Agency Strategic Plan

Appendix G

For Fiscal Years 2001-2005

By

University of Houston System
University of Houston

June 1, 2000

Table 1: Goals, Objectives and Strategies

Goals	Description
Information Technology is committed to: Information Resource (IR Goals) 1) Advanced instructional technologies 2) Advanced communications networks 3) Carnegie I research computing 4) Championing knowledge workers 5) Enabling people with computing resources 6) Superior Customer Support University of Houston System Goals 1) Coordinate the operations of the UH System universities so that they may serve the higher education needs of the Houston metropolitan area effectively, comprehensively, and in a cost-efficient manner. 2) Establish and carry out policies regarding purchasing and contracting that encourage meaningful and substantive engagement of historically under-utilized businesses. University of Houston Goals 1) Diversity and Opportunity In the face of changing demographics and rising costs, the University of Houston will work to ensure that members of the diverse communities it serves have access to the full range of educational opportunities it provides. 2) Undergraduate Education Through a commitment to excellence in its faculty and in its learning environments, including classrooms, libraries, and laboratories, the University of Houston will provide its undergraduates with an outstanding education. 3) Graduate and Professional Education The University of Houston will continue to develop its faculty and professional students, and to earn national recognition for the quality of its programs. 4) Research The University of Houston will pursue a research agenda that capitalizes on its location and on its unique strengths in both basic and applied research, and that enables it to become one of the premier urban research universities in the country.	*Describe the Information Resources goal, relate the information resources goal to the overall Strategic Plan, and indicate how these goals support the 1999 State Strategic Plan for Information Resources, Texas Connected Service at the Speed of Light. This plan can be found at http://www.dir.state.tx.us/pubs/99ssp/index.html* The University of Houston—Information Technology Division's information resource (IR) goals support the University of Houston's 2001-2005 Agency Strategic Plan. The IR goals comply with State goals, objectives, principles and vision of high-quality government services that are made more accessible and useful through information resources identified in the 1999 State Strategic Plan for Information Resources, *Texas Connected: Service at the Speed of Light*. IR Goal 1: **Advanced instructional technologies** Advances in instruction depend on services and technologies that will deepen and broaden the learning experience for students on campus and throughout the region. IR Goal 1 Supports: UH Goals: Undergraduate Education, Research, Graduate and Professional Education, Information Technology, Institutional Advancement, Enrollment Management. State IR Goals 1, 4 IR Goal 2: **Advanced communications networks** Efficient communication among scholars and students across campus and around the world is essential for a premier educational institution. UH must continue to develop advanced campus networks that seamlessly interconnect with regional, national, and international resources. IR Goal 2 Supports: UH System Goal 1 UH Goals: Undergraduate Education, Graduate and Professional Education, Research, Information Technology, Administrative Efficiency, Globalism and Institutional Advancement. State IR Goals 1, 3, 4

Table 1: Goals, Objectives and Strategies

Goals	Description
5) University Community The University of Houston will be a place where students, faculty, staff, and visitors feel comfortable, and where their needs are addressed promptly and efficiently. 6) Administrative Efficiency As a public institution, the University of Houston will hold itself accountable for the dollars it receives, will demonstrate its responsiveness to the needs of the State, and will not only show that it is capable of change, but it is a leader in defining what those changes must be. 7) Information Technology Technology is revolutionizing the world in which we live, and the University of Houston will fully explore the ways in which it can use the most advanced information technology to improve the quality of instruction, research and administration within the institution. 8) Globalism Since Houston is one of the most globally-oriented cities in the country, it is both natural and important that the University of Houston provide international education and research opportunities to its students and faculty, and that it address the needs of its partners abroad. 9) Enrollment Management The University of Houston will identify an optimal institutional enrollment level, determine the best mix of undergraduate, graduate, and professional students given its mission, and allocate resources in ways that best serve the broadly understood needs of its students. 10) Institutional Advancement The University of Houston will be positioned as a significant contributor to the economic, cultural, and social well-being of the region, winning the necessary support from the legislature and securing financial assistance from alumni, individuals, corporations, and foundations to provide resources for excellence in education, research, and community service.	IR Goal 3 **Carnegie I research computing** Becoming a Carnegie I research institution is a key goal for the University. To realize this goal, information technologists and the research community should forge a strong partnership to develop a nationally recognized research-computing environment. IR Goal 3 Supports: UH Goals: Research, Information Technology, Globolism, Institutional Advancement State IR Goals 1, 3 IR Goal 4 **Championing knowledge workers** Timely and accurate information is necessary for the efficient operation of the University. Information Technology must continue to provide state-of-the-art resources to collect, store, protect, and make available the mission-critical data of the institution. These resources will streamline processes and enable more efficient decision making for better service to the University community. IR Goal 4 Supports: UH System Goal 1, 2 UH Goals: Undergraduate Education, Research, Graduate and Professional Education, Information Technology, Institutional Advancement. State IR Goals 1, 2, 3, 4 IR Goal 5 **Enabling people with computing resources** Highly functional computing resources are essential commodities to realize the potential of Information Age. To ensure that members of the University community possess these necessary tools, we should continue to upgrade the shared computing resources and desktop computers. IR Goal 5 Supports: UH System Goal 1 UH Goals: Undergraduate Education, Graduate and Professional Education, Information Technology, Enrollment Management, Administrative Efficiency, Globolism, University Community State Goal 1, 2, 4:

Table 1: Goals, Objectives and Strategies

Goals	**Description**
11)Partnerships and Public Service The University of Houston will establish and nurture relationships with community organizations, governmental agencies, and the private sector to enhance the educational, economic, and cultural vitality of the city of Houston. State of Texas Information Resource (IR) Goals 1) Texas state government will deliver seamless, integrated government services to citizens through coordinated, statewide information resources. 2) Texas state government will enhance the performance of its agencies' mandates, missions, and core competencies through appropriate application of information resources. 3) Texas state government will ensure the privacy, security, and historical integrity of the information and information resources entrusted to government by the people of Texas. 4) Texas State government's acquisition, use, and management of information resources will be driven by customer needs.	IR Goal 6 **Superior Customer Support** To deploy new technologies to the university community, high-quality customer support is essential. This support focuses on user education and technical consultation that helps customers leverage information technologies to enhance education, research, and service and enables efficient administration. IR Goal 6 Supports: UH Goals: Undergraduate Education, Graduate and Professional Education, Diversity & Opportunity, Research, Administrative Efficiency, Information Technology, Institutional Advancement State IR Goal 4

Table 1: Goals, Objectives and Strategies

Objectives	*Provide clear targets for specific action and the quantified results or impacts of that action.*
State Goal 1: Texas state government will deliver seamless, integrated government services to citizens through coordinated, statewide information resources. Objectives 1. State, local government, and private information resources will be interoperable. 2. Agencies will coordinate and share information. 3. Services will be delivered directly to the public via a single point of entry to online state government services. 4. Information technology will be aligned with business processes, irrespective of organizational boundaries. 5. All citizens will have access to online government services at times and locations that citizens select, taking into account special needs and social, economic, and ethnic considerations. Outcomes 1. Agencies share electronic information to eliminate duplication. Target Dates: General Government: 2001, Regulatory: 2001, Education: 2003, Criminal Justice: 2005, Health and Human Services: 2005 2. The state establishes common information portals to government information and services. Target Date: 2001 3. The state deploys broadband access irrespective of the location. State Goal 2 Texas state government will enhance the performance of its agencies' mandates, missions, and core competencies through appropriate application of information resources.	Agency IR Goal 1 Advanced instructional technologies Objectives 1. IT will establish the infrastructure to support a student-centered learning environment with "any time and any place" access to education. 2. IT will provide technologies to enhance the delivery of instruction on and off campus. Outcomes 1. Students receive course schedules, register and receive syllabi, grades, and transcripts online. Target Date: *(2001, 02, 03)* 2. Faculty course curriculum integrated into instructional technology. Target Date: *(2001, 02, 03)* 3. Additional high-speed Ethernet connections in classrooms and other buildings on campus to provide students with access to the Internet capable of providing more than 175 times the speed of a 56K modem. Target Date: *(2001-05)* Agency IR Goal 2 Advanced communications networks Objectives 1. IT will enhance local communication networks 2. IT will enhance connections to regional and global networks and research resources. 3. IT will work with educational, research, and industrial partners to develop and deliver information technologies. 4. IT will improve the quality, security, availability, and performance of computing systems as needed to keep pace with changing technologies. 5. Services and information will be shared between campuses through common systems, networks and processes.

Table 1: Goals, Objectives and Strategies

Objectives

1. The focus will be on the government services, rather than on the technology used to provide the services.
2. Information technology operations will be "best of class," whether operated by the public or private sector.
3. There will be appropriate application of technology through the adoption and application of information resources standards and guidelines.
4. Services and information will be shared between agencies because common frameworks and processes will be in place for technology.
5. Rigorous information systems development and implementation processes will improve on-time and within-budget project performance.
5. Best practices of common processes that exemplify quality information resources management will be in place throughout state agencies. For example, agencies will apply lessons learned from Year 2000 project management and remediation efforts.
6. Information resources planning will be coordinated at all levels of government.

Outcomes

1. All agencies use private sector technology skills and resources when it is in the best interest of the state. Target Date: 2005
2. Major information resources projects are consistently completed on time and within budget. Target Date: 2002
3. Government shares best practices for information systems development. Target Date: 2001
4. Standards are developed and followed for technical interoperability (e.g., electronic commerce) and project management (e.g., internal quality assurance processes). Target Date: 2001

Outcomes

1. Campus backbone upgraded and installation of new electronics in the colleges. Target Date*: (2001-05)*
2. Internet 2 to Texas gigapop
   Target Date: *(2001-05)*
3. Collaboration with Houston Area Technology Advisory Council (HATAC) to create an environment where Houston becomes a recognized leader in high technology.
   Target Date: *(2001-05)*
4. Ongoing enhancement of network speed and capacity
   Target Date: *(2001-05)*

<u>Agency IR Goal 3</u>

Carnegie I research computing

Objective

1. IT will maintain and improve research facilities and infrastructure, including libraries, and computer network resources.

