is much more work needed in other areas. Aspects of information systems on campus that need to be further addressed include:

Network Financing

The UAB information network must become financially self-supporting. Models for funding must be considered, and a final funding plan implemented.

Education and Research

 Basically, all aspects of information technology on campus ultimately supports the education and research missions of UAB. Continued application of new and improved methods of using information technologies in instruction and research need to be investigated and supported.

Administrative Applications

Currently a wide variety of administrative computing systems are in use on campus. The ultimate goal would be to move towards a unified, centrally supported Departmental Management System that would provide the tools to locally maintain records such as departmental and laboratory accounts, budgets, electronic forms, and personnel records.

Support Services

The expense in providing the physical campus network and computer hardware and software that supports information technology at UAB is substantial. But the major expense that exceeds all of the above is in
providing the technical support necessary to install, maintain, and administer these systems. UAB currently operates with a computing support staff that maintains central computing services, and provides whatever user support it can, given the limited personnel resources that are available. Many departments provide their own support staff as their individual budgets allow. This system has resulted in a support structure where some users have excellent support services, others only adequate services, while still other users are on their own, with no local assistance whatsoever.

UAB needs to continue to investigate ways of providing technological support to all personnel, including students, and needs to provide continued training to existing support staff. While it is difficult to predict the overall costs of this effort, UAB’s investment in this area should result in increased productivity and efficiency, if not also in an actual reduction in overall costs.

Towards the Future

Perhaps the one goal that can go further than any other in impacting all aspects of information systems at UAB would be the establishment of a permanent centralized oversight structure that has the input from personnel representing faculty, administration, and staff. Such oversight would serve to organize the various disparate committees, departments, units, and individuals which impact the provision of these services on campus. This would enable the establishment of university-wide priorities and aid in the development of plans to implement those priorities in order to support a state-of-the-art, cost effective, collaborative information system environment on campus. In short, this oversight would provide a continued strategic planning role for support of these critical technologies.