Outcomes

1. University of Houston is one of the premier urban research universities in the country.
   Target Date: *(2001-05)*

<u>Agency IR Goal 4</u>

Championing knowledge workers

Objectives

1. Information Technology will conserve financial resources.
2. Information Technology will enhance productivity at the University through information technology.
3. Information Technology will provide appropriate security and authentication to protect University assets.
4. The Universities mission-critical information resources will be continually available.
5. Information Technology will comply with State rules, policies, guidelines and requests in a timely manner.

Outcomes

1. Accountability to University of Houston and the citizens of Texas
   Target Date: *(2001-05)*

Table 1: Goals, Objectives and Strategies

assurance processes). Target Date: 2001

Objectives

5. Formal processes and organization for Web management and development are incorporated into agencies. Target Date: 2002

State Goal 3
Texas state government will ensure the privacy, security, and historical integrity of the information and information resources entrusted to government by the people of Texas.

Objectives

1. Data will be collected and used appropriately and securely to ensure the privacy of information managed by the state.

2. Appropriate security and authentication will be in place for information and services provided by the state.

3. The state's mission-critical information resources will be continuously available.

4. Records management processes will ensure the long-term viability of electronic records.

Outcomes

1. Agencies publish their policies on data privacy and open records on their Web sites. Target Date: 2001

2. Appropriate security measures for electronic transactions are in place and ensure continued accountability to the citizens of Texas. Target Date: 2001

3. Agencies adhere to electronic records management policies and procedures. Target Date: 2003

4. Agencies rigorously apply and test disaster recovery and business contingency plans. Target Date: 2003

2. Enhanced access to information technology and ongoing training for faculty, staff and students
   Target Date: (2001-05)
3. Information systems and networks are continuously available and provide adequate security to protect the critical information infrastructure at the University. Target Date: (2001-05)

Agency IR Goal 5
Enabling people with computing resources

Objective

1. Information Technology will increase access to institutional data.
2. Implementation of People Soft Integrated System
   Target Date: *(2001-05)*

Outcomes

1. All faculty, staff, and students will have access to information technology and ongoing training.
   Target Date: *(2001-05)*
2. Fully integrated financial, human resources and student information system for the four UH campuses.

Table 1: Goals, Objectives and Strategies

Objectives	
State Goal 4 Texas state government's acquisition, use, and management of information resources will be driven by customer needs. Objectives 1. Processes will exist to identify and categorize end-user needs for government information. 2. Simple, comprehensive user interfaces will be available for state-provided information and services. 3. Accurate and timely state documents, data, and services will be available and linked electronically. 4. Consistent organization and indexing methods will make information search and retrieval seamless across agency boundaries. Outcomes 1. State agency Web sites are accessible to all citizens, regardless of location, language, or physical disability (for example, Web sites comply with the Americans with Disabilities Act). Target Date: 2004 2. Public information collected and used in state information systems is easily accessible to citizens without requiring intervention from a government employee. Target Date: 2003 3. Planning and operational processes for agency Information Resources Managers include input from citizens and customers. Target Date: 2002 4. Standards for indexing, organizing, accessing, and retrieving government information are adopted by state agencies. Target Date: 2003	Agency IR Goal 6 Superior Customer Support Objectives 1. Information Technology will enhance distance-learning technology to support any time and any place student-centered learning. 2. Information Technology will enhance and integrate, Information Technology support and provide distributed support to the colleges. 3. Information Technology will evaluate and enhance technology services for students, faculty, staff and visitors. Outcomes 1. Assess and redesign University of Houston's Web site to support student-centered learning. Target Date: *(2001, 02)* 2. Information Technology distributed support staff is placed in every college. Target Date: *(2001)* 3. Information Technology Customer Satisfaction Survey *Target Date: (2001)*

Table 1: Goals, Objectives and Strategies

Strategies	*Detail the methods to achieve goals and objectives and the quantified end products, proficiencies, and descriptive indicators of the agencies' efforts.* Division of Information Technology (IT) strategies are focused on three primary elements – people, networks and applications – that are critical to enabling the University and UHS to achieve stated goals in research, instruction, service, and administrative support. **Central Computing and Telecommunication Services (CCTS)** • Upgrade UH Network Backbone (FY2001) Upgrade Campus network backbone infrastructure to provide support for redundant, high-speed links form campus buildings into remote high performance networks. *(IR Goal 2, Objective 1, 2, 3; IR Goal 3, Objective 1;IR Goal 4, Objective 2)* • Migration from shared to switched networks (FY2001) Install fiber optic cabling from Building Distribution Room (BDR) to Intermediate Distribution rooms (IDR) on the floors of selected buildings. Install Ethernet switches in the BDR of these buildings with an ATM link to the Campus backbone. (*IR Goal1, Objective 1, 2; IR Goal 2, Objective 1, 2, 4; IR Goal 3, Objective 7; IR Goal 4, Objective 2)* • Purchase a multiprocessor node for the IBM SP2 (FY2001) Upgrade one node of the SP2 for multiprocessing research and teaching. *(IR Goal 2, Objective 1, 2; IR Goal 3, Objective 1; IR Goal 4, Objective 9)* • Expansion of the data and video network (FY2001) Provide additional data and video distribution equipment to meet campus requirements for more data and video services. *(IR Goal 1,Objective 1, 2; IR Goal 2, Objective 1, 2; IR Goal 5, Objective 1; IR Goal 6, Objective 1, 2)* • Upgrade Academic Systems (FY2001) Provide a more reliable and functional academic computing platform by upgrading storage option to include redundancy and minimal downtime for maintenance. *(IR Goal 1,Objective 1, 2; IR Goal 2, Objective 1, 3, 4; IR Goal 5, Objective 1; IR Goal 6, Objective 1, 2)*

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Strategies	
	• Upgrade Multipoint Control Unit for Compressed Video Network (FY2001) The Compressed Video Network is utilizing all available MCU ports for Distance Learning Classes. Provide additional ports for future expansion. *(IR Goal 1, Objective 1, 2; IR Goal 2, Objective 1, 2, 4;IR Goal 6, Objective 1)* • Implement Infrastructure for PeopleSoft (FY2001-2003) Provide the infrastructure (networks and servers) to support the implementation of the PeopleSoft ERP application. *(IR Goal 2, Objective 1, 2, 3, 4, 5; IR Goal 3, Objective 1; IR Goal 4, Objective 1, 2)* • Replace Mariposa (FY2001) Upgrade current UH Central Web Server. *(IR Goal 1, Objective1, 2;IR Goal 2, Objective 1, 4; IR Goal 5, Objective 1; IR Goal 6, Objective 1, 3)* • Windows 2000 Server Deployment (FY2001) Purchase two Windows 2000 servers to be used for primary domain controller, DNS and DHCP and the Windows 2000 server software licenses. *(IR Goal 1, Objective 2; IR Goal 2, Objective 4; IR Goal 3, Objective 1; IR Goal 4, Objective 1, 2; IR Goal 5, Objective 1; IR Goal 6, Objective 1, 3)* • Upgrade Network in the College of Technology (FY2001) Upgrade the College of Technology network to support redundant high-speed network connections to the desktop. *(IR Goal 1, Objective 1, 2; IR Goal 2, Objective 1, 3, 4; IR Goal 3, Objective 1; Goal 4, Objective 2; IR Goal 5, Objective 1; IR Goal 6, Objective 1, 2)* • Upgrade Network in the College of Social Sciences (FY2002) Upgrade the College of Social Sciences network to support redundant high-speed network connections to the desktop. *(IR Goal 1, Objective 1, 2; IR Goal 2, Objective 1, 3, 4; IR Goal 3, Objective 1; IR Goal 4, Objective 2; IR Goal 5, Objective 1; IR Goal 6, Objective 1, 2)*

Table 1: Goals, Objectives and Strategies

Strategies	• Upgrade Network in the College of Humanities and Fine Arts (FY2002) Upgrade the College of Humanities and Fine Arts network to support redundant high-speed network connections to the desktop. *(IR Goal 1, Objective 1, 2; IR Goal 2, Objective 1, 3, 4; IR Goal 3, Objective 1; IR Goal 4, Objective 2; IR Goal 5, Objective 1; IR Goal 6, Objective 1, 2)* • Upgrade Network in the College of Hotel and Restaurant Management (FY2002) Upgrade the College of Hotel and Restaurant Management network to support redundant high-speed network connections to the desktop. *(IR Goal 1, Objective 1, 2; IR Goal 2, Objective 1, 3, 4; IR Goal 3, Objective 1; IR Goal 4, Objective 2; IR Goal 5, Objective 1; IR Goal 6, Objective 1, 2)* • Upgrade Network in the Law Center (FY2001) Upgrade the Law Center network to support redundant high-speed network connections to the desktop. *(IR Goal 1, Objective 1, 2; IR Goal 2, Objective 1, 3, 4; Goal 3, Objective 1; IR Goal 4, Objective 2; IR Goal 5, Objective 1; IR Goal 6, Objective 1, 2)* • Upgrade Network in the College of Education (FY2002) Upgrade the College of Education network to support redundant high-speed network connections to the desktop. *(IR Goal 1, Objective 1, 2; IR Goal 2, Objective 1, 3, 4; IR Goal 3, Objective 1; IR Goal 4, Objective 2; IR Goal 5, Objective 1; IR Goal 6, Objective 1, 2)* • Upgrade Network in the College of Business Administration (FY2003) Upgrade the College of Business Administration network to support redundant high-speed network connections to the desktop. *(IR Goal 1, Objective 1, 2; IR Goal 2, Objective 1, 3, 4; IR Goal 3, Objective 1; IR Goal 4, Objective 2; IR Goal 5, Objective 1; IR Goal 6, Objective 1, 2)*

Table 1: Goals, Objectives and Strategies

Strategies	• Upgrade Network in the College of Pharmacy (FY2003) Upgrade the College of Pharmacy network to support redundant high-speed network connections to the desktop. *(IR Goal 1, Objective 1, 2; IR Goal 2, Objective 1, 3, 4; IR Goal 3, Objective 1; IR Goal 4, Objective 2; IR Goal 5, Objective 1; IR Goal 6, Objective 1, 2)* • Upgrade Network in the College of Optometry (FY2003) Upgrade the College of Optometry network to support redundant high-speed network connections to the desktop. *(IR Goal 1, Objective 1, 2; IR Goal 2, Objective 1, 3, 4; IR Goal 3, Objective 1; IR Goal 4, Objective 2; IR Goal 5, Objective 1; IR Goal 6, Objective 1, 2)* • Upgrade Network in the Graduate School of Social Work (FY2004) Upgrade the Graduate School of Social Work network to support redundant high-speed network connections to the desktop. *(IR Goal 1, Objective 1, 2; IR Goal 2, Objective 1, 3, 4; IR Goal 3, Objective 1; IR Goal 4, Objective 2; IR Goal 5, Objective 1; IR Goal 6, Objective 1, 2)* • Upgrade Network in the College of Architecture (FY2004) Upgrade the College of Architecture network to support redundant high-speed network connections to the desktop. *(IR Goal 1, Objective 1, 2; IR Goal 2, Objective 1, 3, 4; IR Goal 3, Objective 1; IR Goal 4, Objective 2; IR Goal 5, Objective 1; IR Goal 6, Objective 1, 2)* • ADSM Server (FY2002) Upgrade the ADSM Server to be able to support the growth in the use of the ADSM system. *(IR Goal 2, Objective 1; IR Goal 4, Objective 2; IR Goal 5; Objective 1)* • Enterprise Storage/Backup/Recovery System (FY2002) Purchase an enterprise storage/backup/disas ter recovery system to ensure no loss of data or downtime. To minimize downtime or data loss by any of the enterprise servers that resides in the Computing Center and to be able to restore

Table 1: Goals, Objectives and Strategies

Strategies	systems and data quickly and efficiently in the case of a disaster or power failure. *(IR Goal 2, Objective 1, 4; IR Goal 4, Objective 1, 2, 3, 4)* • Upgrade Administrative Systems (FY2002) Upgrade for growing client base and put web interfaces on existing applications. *(IR Goal 2, Objective 2; IR Goal 4, Objective 1, 2; IR Goal 5, Objective 1)* • Replace existing power Generator (FY2002) Provide full load electrical power backup to the computing center in the event of a utility power outage or failure to prevent a shutdown of the mission critical services provided by CCTS. *(IR Goal 2, Objective 1, 2, 4; IR Goal 3, Objective 1; IR Goal 4, Objective 1, 2, 3, 4)* • Upgrade Network in Administrative Areas (FY2003) Upgrade the administrative segments of the UH network to support redundant, high-speed network connections to the desktop. *(IR Goal 2, Objective 1, 4, 5; IR Goal 4, Objective2; IR Goal 5, Objective 1)* **Technology Support Services (TSS)** • Customer Satisfaction Measurements (FY 2001) Measure customer satisfaction in order to improve current services and predict future service requirements. This will include Web-based and hard copy evaluation forms analysis and program changes to reflect improved and new services. *(IR Goal 6, Objective 2, 3)* • Student Web Access (FY 2001-2003) Provide web interface to student records system. This will include undergraduate international and domestic and international graduate admissions applications, course schedule inquiry, and various enrollment and records inquiry URLS with the goal of improving service, recruitment and retention of students while minimizing operating cost increases. *(IR Goal 2, Objective 4, 5; IR Goal 5, Objective 5, Objective 1; IR Goal 6, Objective 3)*

Table 1: Goals, Objectives and Strategies

Strategies	• Create the Academic Technology Support Center (FY 2001) Create a dynamic faculty support center where knowledgeable personnel and the latest technology are available to support the development of technology-rich instruction and to encourage research in the development of new technologies. It would also house the Center for Online Education, a joint partnership between the Provost's Office, Information Technology, and the College of Education that would encourage the development of online courses. *(IR Goal 1, Objective 1, 2; IR Goal 2, Objective 3; Goal 4, Objective 1; IR Goal 6, Objective 1, 2, 3)* • Deploy Online, Real-time Communications Tools (FY 2001) Provide instant messaging and chat tool to campus to improve support and communications. *(IR Goal 1, Objective 1, 2; IR Goal 2, Objective 1, 4; IR Goal 4, Objective 2; IR Goal 6, Objective 1)* • Hardware for Migration from Local Talk & AppleTalk (FY 2001) Provide hardware to replace the AppleTalk network with Ethernet. Additional hardware such as printers and peripherals would be used to assist the university departments and colleges in finalizing the migration process. *(IR Goal 2, Objective 1, 2, 4; IR Goal 4, Objective 1; IR Goal 5, Objective 1)* • Microsoft Campus Agreement Site License (FY 2001-2003) Negotiate a Microsoft Campus Agreement Site License in order to conserve state resources and provide customers with upgrades to Microsoft software products. *(IR Goal 1,Objective 2; IR Goal 2, Objective 4; IR Goal 4, Objective 1, 2; IR Goal 5, Objective 3)* • Deploy CBT Services (FY 2001) Provide CBT services to allow faculty, staff and students to acquire self-paced training resources according to their own needs. Emphasis in training would be in the areas of computer software and human resources. *(IR Goal 1, Objective 2; IR Goal 6, Objective*

Table 1: Goals, Objectives and Strategies

Strategies	*3)* **Management Information Systems (MIS)** • Web Interface (2001-03) Provide Web interface to student records system. This will include undergraduate international and domestic and international graduate admissions applications, course schedule inquiry, and various enrollment and records inquiry URLs with the goal of improving service, recruitment, and retention of students while minimizing operating cost increases. *(IR Goal 1, Objectives 1; IR Goal 2, Objective 3, 4, 5; IR Goal 4; Objective 2)* **Security & Disaster Recovery** • System Administrators (2001-02) Identify, train and certify system administrators that are responsible for university communication and computer devices. *(IR Goal 4, Objective 1, 2, 3, 5; IR Goal 6, Objective 2, 5)* • Security Policies (2001-03) Revise current security policies to reflect current implemented and planned technologies. *(IR Goal 4, Objective 5)* • Security Configuration (2001-03) Develop and apply security configuration templates for all university computers using Windows and UNIX operating systems. *(IR Goal 2, Objective 1, 4; IR Goal 4, Objective 1, 5)* • Security Process (2001-02) Develop a process that frequently analyses security logs for computers using Windows and Unix operating systems to detect systems that are compromised. *(IR Goal 2, Objective 4; IR Goal 4, Objective 1, 5)* • Security Alarm System (2002-04) Develop and implement a security alarm system that targets alarms to all those system owners to which the alarms will apply. *(IR Goal 2, Objective 1, 4; IR Goal 4, Objective 1, 2, 3, 4)* • Network Scanning Software (2002) Purchase network scanning software to provide a means of identifying and assessing

Table 1: Goals, Objectives and Strategies

	system security configuration. *(IR Goal 2, Objective 1, 4; IR Goal 4, Objective 2, 3, 4, 5)* • Disaster Recovery Plans (2001-03) Review and revise current Disaster Recovery plans, which reflect the transition of UH administrative systems over the next (5) year period. *(IR Goal 4, Objective 5)* • Document the Disaster Recovery plan with CBR software. *(IR Goal 4, Objective 5)*

Table 2: Information Resources Policies and Practices

Information Resources Policies and Practices	Brief Summary/Overview
IR Priorities	*Describe agency policies and procedures for setting priorities for information resources activities and projects. Refer to any information resources steering committees.* Various factors are used to determine priority for information resources activities and projects. In FY00, UH established the Information Technology Computing Committee (ITCC) to replace the Academic Computing Advisory Committee (ACAC). ITCC advises the Vice Chancellor/Vice President on the instructional and research technology and the strategic direction of computing at the University of Houston. Usually, customer needs are the overriding factor but fund availability is a deciding consideration. At all times, the user needs are considered, and whenever possible, users provide advice on the priority of our actions. In the absence of specific oversight or end user guidance, the following default priorities are followed in order of decreasing priority: production software problems, ad hoc information requests, mandates, ERP (PeopleSoft) implementation, ongoing maintenance and operations, performance and service enhancements.
IR Planning Methodology	*Indicate steps used to develop and implement planning for information resources. Indicate the level of executive involvement in the planning process.* The planning process is integrated and participatory both within Information Technology and the user base. Linkages from previous plans are maintained with the 1999-2003 Agency Strategic Plan, the Division of Information Technology Policies and Procedures Manual and the Component Analysis drafted in January 1993. The Vice Chancellor/Vice President and his departmental AVC/AVPs/directors/managers and Assistant to the VC/VP drafted the documents for Information Technology (VC/VPIT). Information Technology collaborates with Institutional Advancement, Administration & Finance, and the Budget Office to develop a campus-wide planning process and calendar. The Information Technology Computing Committee (ITCC) and Administrative Systems Steering Committee (ASSC) facilitates participation outside the IT organization. The Administrative Systems Steering Committee is developing a plan to replace the Administrative Systems.
Operating System	*List operating system standards in place at the agency.* <u>Operating System Standards:</u> The operating systems supported are: ▪ OpenVMS ▪ Multiple variants of UNIX ▪ OSF/1, and UNIX on the mainframes and Macintosh ▪ DOS ▪ Microsoft Windows

Table 2: Information Resources Policies and Practices

Operating System	▪ Apple McIntosh ▪ Linux. All operating systems installed must be an officially sanctioned release version. A reference check is made of all new hires in the operating systems group, and they are cautioned to use their special access and capabilities with the utmost integrity.
Development Methodology	*Indicate the software development, methodology in use at the agency, including CASE tools* For non-PeopleSoft systems, IT/MIS follows a prototyping software development methodology as described at http://www.uh.edu/computing/mis/POLICIES/POLICIES.html. Software development standards are also described in the MIS internal Application Development Standards, July 1994 document. PeopleSoft systems related development follow the best practices outlined at http://www.uh.edu/FAST/FAST-planning.htm.
Software Audit and Management	*Describe the plans for software audits. Describe plans to manage software licenses within the agency.* All volume and site licenses are brokered and tracked by Information Technology. Audits will be conducted in compliance with House Bill 1895. The purpose of these audits is to eliminate waste in software licensing. All volume and site licenses will be examined at the time of purchase to ensure that none are redundant. The plan will be to use software to audit agency machines to eliminate both piracy and waste. License information will be available on the IT software website at http://www.uh.edu/infotech/software/. This site is also a brokering tool; departments can report their site and volume license information to IT via the web. Requests for new licenses can be made via the same website; these requests are reviewed by IT before approval.
Quality-Assurance Practices	Provide a high-level description of quality-assurance practices in the agency. Include a timeline for implementation of quality-assurance practices developed in accordance with DIR guidelines for internal quality assurance. Address each of the seven areas included in the Information Resources Management Act: Guidelines for internal quality assurance procedures are available at http://www.dir.state.tx.us/eod/qa/. *Planning project development; determining the projected benefits of a project; developing and implementing management-control processes;* establishing standards by *which the effectiveness and efficiency of a project can be evaluated; Analyzing the risks of a project; evaluating and reporting on the project after implementation*

Table 2: Information Resources Policies and Practices

Quality-Assurance Practices	The project development methodology employed at the University begins with identifying a project director and project team to provide leadership for the project. The Project Director, with input from the executive management, academic and administrative computing committees, CIO's and many other constituents from University of Houston System campuses, is responsible for developing and managing the Project Development Plan (PDP), a living breathing document that identifies the scope of the project, goals, objectives, performance measures and project schedule. The goals and objectives identified in the plan are measurable and correlate to the agency's strategies and outcomes identified in the UH Strategic Plan and Biennial Operating Plan. Measurement for projects is based on the work of Robert S. Kaplan, and Peter Norton in their development of the 'balanced scorecard' system of strategic measurement design. The PCP divides the project implementation into several steps of increasing levels of details. The design intends the most significant decisions to be made "up front", where the possibility of large-scale design has the least impact on project schedules. As each Release progresses through these steps, the project teams should be increasingly focused on smaller and smaller scale decisions. This allows the project teams to move forward effectively, in an integrated fashion, while the answers to final process design questions are still being developed. A systems design methodology is incorporated in the PDP and addresses benefits of a project, management-control processes and standards by which the effectiveness and efficiency of a project can be evaluated. All implementation efforts in projects follow a standard methodology that sequences the implementation activities into a logical progression of environmental analysis, application review, design, development, testing and implementation. The steps followed throughout each implementation of projects include the following: • Release Startup/Planning • Process Analysis • Fit Analysis • Setup and Design • Development • User Acceptance • Deployment To comply with the Department of Information Resources (DIR) Quality Assurance Team, an initial risk analysis is conducted for projects over threshold. An initial internal risk analysis is conducted and included in the initial project risk analysis questionnaire from DIR.

Table 2: Information Resources Policies and Practices

Quality-Assurance Practices	A risk analysis instrument is used to identify and rate the risk factors to minimize the potential to compromise the successful outcome of the project. Risk factors are rated according to its probability and consequence of failure, after which an action plan to manage the risk is developed. Ongoing internal risk analyses and project evaluations are performed throughout the project's life cycle to mitigate the risks to the project. *Projecting the budget for a project* Projecting a budget for a project is based on many considerations such as the scope, timeline and initial project start-up costs; staffing (FTE resource needs) services of a consulting partner, supplementary short-term contracting assignments and training; facilities, equipment; hardware and software, operating costs ongoing maintenance and contract costs, evaluation and testing.
E-Government	*Describe the agency's plan for receiving forms and/or payments through the Internet or other electronic means. Include security measures, following DIR guidelines that will be in place. Include performance measures to be used to evaluate progress in implementing the plan. Specify the timeline for achieving this plan. Electronic commerce/business standards and initiatives can be located at* http://www.state.tx.us./EC. In FY 00, the Vice Chancellor/Vice President for Information Technology established the E-Business Task Force to study and recommend proceeding with electronic business. A vision and strategy statement is pending approval from the President and a plan for E-business will be developed in FY01, however, E-Government" as it currently exists at UH is categorized as follows: 1) Enrollment service Current plans call for Internet services based on the PeopleSoft Campus Community product suite now being implemented and scheduled for completion in FY2004. Services available now include touch-tone/voice registration, admissions status inquiry, billing account inquiry and payment by either credit card or short-term loans. Also available now are the Internet Texas Common Admissions Application and also class schedule inquiry. A standard UH system wide Internet credit card payment service is being investigated. A final implementation project schedule has not been set for the Internet credit card payment service.

Table 2: Information Resources Policies and Practices

E-Government	2) Instructional support Email, faculty/staff directory, WebCT, and Intrakal are Internet services available now at UH for both instructional and academic administrative use. 3) Other public self-service The campus bookstores, computer store, alumni office, athletics, and other auxiliary offices are in various stages of moving services to the Internet. Class rings, bookstore gift shop items, and computers may be purchased over the Internet now. 4) Internal administrative self-service Prototypical Internet reports are available to central administrative departments, but current plans call for a web enabled data mart approach for Internet self-service to be implemented in conjunction with the PeopleSoft project to be completed in FY2004. 5) Electronic Data Interchange (EDI). EDI processes (including transcripts, scores, payroll direct deposit, Texas Guaranteed Student Loans) have been in place as early as 1986 and continue to replace tape and manual processes for moving data in and out among external agencies. Project schedules and deadlines are dependent on the cooperation of external agencies. Internet security guidelines and FERPA privacy regulations are incorporated as part of every E-Government project.
Change Control	*Describe configuration-management and change-control policies.* Standard All system software modifications must adhere to University of Houston-defined policies and procedures regarding their development, testing, and implementation. Guidelines 1. System software modification implementation--The system programmer applying changes to system software must have an approved back out plan, in case there are problems encountered during the implementation of the changes. 2. Separate test environment for system software programs--System software modifications/exits should be made to test versions of the software libraries. The test environment shall have a reasonable set of activities performed within it, in order to validate the integrity of the new environment.

Table 2: Information Resources Policies and Practices

Change Control	3. Emergency modifications directly to the production system software--All modifications directly to the production system software libraries shall require the approval of the system programmer's direct line manager. After the emergency is past, documentation shall be developed to reflect the changes made to the affected system software. At the application level, modifications directly to a production system are not permitted. Changes must first be made in a development environment and moved with user approval into production. On an emergency basis, the Technical Services Manager may move code into production on behalf of users. Environmental change and version control programs enforce this convention.
Security	*Comment on compliance with published information resources standards, including whether an Information Security Risk Analysis has been completed and documented. Asset protection standards and guidelines can be found at http://lanner.dir.state.tx.us/irapc/.* The Information Technology Division has maintained security through formal Security Policies, logon banners, user awareness, system risk assessments, and oversight by a Security Officer. In FY00, the university has significantly broadened the scope of the security function. A Security and Disaster Recovery Department has been established and staffed. Implementation of an expanded security program will occur during FY00/01and will consist of the following: ▪ Review and modify current security policies and practices if appropriate ▪ Formal identification of system administrators for all university systems ▪ Security training and certification for each system administrator ▪ Certification security configuration for equipment before permanent connection to the university network ▪ Use of a network scanning program to detect all devices, and analyze them for vulnerabilities on a scheduled basis dependent upon the criticality of the system ▪ Frequent analysis of computer logs to identify configuration changes or compromised systems ▪ Implement a self-taught user security awareness training program coincident with computer ID registration ▪ Implement security configuration templates for Unix, and Windows platforms ▪ Implement a security analysis lab ▪ Implement a security alert system and a security incident handling process

Table 2: Information Resources Policies and Practices

Security	▪ Audit the current practices of computer ID assignments, password expirations, access control to programs and data, and physical access controls to assure adequate levels of protection are maintained.
Geographic Information Systems	*List* Geographical Information Systems: various departments, such as Architecture are proposing Geographical information systems, and the Geosciences department operates a GIS lab of 30 Unix workstations running ArcView and ArcInfo software. UH has no published GIS policies or standards. UH does use GIS products as research tools, teaches GIS elective classes out of the Geosciences Department, and specifies GIS as a required skill when hiring some Social Science research assistants. Geoscience has experienced an increase in multi-disciplinary student demand for GIS courses. UH currently does not participate in the TGIC.
Disaster Recovery/Business Continuity Planning	*Describe how priorities for disaster recovery planning are set within the agency. Describe any contractual or interagency agreements planned or in place for disaster recovery planning and services, including the West Texas Disaster Recovery Operations Center (WTDROC) or Austin Disaster Recovery Operations Center.* *The 2000-01 General Appropriations Act, Section 9.623 states that it is the intent of the Legislature that all agencies use the WTDROC for testing disaster plans and for disaster recovery services or data center operations.* *Guidelines for business continuity planning are available at* http://www.dir.state.us/pubs/1999/bcpg.pdf. The Information Technology Division has combined the previously separate disaster recovery programs of the UH System with that of the UH central campus. This program has been assigned to a newly established Security and Disaster Recovery Department. Replacement of the current disaster recover plan will occur during FY'2000 in response to the incremental replacement of the university administrative applications over the next five years. The project to develop this new plan before September 2001 has already been established and will be implemented by: ▪ Identifying critical university functions through an impact analysis ▪ Determining the hardware and software requirements for each critical function ▪ Defining how critical functions will be impacted over the next 5 year period ▪ Establishing hardware, software, and network requirements for each year ▪ Defining data backup requirements for each year of the plan and establishing off-site storage requirements that complement changes during the 5 year period

Table 2: Information Resources Policies and Practices

Disaster Recovery/Business Continuity Planning	▪ Defining the organizational roles that support the plan ▪ Publishing, testing and maintaining the plan
Resource Use	*Provide policies and procedures for the use of voice, data, and video resources. Comment on the agency's adherence to standards for video conferencing as adopted in TAC.201.16. These can be found at* http://www.state.tx.us/standards/S201-16.htm**.** It is our policy that all enrolled students, UH faculty, and UH staff are entitled to use academic computing resources according to approved computer use guidelines. Those granted access to institutional data are approved and trained by the specific application owner. Written policies covering network access, computer use, password responsibilities, and Central Site Computer Center use are explained and made available when users obtain computer access accounts. A voice response student registration system is in the expansion stage. Policies and practices will be written and distributed as needed.

Table 2: Information Resources Policies and Practices

Contract/Consultant	*List agency policy procedures related to the use of consultant and contracted services for information resources. Include processes in place for monitoring contracts.* Contractors and consultants are used, as needed, to enhance and support the Information Technology Division. University management retains authority and control of their participation.
Information Sharing	*Describe the agency policies and procedures for sharing data with other agencies or other external entities.* UH has several "data sharing" policies and procedures depending on whether requests are for student, personnel, financial, or alumni data. All external requests for student directory data must be approved by the Vice Chancellor for Student Affairs. Student summary data for externally requested statistical surveys are handled by the Office of Planning and Policy Analysis. External requests for payroll personnel data are routed through the UH Human Resources office. External requests for financial data are routed through the Financial Reporting office. And external requests for alumni data route through General Counsel for approval but are handled by the Institutional Advancement office. UH student data sharing policies and procedures comply with the Texas Open Records Act and FERPA regulations and are available on the Internet at http://www.uh.edu/computing/mis/REQUESTS/adhocreq.html. Student record confidentiality is further discussed at http://www.uh.edu/enroll/rar/general_info.html#confidentiality. Employee data policies are found at http://www.uh.edu/mapp/framset3.htm See HR policy 02.05.01. Further discussion is available at http://www.uh.edu/sam/AM/Am_03h02.htm, http://www.uh.edu/sam/AM/Am_02a31.htm, and http://www.uh.edu/campus/rep/fsenate/handbook/RespStu.htm. UH daily exchanges (at student request) transcripts electronically with other higher education institutions through the SPEEDE server in Austin, and provides academic data for statistical studies to Texas community colleges (when requested) of their students actively enrolled at UH.
Training and Continuing Education	*Describe the agency policies for determining training and education that is necessary for any given information resources position. Describe procedures for tracking training and education received.* Staff is encouraged to enhance their skills at every opportunity. There are numerous online and short classroom courses offered within the Information Technology Division on

Table 2: Information Resources Policies and Practices

	microcomputer, networking, and mainframe topics. Internet courses are offered via WebCT, and Intrakal. Staff is asked to teach, as well as attend. Other departments offer occasional training classes in non-data processing disciplines that broaden and enhance skills. Off-campus training is offered as the budget allows. All employees are allowed to attend any formal courses, during the workweek for three hours per week. There are some monetary incentives, such as fee waivers, offered to employees. Basic requirements for each position are determined in the job description process. Typically the manager will assign values to the baseline skill set using information from national surveys such as the Mercer study. General training on campus is provided through the Human Resources department and HR is bringing up a system called Training Post to perform and track general employee training. The system has built in tracking capabilities that allow for assignment of required training and identification of people who have not completed the requirements. Information Technology is evaluating this system for its own use but initial reviews of the system do not favor anything but the most basic policy-based instruction. Each IT manager determines subsequent training and certification requirements and handles all tracking. Generally training occurs on an as-needed basis to contain costs. Some areas do require that certain certifications be maintained. The IT Security Officer and the Information Resource Manager (IRM) is required to maintain a certain amount of continuing education credits. Records of the Security Officer's certification are maintained in his department. The IRM self reports continuing education hours to the Department of Information Resources (DIR).
Data Center Operations	*Describe any plans for migration to the West Texas Disaster Recovery and Operations Center for data center operations and/or provide status on any waivers for WTDROC.* There are no plans for migration to the West Texas Disaster Recovery and Operations Center for data center operations. The university is in the process of developing a comprehensive disaster recovery plan in house.

University of Houston—University of Houston System
Information Resource Agency Strategic Plan 2001-2005
Table 3: Agency Platforms, Systems, and Telecommunications

Mainframes

Type	Operating System	Database Management System	Capacity/Size/Count	Purpose
COMPAQ ES40	Tru64 UNIX	Oracle	2/EV56 533MHz	FAST (PeopleSoft Development)
COMPAQ ES40	Tru64 UNIX	Oracle	2/EV56 533MHz	FAST (PeopleSoft Development)
COMPAQ GS140	Open VMS 7.1-1H2	Adabas	2/P 700MHz	Y2K Test System (Admin)
COMPAQ GS140	Open VMS 6.2	Adabas	4/P 525MHz	Admin Cluster System
IBM SP2 9076	IBM AIX 4.3	N/A	64 Node Scalable POWER parallel	Research computing

Minicomputer

Type	Operating System	Database Management System	Capacity/Size/Count	Purpose
DEC Celebris XL6200PC	MS Windows NT 4.0	N/A	1/Ppro 200MHz	BDC for INFO_TECH
Missing Byte	MS Windows NT 4.0	N/A	1/P 90MHz	BDC for UHSA
DEC PC XL560	MS Windows NT 4.0	N/A	1/P 60MHz	PDC for HFAC
COMPAQ Proliant 1600R	MS Windows NT 4.0	N/A	2/P3 266MHz	PDC for Engineering
COMPAQ Proliant 1600R	MS Windows NT 4.0	N/A	2/P3 266MHz	BDC for NSM
DEC Alpha 2100A	Open VMS 6.2-1H2	N/A	1/VAX	Admin Cluster System
COMPAQ Proliant 2500	MS Windows NT 4.0	N/A	1/P 60MHz	BDC for UH
COMPAQ Proliant 2500	MS Windows NT 4.0	N/A	1/Ppro 200MHZ	PDC for ADMIN_NT
DEC Celebris XL5100	MS Windows NT 4.0	N/A	1/P 100MHz	PDC for INFO_TECH
DEC Celebris XL6200	MS Windows NT 4.0	N/A	1/PII 200MHz	Spare System
HP D330	HPUX 10.20	N/A	1/D330	One-Card Services
COMPAQ Proliant 6500R	MS Windows NT 4.0	N/A	2/PII 200MHz	Primary file server for HFAC, UH_IT, TECHNOLOGY, and NSM
DEC Alpha 4100	DEC UNIX 4.0E	N/A	2/EV56 533MHz	MIS Production environment for Alumni/Gift DB
COMPAQ Proliant 6500R	MS Windows NT 4.0	N/A	2/PII 200MHz	Primary file server for LAWSTU, ENGINEERING, and SOC_SCIENCES

COMPAQ Proliant 1600R	MS Windows NT 4.0	N/A	2/PII 300MHz	FAX delivery server
DEC PC XL590	MS Windows NT 4.0	N/A	1/P 90MHz	BDC for ENGINEERING
COMPAQ Proliant 1600R	MS Windows NT 4.0	N/A	2/P3 266MHz	BDC for TECHNOLOGY
DEC VAXstation 3100	Open VMS 6.2	N/A	1/VAX	Open VMS license & software distribution
Gateway P5-75	MS Windows NT 4.0	N/A	1/P 90MHz	PDC for UHSA
COMPAQ Proliant 3000	MS Windows NT 4.0	N/A	2/P3 500MHz	File services for UH Administration
DEC Celebris XL6200	MS Windows NT 4.0	N/A	1/PII 200MHz	BDC for UH_IT
DEC Alpha 400	MS Windows NT 4.0	N/A	1/EV4 133MHz	PDC for UH
COMPAQ Proliant 1600R	MS Windows NT 4.0	N/A	2/P3 266MHz	BDC for HFAC
DEC Celebris XL6200	MS Windows NT 4.0	N/A	1/PII 200MHz	Replacement system for Miura
DEC Alpha 2100	DEC UNIX 4.0E	N/A	2/EV4 190MHz	UH campus news server
DEC Celebris XL6200	MS Windows NT 4.0	N/A	1/PII 200MHz	PDC for UH_IT, account management for ENGINEERING, LAWSTU, SOCIAL SCIENCES, HFAC, UH_IT, TECHNOLOGY, and NSM
DEC Alpha 2100	DEC UNIX 4.0E	N/A	1/EV4 190MHz	MIS training and development for Alumni/Gift DB
COMPAQ Proliant 6500	MS Windows NT 4.0	N/A	2/P3 500MHz	FAST (PeopleSoft development)
DEC PC XL590	MS Windows NT 4.0	N/A	1/P 60MHz	PDC for NSM
DEC PC XL590	MS Windows NT 4.0	N/A	1/PPro 60MHz	BDC for LAWSTU
Sun SPARC5	Solaris 2.6	N/A	1/UltraSPARC 333MHz	Development environment for Remedy
COMPAQ Prosignia 300	MS Windows NT 4.0	N/A	1/P 90 MHz	BDC for ADMIN_NT
COMPAQ Proliant 1600R	MS Windows NT 4.0	N/A	2/P3 266MHz	BDC for SOCIAL SCIENCES< WWW Server
COMPAQ Proliant 6500	MS Windows NT 4.0	N/A	2/P3 500MHz	FAST (PeopleSoft development)

DEC Celebris XL6200	MS Windows NT 4.0	N/A	1/PPro 133MHz	System to monitor
DEC PC XL590	MS Windows NT 4.0	N/A	1/P 90MHz	PDC for SOCIAL SCIENCES, WWW Server
Optiplex XM-575	MS Windows NT 4.0	N/A	1/P 75MHz	PDC for UHEXCHANGE
COMPAQ Proliant 2500	MS Windows NT 4.0	N/A	1/PPro 200MHz	BDC for UHSA
COMPAQ Proliant 2500	MS Windows NT 4.0	N/A	1/PPro 200MHz	Print Spooling services for UH
Optiplex GXM 5166	MS Windows NT 4.0	N/A	1/P 166MHz	BDC for UH_IT
Sun Enterprise 3000	Solaris 2.6	N/A	1/UltraSPARC 168MHz	Remedy and Pinacle
HP 9000/747	HPUX 10.20	N/A	1/PA-RISC 100MHz	NTP (Time) Services
COMPAQ Proliant 1600R	MS Windows NT 4.0	N/A	2/P3 266MHz	PDC for LAWSTU
COMPAQ Proliant 3000	MS Windows NT 4.0	N/A	2/P3 500MHz	SQL Database Server for Student Services
COMPAQ Proliant 1600R	MS Windows NT 4.0	N/A	1/VAX	Web Server for Student Services
DEC VAX 7640	Open VMS 6.2	N/A	4/P	Admin Cluster System
DEC VAX 7640	Open VMS 6.2	N/A	4/P	Admin Cluster System
DEC VAXstation 3100	Open VMS 7.1	N/A	1/VAX	PCM Console System (Admin)
COMPAQ Proliant 2000 5/66	MS Windows NT 4.0	N/A	2/PPro 200MHz	File Services for UH Administration
COMPAQ Proliant 5000	MS Windows NT 4.0	N/A	2/PPro 200MHz	Misc. business applications (MIS)
IBM 7012 RISC 6000 G30	IBM AIX 4.2.1	N/A	2/PowerPC 122MHz	ADSM Host Server
DEC PC XL560	MS Windows NT 4.0	N/A	1/60MHz	PDC for Technology
DEC Alpha 4100	DEC UNIX 4.0E	N/A	2/EV56 533MHz	MIS reporting environment for Alumni/Gift DB

LAN Servers (Central)

Type	Operating System	Database Management System	Capacity/Size/Count	Purpose
PC	MS Windows NT 4.0	N/A	2/PII 400MHz	Instructional Technology Streaming Media Services
PC	MS Windows NT 4.0	N/A	2/PII 300MHz	Instructional Technology Intrakal Server
PC	MS Windows NT 4.0	N/A	2/P3 550MHz	Instructional Technology WebCT Server

LAN Servers (Remote)

Type	Operating System	Database Management System	Capacity/Size/Count	Purpose
PC	MS Windows NT 4.0	N/A	1/P 120MHz	BDC for UH in Austin
PC	MS Windows NT 4.0	Infobase	1	Academic Audit Development
PC	MS Windows NT 4.0	N/A	1	MIS primary domain server
PC	MS Windows NT 4.0	N/A	2	Student Web staging new releases
PC	MS Windows NT 4.0	Oracle	1	Financial Development DataMart
PC	Windows 98	N/A	1	Imaging System Development
PC	MS Windows NT 4.0	Oracle	1	Web access ti Advance reports
PC	MS Windows NT 4.0	N/A	1	Supports CD burner
PC	MS Windows NT 4.0	N/A	1	MIS backup Domain Controllers
PC	MS Windows NT 4.0	N/A	1	UHSA backup Domain Server
PC	MS Windows NT 4.0	SQL Server	1	PCBud/Event test
PC	MS Windows NT 4.0	N/A	2	Student Web development
PC	MS Windows NT 4.0	N/A	1	Student Web training

WAN Servers

Type	Operating System	Database Management System	Capacity/Size/Count	Purpose
COMPAQ Proliant 3000	MS Windows NT 4.0	N/A	2/P3 500MHz	Clustered MS Exchange Server
DEC Alpha 4100	DEC UNIX 4.0E	N/A	1/EV6 600MHz	E-Mail, General Computing
COMPAQ Proliant 2500	MS Windows NT 4.0	N/A	1/PPro 200MHz	MIS production environment for WWW Services
COMPAQ Proliant 2500	MS Windows NT 4.0	N/A	1/PPro 200MHz	MIS production environment for WWW Services
COMPAQ Proliant 2500	MS Windows NT 4.0	N/A	2/PPro 200MHz	MS Exchange Services for UH
COMPAQ Proliant 1600R	Red Hat Linux 5.2	N/A	1/PII 400MHz	DHCP Services for Main Campus, DNS
DEC PC XL560	MS Windows NT 4.0	N/A	1/P 60MHz	Test Exchange Server
COMPAQ Proliant 3000	MS Windows NT 4.0	N/A	2/P3 500MHz	Clustered MS Exchange Server
DEC Alpha 2000	DEC UNIX 4.0D	N/A	1/EV45 233MHz	WWW Server for UH
DEC Alpha 3000	DEC UNIX 4.0E	N/A	1/EV4 175MHz	DNS, Access UH Authentication, News Server
COMPAQ Proliant 1600R	Red Hat Linux 5.2	N/A	1/PII 400MHz	DHCP Services for Main Campus
COMPAQ Proliant 1600R	Red Hat Linux 6.0	N/A	1/PII 400MHz	Network Router and Hub Support Services
DEC Alpha 400	DEC UNIX 4.0D	N/A	1/EV45 233MHz	E-Mail Services
DEC Alpha 2100A	DEC UNIX 4.0D	N/A	1/EV5 300MHz	SMTP Server for UH DNS Server
DEC Alpha 4500	Open VMS 6.2	N/A	1/VAX	E-Mail, General Computing
DEC Alpha 2100	Open VMS 6.2	N/A	2/EV4 190MHz	E-Mail, General Computing
COMPAQ Proliant 2500	Red Hat Linux 5.2	N/A	1/PPro 200MHz	DHCP Services for Residence Halls
DEC Alpha 400	Open VMS 6.2	N/A	1/EV4 133MHz	E-Mail Gateway for Admin (Decnet→IP)

Shared Network

Category	Type	Operating System	Database Management System	Capacity/Size/Count	Purpose
Shared Network		UH participates in the Texas GigaPOP with TAMU, SFASU, Texas Tech, Rice, and Baylor College of Medicine. The Texas GigaPOP provide intranet services between all members and provides the facilities to aggregate Internet2/Abilene traffic and Verio's ISP traffic. Additionally, UH has a TIFF funded project to create a Community College MegaPOP (see diagram for network topology and participants) with ten area community colleges, this intranet will be interconnected with the Texas GigaPOP. This MegaPOP will provide connectivity between the participants and facilitate collaboration via Distance Education and video conferencing. The university also participates in the GSC provided Internet (CAPnet).		N/A	This is a shared arrangement.

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Table 3: Agency Platforms, Systems, and Telecommunications

Internet Service Providers

Category	Type	Operating System	Database Management System	Capacity/Size/Count	Purpose
Internet Service Providers (ISP)		The primary ISP for the University is Verio of Texas. Currently UH has a 12 Mbps connection to the Internet with Verio via our shared connection to the Texas GigaPOP. The secondary ISP for the University is CAPnet via GSC. This is a 10 Mbps connection via local Ethernet interconnection in the University's facilities. The third ISP for the University is Internet2's Abilene. This is a 155 Mbps connection via the Texas GigaPOP. Note that this network is not a commodity internet network.		N/A	1. Verio of Texas 2. CAPnet 3. Internet2 Abilene

Table 4: Agency Databases

Major agency databases critical to the administration or service of the agency's mission and a brief description of their uses. This includes internal administrative databases, but excludes simple databases used in the support of administrative functions (for example, phone lists and address directories). The following information is provided for each database.

Estimated Physical Storage Requirements Please note that sizes given in this section are in terms of the end-user's view of production or operating data. A technical support view will usually see several times the listed size as required to support reporting, batch, archiving, development, and shared (e.g., security) processes. A system administrator view will see even more storage required in terms of physical devices allocated (but not fully for performance reasons). Where, for example, the database may require 18GB; the device dedicated for this database may have a rated capacity of 36GB. For performance reasons only 18GB of the capacity can be used. System administrators will see 36GB allocated whereas end-users will see only 18GB available.	*Size and projected growth of the database expressed in bytes as the unit of measurement, for example, 1.5GB* Where indicated below a total database storage of 162.82 GB (estimated to become 198.28 GB by September), the overall storage to support these production data exceeds 492 GB.
Database name	**Financial Information (FIN)**
Database Description	Provides financial accounting, general ledger, property management, facilities and planning, purchasing, microfilm indexing, and accounts payable support for both local and state funds – general, research, construction, and project accounting.
Database System	SAGA ADABAS
Estimated Physical Storage Requirements	42GB (35% annual growth)
GIS Data Classification	NA
Sharing	Data are shared via the Texas USAS.
Future	FIN is scheduled to be replaced over time by an Oracle-based PeopleSoft ERP system beginning in September of 2000.

Database name	**Payroll (FRS)**
Database Description	Provides financial accounting and general ledger support for both local and state funds – general, research, construction, and project accounting.
Database System	SAGA ADABAS
Estimated Physical Storage Requirements	42GB (35% annual growth)
GIS Data Classification	NA
Sharing	Data are shared via the Texas USAS.
Future	FRS is scheduled to be replaced by an Oracle-based system beginning in September of 2000.
Database name	**Institutional Advancement (INA)**
Database Description	Former Alumni Development system. Now used for archival reference.
Database System	SAGA ADABAS
Estimated Physical Storage Requirements	3.09GB (0% annual growth)
GIS Data Classification	NA
Sharing	NA
Future	INA was replaced by the Advance/CS system.
Database name	**Institutional Advancement (Advance/CS)**
Database Description	BSR, Inc. proprietary product for UH System

Table 4: Agency Databases

Major agency databases critical to the administration or service of the agency's mission and a brief description of their uses. This includes internal administrative databases, but excludes simple databases used in the support of administrative functions (for example, phone lists and address directories). The following information is provided for each database.

	institutional advancement.
Database System	Oracle
Estimated Physical Storage Requirements	10.2GB (10% annual growth)
GIS Data Classification	NA
Sharing	NA
Future	Normal operations.
Database name	**Financial/Human Resources Query**
Database Description	Ad hoc and analytical query support for financial/HR
Database System	FOCUS
Estimated Physical Storage Requirements	9.1GB (5% annual growth)
GIS Data Classification	NA
Sharing	NA
Future	The current FOCUS-based system is scheduled to be replaced by a PeopleSoft driven datamart.
Database name	**Master (CTL)**
Database Description	Control database for security, tables, change management, and batch scheduling.
Database System	ADABAS (Software AG)
Estimated Physical Storage Requirements	20.82GB (26% annual growth)
GIS Data Classification	NA
Sharing	NA
Future	CTL functions are scheduled to be replaced by Oracle PeopleSoft products.
Database name	**Budget Planning (BUD)**
Database Description	Database for budget development.
Database System	SQL Server 6 (Microsoft)
Estimated Physical Storage Requirements	0.1GB (0% annual growth but, about 10 GB total)
GIS Data Classification	NA
Sharing	NA
Future	The PeopleSoft budget planning product was not purchased, but may later become a BUD alternative.

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Information Resource Agency Strategic Plan 2001-2005
Table 4: Agency Databases

Major agency databases critical to the administration or service of the agency's mission and a description of their uses. This includes internal administrative databases, but excludes simple databases used in the support of administrative functions (for example, phone lists and address directories).

Estimated Physical Storage Requirements Note that sizes given here are in terms of the end-user's view of production or operating data. A technical support view will usually see several times the listed size as required to support reporting, batch, archiving, development, and shared (e.g., security) processes. A system administrator view will see even more storage required in terms of physical devices allocated (but not fully for performance reasons). Where, for example, the database may require 18GB; the device dedicated for this database may have a rated capacity of 36GB. For performance reasons only 18GB of the capacity can be used. System administrators will see 36GB allocated whereas end-users will see only 18GB available.	*Size and projected growth of the database expressed in bytes as the unit of measurement, for example, 1.5GB* Where we indicate below total database storage of 162.82 GB (estimated to become 198.28 GB by September), the overall storage to support these production data exceeds 492 GB (UH and UHS combined).
Database name	**Financial Information (FIN)**
Database Description	Provides financial accounting, general ledger, property management, facilities and planning, purchasing, microfilm indexing, and accounts payable support for both local and state funds – general, research, construction, and project accounting.
Database System	SAGA ADABAS
Estimated Physical Storage Requirements	42GB (35% annual growth)
GIS Data Classification	NA
Sharing	Data are shared via the Texas USAS.
Future	FIN is scheduled to be replaced over time by an Oracle-based PeopleSoft ERP system beginning in September of 2000.
Database name	**Payroll (HRS)**
Database Description	Provides financial accounting and general ledger support for both local and state funds – general, research, construction, and project accounting.
Database System	SAGA ADABAS
Estimated Physical Storage Requirements	42GB (35% annual growth)
GIS Data Classification	NA
Sharing	Data are shared via the Texas USAS.
Future	FRS is scheduled to be replaced by an Oracle-based system beginning in September of 2000.
Database name	**Institutional Advancement (INA)**
Database Description	Former Alumni Development system. Now used for archival reference.
Database System	SAGA ADABAS
Estimated Physical Storage Requirements	3.09GB (0% annual growth)
GIS Data Classification	NA
Sharing	NA
Future	INA was replaced by the Advance/CS system.
Database name	**Institutional Advancement (Advance/CS)**
Database Description	BSR, Inc. proprietary product for UH System institutional advancement.
Database System	Oracle

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Table 4: Agency Databases

Major agency databases critical to the administration or service of the agency's mission and a description of their uses. This includes internal administrative databases, but excludes simple databases used in the support of administrative functions (for example, phone lists and address directories).

Estimated Physical Storage Requirements	10.2GB (10% annual growth)
GIS Data Classification	NA
Sharing	NA
Future	Normal operations.
Database name	**Financial/Human Resources Query**
Database Description	Ad hoc and analytical query support for financial/HR
Database System	FOCUS
Estimated Physical Storage Requirements	9.1GB (5% annual growth)
GIS Data Classification	NA
Sharing	NA
Future	The current FOCUS-based system is scheduled to be replaced by a PeopleSoft driven datamart.
Database name	**Master (CTL)**
Database Description	Control database for security, tables, change management, and batch scheduling.
Database System	ADABAS (Software AG)
Estimated Physical Storage Requirements	20.82GB (26% annual growth)
GIS Data Classification	NA
Sharing	NA
Future	CTL functions are scheduled to be replaced by Oracle PeopleSoft products.
Database name	**Budget Planning (BUD)**
Database Description	Database for budget development.
Database System	SQL Server 6 (Microsoft)
Estimated Physical Storage Requirements	0.1GB (0% annual growth but, about 10 GB total)
GIS Data Classification	NA
Sharing	NA
Future	The PeopleSoft budget planning product was not purchased, but may later become a BUD alternative.
Database name	**Student/Financier (STU)**
Database Description	Financial aid and student records including recruiting, admissions, advising, registration, billing and student receivables, academic records, datamart, and facilities management.
Database System	ADABAS (Software AG)
Estimated Physical Storage Requirements	68.72GB (21% annual growth)
GIS Data Classification	NA
Sharing	Numerous interfaces to external agencies exist.
Future	STU will be replaced with PeopleSoft Student Administration by late 2003 or early 2004.
Database name	**Financial Aid Management (FAM)**
Database Description	Former scholarships and financial aid database replaced by Wolfpack Financier and now used for archival reference.
Database System	RMS (DEC/COMPAQ)
Estimated Physical Storage Requirements	4.55 GB (0% annual growth)
GIS Data Classification	NA
Sharing	NA.
Future	None beyond records retention requirements.

Table 5: Agency Applications

Major software applications and a brief description of their uses. For this plan, major applications are those critical to the administration or service of the agency's mission.

Application Name	**Financial Records System (FRS)**
Application Type (choose from the listed types)	Traditional Financial system (none of the listed types are applicable).
Application Description	Financial Accounting and General Ledger application for both local and state funds – general, research, construction, and project accounting.
Database System	ADABAS
Development Language	NATURAL 2
Sharing	Used by all UH components.
Future	Scheduled to be replaced with PeopleSoft Public Sector Financials beginning Fall, 2000. See http://www.uh.edu/FAST/docs/schedule1215.pdf.
Application Name	**Annual Financial Reporting System (AFRS)**
Application Type (choose from the listed types)	Report generator (none of the listed types are applicable).
Application Description	Used to produce GAAP, GASB, and State required annual financial reports. AFRS also produces limited monthly financial reports using data from the FRS system.
Database System	ADABAS
Development Language	NATURAL 2
Sharing	For UH Systems internal use only.
Future	Proposals for alternative datamart reporting systems are currently pending with implementation to follow the PeopleSoft Public Sector Financials implementation by about three months.
Application Name	**Accounts Payable System (APS)**
Application Type (choose from the listed types)	Traditional Financial system (none of the listed types are applicable).
Application Description	Tracks vendor invoices, produces university vouchers, and disburses funds to vendors for invoice payment.
Database System	ADABAS
Development Language	NATURAL 2
Sharing	APS supports EDI feeds with external financial agencies.
Future	APS is scheduled to be replaced with PeopleSoft Public Sector products. See http://www.uh.edu/FAST/docs/schedule1215.pdf.
Application Name	**Property Management System (PMG)**
Application Type (choose from the listed types)	Traditional Financial system (none of the listed types are applicable).
Application Description	PMG is a fixed asset inventory system used to track and account for capital equipment.
Database System	ADABAS
Development Language	NATURAL 2
Sharing	Data are exchanged with the State (SPA feed)
Future	Scheduled to be replaced with PeopleSoft products. See http://www.uh.edu/FAST/docs/schedule1215.pdf.
Application Name	**Facilities and Planning (FAP)**

Table 5: Agency Applications

Major software applications and a brief description of their uses. For this plan, major applications are those critical to the administration or service of the agency's mission.

Application Type (choose from the listed types)	Traditional Financial system (none of the listed types are applicable).
Application Description	FAP is a space management system maintaining room and building inventories.
Database System	ADABAS
Development Language	NATURAL 2
Sharing	NA
Future	Candidate for replacement by either PeopleSoft or Schedule25 products in combination with some datamart functionality to meet Texas requirements.
Application Name	**Purchasing System (PURCH)**
Application Type (choose from the listed types)	Traditional Financial system with some document management functionality.
Application Description	Procurement system used by buyers within the central purchasing office to process departmental requisitions and place purchase orders with vendors.
Database System	ADABAS
Development Language	NATURAL 2
Sharing	NA
Future	Will be replaced with PeopleSoft products.
Application Name	**Human Resources System (HRS)**
Application Type (choose from the listed types)	Human Resources.
Application Description	Human Resource and payroll system.
Database System	RMS (DEC/COMPAQ OpenVMS Records Management System), a file management service.
Development Language	COBOL
Sharing	There are about 33 feeds to other systems. Financial and appropriate State organizations are sent data. All UH components use this system.
Future	HRS is scheduled to be replaced by the PeopleSoft Public Sector HR product. See http://www.uh.edu/FAST/docs/schedule1215.pdf.
Application Name	**HR Published Staff Directory (PAYEMP)**
Application Type (choose from the listed types)	Human Resources.
Application Description	System for maintaining staff directory data and formatting for publishers.
Database System	ADABAS
Development Language	NATURAL 2
Sharing	NA
Future	Internet LDAP directory services are now made available and may eventually replace the published directory. Directory data are increasingly important for integrating access and authentication processes across many systems and services. The data may be human resource, but the use is becoming fundamental to a robust information technology infrastructure.
Application Name	**W2/1042S Production (PAYTFT)**
Application Type (choose from the listed types)	Human Resources.

Table 5: Agency Applications

Major software applications and a brief description of their uses. For this plan, major applications are those critical to the administration or service of the agency's mission.

Application Description	System for maintaining W2 and 1042S forms for employees and students.
Database System	ADABAS
Development Language	NATURAL 2 and PostScript
Sharing	NA
Future	PAYTFT is scheduled to be replaced by PeopleSoft products. See http://www.uh.edu/FAST/docs/schedule1215.pdf.
Application Name	**Budget Development System (PCBUD)**
Application Type (choose from the listed types)	Client Server Financial System, Development.
Application Description	PCBUD models and develops budget information, produces budget book and reports, and loads budget account data into financial and payroll systems for future fiscal year.
Database System	SQL Server 6.5
Development Language	PowerBuilder 5.0
Sharing	FRS, HRS
Future	The PeopleSoft budget planning module is not purchased. There are currently no plans to replace PCBUD.
Application Name	**Institutional Advancement (Advance/CS)**
Application Type (choose from the listed types)	Client Server Alumni Development system.
Application Description	The BSR Advance/CS system holds the alumni and database and provides tools for fund raising and gift/ donor management.
Database System	ORACLE 8
Development Language	PowerBuilder 6.5, PL/SQL
Sharing	Data are shared with third party vendors (EMS, TransUnion, and EIS). All UH components share the system.
Future	The Advance/CS reporting capabilities are being enhanced in-house at user request.

Table 5: Agency Applications
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Major software applications and a brief description of their uses. For this plan, major applications are those critical to the administration or service of the agency's mission. Provide the following information for each application.

Application Name	**Student System (STU)**
Application Type (choose from the listed types)	Data Warehouse, Document Management, Electronic Commerce, web-enabled.
Application Description	The student system is an integrated multi-campus enrollment management system comprised of Recruiting, Admissions, Records and Registration, Advising, Student Financials, Engineering Minority Student program, and data extraction applications.
Database System	ADABAS
Development Language	NATURAL 2
Sharing	Data are shared with other institutions through the Texas SPEEDE server in Austin and on an ad hoc basis as approved by the Student Affairs Division.
Future	The student system is scheduled to be replaced with PeopleSoft Student Administration. See http://www.uh.edu/FAST/docs/schedule1215.pdf.
Application Name	**Official Reporting (ORD or PPA)**
Application Type (choose from the listed types)	Data Warehouse.
Application Description	The official State reporting system is comprised of student, course, and faculty extraction processes in support of Coordinating Board reporting.
Database System	ADABAS
Development Language	NATURAL 2, COBOL, SAS
Sharing	Data are shared with the Texas Coordinating Board, and the Office of Civil Rights. Summary data are shared with the National Science Foundation and others.
Future	Official reporting will drive off a datamart once the PeopleSoft Student Administration product is implemented. See http://www.uh.edu/FAST/docs/schedule1215.pdf.
Application Name	**Financier (SFA and FAMS)**
Application Type (choose from the listed types)	None of the listed types are applicable.
Application Description	Financier (a Wolfpack vendor product) supports the Scholarships and Financial Aid Office in dispensing financial aid to students. Functions include: application processing, awarding aid, managing loans, batch and on-line records maintenance, reporting, new aid year preparation.
Database System	ADABAS
Development Language	NATURAL 3
Sharing	Financier is integrated with the student system, and supports Department of Education processes through batch feeds and the Texas Guarantee Student Loan (TGSL) system through "PC AdvanTG".
Future	Assuming subsequent releases of the PeopleSoft financial aid system will meet UH needs (currently PeopleSoft does not), then at that time we will convert from Financier to PeopleSoft. See http://www.uh.edu/FAST/docs/schedule1215.pdf.
Application Name	**Texas Guarantee Student Loan system (TGSL)**

Table 5: Agency Applications
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Major software applications and a brief description of their uses. For this plan, major applications are those critical to the administration or service of the agency's mission. Provide the following information for each application.

Application Type (choose from the listed types)	Client Server Financial system.
Application Description	AdvanTG is a Windows-based software system developed by the Texas Guaranteed Student Loan Corporation for guaranteeing loans electronically. AdvanTG also supports most CommonLine Release application functions and transactions.
Database System	PC based
Development Language	PC based
Sharing	Data are shared with TGSL and other guarantors via ComuServe.
Future	UH will continue using TGSL AdvanTG.
Application Name	**Remedy Problem Reporting System**
Application Type (choose from the listed types)	Action request system (none of the listed types are applicable).
Application Description	Remedy is a problem reporting, tracking, and action request system.
Database System	ORACLE 7.3.4 installed on a Unix machine
Development Language	SQL
Sharing	NA
Future	UH will continue using Remedy.
Application Name	**Academic Audit (AA)**
Application Type (choose from the listed types)	Client Server, Web-enabled (none of the listed types are applicable)
Application Description	Academic Audit is an automated advising and degree audit system from IronSoft Ltd.
Database System	Interbase
Development Language	Proprietary (system is vendor supported)
Sharing	NA
Future	UH will continue using Remedy.
Application Name	**Voice Information Processing (VIP)**
Application Type (choose from the listed types)	Client Server, Electronic Commerce (none of the listed types are applicable)
Application Description	VIP is an integrated voice response (IVR) system for 24x7 registration, admissions status inquiry, grading, and billing account status and payments.
Database System	Microsoft Access
Development Language	EPOS Encore ScriptWrite V6.1 Build 71
Sharing	NA
Future	UH will continue using VIP.
Application Name	**WWW**
Application Type (choose from the listed types)	Client Server, Web-enabled
Application Description	WWW is the administrative systems Internet access portal.
Database System	SAGNA iXpress NT Server
Development Language	HTML and DML (iXpress Dynamic Markup Language)
Sharing	Integrates to ADABAS and ODBC administrative systems.
Future	UH will switch to PeopleSoft Electronic Commerce after PeopleSoft release 8. The iXpress product may be retained to leverage some strategic business

Table 5: Agency Applications
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Major software applications and a brief description of their uses. For this plan, major applications are those critical to the administration or service of the agency's mission. Provide the following information for each application.

	practices if necessary.
Application Name	**Master**
Application Type (choose from the listed types)	(none of the listed types are applicable)
Application Description	Master provides the shared administrative environmental utilities for security, access control, batch scheduling, print management, change and version control, email, and data administration (includes the data dictionary).
Database System	ADABAS 3.22 and ADABAS 4.11
Development Language	NATURAL 2.17, NATURAL 3.1.1.25, C, DCL
Sharing	Data are shared with the campus Remedy system.
Future	UH will switch to PeopleSoft for these services for those applications purchased from PeopleSoft. Non-PeopleSoft applications will either continue with these services are rely on internal equivalents.
Application Name	**Parking System (PowerPark)**
Application Type (choose from the listed types)	Client Server (none of the listed types are applicable)
Application Description	The PowerPark system maintains parking permits and citations issued. Batch interfaces link the parking system with the student, payroll, and financial systems. T2 Systems, Inc. maintains the server.
Database System	Oracle, ADABAS
Development Language	Interfaces are in NATURAL.
Sharing	NA
Future	New interfaces will need to be built to accommodate PeopleSoft.
Application Name	**Internet Directory (LDAP)**
Application Type (choose from the listed types)	Client Server, Web-enabled
Application Description	LDAP (Light-weight Directory Access Protocol) is an on-line directory server containing contact information on most faculty and staff.
Database System	DBM (database with hashed index)
Development Language	PERL, HTML, JavaScript
Sharing	The LDAP standard permits directory query from any Internet LDAP search engine.
Future	The directory may later be folded in with other single sign on and authentication services.
Application Name	**AXIS**
Application Type (choose from the listed types)	(none of the listed types are applicable)
Application Description	AXIS is the UH telecommunications management inventory system for telephone billing and directory services.
Database System	Oracle 7.3.4
Development Language	SQL
Sharing	NA.
Future	Additional interfaces are planned to link AXIS with the Remedy problem reporting and tracking system.
Application Name	**ACE**
Application Type (choose from the listed types)	(none of the listed types are applicable)

Table 5: Agency Applications
University of Houston

Major software applications and a brief description of their uses. For this plan, major applications are those critical to the administration or service of the agency's mission. Provide the following information for each application.

Application Description	FirstLogic's PostalSoft ACE/Libraries V6.10c provide CASS certification, bar coding, and address correction services for the administrative systems.
Database System	FirstLogic proprietary under USPS license
Development Language	C, PostalSoft jobfiles
Sharing	Callable C libraries permit integration with third party and in-house developed software. License agreement prevents external agency sharing.
Future	FirstLogic is a PeopleSoft partner and we anticipate integrating ACE with PeopleSoft.
Application Name	**Cougar OneCard**
Application Type (choose from the listed types)	Client Server.
Application Description	Cougar OneCard is the campus picture ID/library/debit card system.
Database System	? Proprietary
Development Language	?
Sharing	Card swipes connected to the system are made available to some local merchants, e.g., bookstores, vending machines.
Future	The OneCard ISO number is being positioned to become the primary faculty, student, and staff id number for all administrative and instructional services.
Application Name	**CareerNet**
Application Type (choose from the listed types)	Client Server, web enabled.
Application Description	University Career Services maintains this web-based career service system comprised of Campus Recruitment, JoBank, and ResumeBank. Service is provided to register UH students, paid UH alumni, and employers. Employers through controlled access may post jobs and search for resumes. Students and alumni can post three versions of resumes, request campus interviews, and schedule campus interviews or apply to jobs on line.
Database System	Microsoft SQL 7.0
Development Language	Microsoft Visual InterDev 6.0, Visual Basic 6.0, HTML, JavaScript.
Sharing	NA
Future	Will enhance as needed.

Table 6: Interagency Data Needs

Agency's plans for increased sharing of data with other state agencies and obstacles in the way of further sharing.

List	*Description of data held by another agency that is unavailable to your agency but would be of benefit to your agency if shared.* **(1)** UH students are burdened with redundant processes when enrolled at or applying to multiple UH campuses. At the same time, administrators and faculty are similarly hassled with every multi-campus service or innovation, e.g., multi-institution teaching centers. **(2)** Student high school data must be processed manually for making admissions decisions. If the data were transmitted to UH electronically, then the automated input would not only facilitate admissions decisions, but also be available for improved advising services to students. UH currently receives electronic transcripts automatically from Austin ISD. **(3)** Faculty curriculum vita must now be manually processed and maintained. As faculty move from one institution to another, they take with them areas of expertise, and publication and award lists which are subsequently problematic to access and inventory.
Obstacles	*Indicate the reason the data is not available, such as technological, economic, or political considerations* **(1)** Student information is not currently available or easily shared among the UH components due to different enrollment systems installed at each campus. **(2)** Southeast Texas ISDs and regional processing centers have been unable or unwilling to commit sufficient resources to automate their transcript production processes. Some seem unaware the opportunity even exists. Austin and Richardson ISD and Region 20 have progressed considerably in their use of the electronic transcript service in Austin. **(3)** Academic administrators lack funding and technical resources. Central human resource departments do not traditionally offer the same academic background processing and records services for faculty as do, say, the central admissions offices for students.

Table 6: Interagency Data Needs

Agency's plans for increased sharing of data with other state agencies and obstacles in the way of further sharing.

Needed Assistance	*Brief description of the application: purpose, primary user(s)*
	(1) The several UH components are cooperating to implement a shared and integrated enterprise resource planning and management system (PeopleSoft ERP). Upon the implementation of this new system (which includes internet self-service student administration as well as payroll/human resource and financial systems); data will be shared among the universities to better serve students, faculty, and management. **(2)** The application is Electronic Data Interchange (EDI) and uses the ANSI X.12 TS-130/131 data format standard. EDI in K-12 and higher education is called SPEEDE/EXPRESS. A server for handling such transactions between institutions is located on the UT campus in Austin. Services are free of charge. We need the ISDs to be encouraged follow up with this e-Government opportunity. **(3)** Both human resource departments and academic administrators need to open up to the economies available in recruiting, placing, and retaining high quality faculty where academic background is made more accessible, transferable, and maintainable. The public benefits also when this information is available on the Internet.