UNIVERSITY of NORTH TEXAS
HEALTH SCIENCE CENTER at Fort Worth

Education, Research, Patient Care and Service

Appendix G

UNT Health Science Center

Information Resources Strategic Plan
Fiscal Years 2003 – 2007

_____   _____
Robert Nimocks, ITS Director   Date
Information Resources Manager

Information Resources Strategic Plan FY's 2003-07

The mission of the UNT Health Science Center focuses on education, research, healthcare and service. The Institution's legislative appropriations request is written to support the mission of the institution by funding initiatives in these areas.

All items in the Information Strategic Plan are aligned with the institution's tactical initiatives and long term goals in support of the institutional mission.

The four information resources goals are derived directly from the statewide information resources goals found in the 2001 State Strategic Plan For Information Resources Management.

1. The University of North Texas Health Science Center (UNTHSC) will use coordinated, well integrated information resources appropriate to the required business process to improve and extend the services delivered to the people of the State.

2. The UNTHSC will enhance the performance of its mission by appropriate application and management of information resources.

3. The UNTHSC will organize information resources and implement their supporting technology to ensure the privacy, security and historical integrity of information entrusted to it by faculty, staff, students, patients and business partners.

4. Acquisition, use and management of information resources by UNTHSC will be driven by customer needs.

Table 1: Goals, Objectives and Strategies

Item	Description
Goal 1	The University of North Texas Health Science Center (UNTHSC) will use coordinated, well-integrated information resources appropriate to the required business processes to improve and extend the services delivered to the people of the state of Texas. This goal supports Texas IR Goal 1 to provide coordinated, integrated services. It also supports the agency mission by facilitating the educational, research, clinical, and service activities, which form the basis for the agency goals.
Objective 1	The University of North Texas (UNT) and UNTHSC will collaborate in implementing a new Enterprise Information System system.
Strategy 1	UNTHSC will provide a team of employees working with people from UNT to fully investigate business needs and vendors systems to meet and recommend a system.
Strategy 2	Once a system is selected, the UNTHSC personnel will work with UNT personnel to design and implement the system.
Strategy 3	UNTHSC will work with UNT to insure the all personnel associated with the EIS are trained appropriately.
Strategy 4	In collaboration with UNT-Denton, Site License agreements of certain statistical packages (such as S-Plus, SAS, SPSS, SUDAAN, STATA, ArcGIS Extension components and other software) will be expanded to cover UNT-HSC.
Strategy 5	Corporate agreements with certain research-related database vendors (such as Community of Science Website) will be extended to enable UNTHSC faculty to utilize the service to support their research needs.
Objective 2	UNTHSC will provide improved student and faculty access to academic content, records and other information online.
Strategy 1	UNTHSC will upgrade and maintain the Banner Student Information System.
Strategy 2	The Gibson D. Lewis Library will provide student and public access to computers and licensed software. Training will be provided for students, faculty and staff.
Strategy 3	UNTHSC will encourage and facilitate faculty and staff participation in providing and maintaining online resources.
Strategy 4	UNTHSC will perform student and course evaluations online and supply the results online.
Strategy 5	The Gibson D. Lewis Library will cooperate with the UNT library and other state libraries to share the expense of providing access to a variety of full text information resources, including electronic

Item	Description
	journals, books, databases, and software.
Strategy 6	The Gibson D. Lewis Library will continue to upgrade it's server and computer laboratory infrastructure to support required services.
Strategy 7	UNTHSC will support an Intranet structure used by facility to support curriculum and instruction materials.
Strategy 8	UNTHSC will develop and support an infrastructure capable of providing outreach information and education programs to remote and underserved populations.
Objective 3	UNTHSC will provide online student applications, registration and payment options.
Strategy 1	UNTHSC will collaborate with UNT to provide online student financial services through a combination of Banner and UNT mainframe services and then converting to the new EIS system when implemented.
Strategy 2	All UNTHSC programs will provide online application opportunities either through the institutional website or through a licensed service provider.
Objective 4	UNTHSC will provide improved patient billing and scheduling services through their partnership with Shared Medical Systems.
Strategy 1	UNTHSC will implement windows based clinical management software that uses a graphical interface to improve data availability.
Strategy 2	UNTHSC will improve billing services by adding claims manager software that checks patient billing for historical consistency and accuracy that is required by insurers.
Strategy 3	UNTHSC will automate billing to and receipt of electronic payments from non-Medicare insurance carriers. This will improve the timeliness of billing and protect patient benefits.
Strategy 4	UNTHSC will install a new practice plan accounting system, EPICOR that will provide the necessary data to effectively manage the practice plan.
Programs	This goal focuses on the administrative processes of the institution
Goal 2	UNTHSC will enhance the performance of its mission by appropriate application and management of information resources. This goal supports Texas IR Goal 2, which emphasizes improved management of information resources to facilitate service delivery not just implement technology. Improved service delivery will support all agency goals for educational, clinical, research and service activities.
Objective 1	Improve delivery of services by using project development and implementation processes to improve on-time and on-budget performance.
Strategy 1	Develop management policies and procedures that facilitate rapid determination of information resource project scope, parameters and need for private sector skills and resources.

Table 1: Goals, Objectives and Strategies (continued)

Item	Description
Strategy 2	Implement formal project management procedures that document and track project progress, problems encountered, and problem resolution. This process will facilitate time management of both managers and employees and help identify trouble areas within current processes that should be improved.
Strategy 3	Implement web development and management processes necessary to provide appropriate security and access to information while allowing rapid development by a wide range of individuals.
Objective 2	Use all opportunities to cooperate and share resources and expertise between UNTHSC operational units, with UNT operational units and with other business partners.
Strategy 1	Improve bandwidth of connectivity to UNT and the internet to support new technology solutions and to allow new services to the community.
Strategy 2	Improve connectivity to the UNTHSC clinical teaching partner locations to facilitate student access to campus resources, provide clinical consultation opportunities, and provide new distance learning opportunities for continuing education of physicians.
Strategy 3	Continue to evaluate and make necessary changes in the information technology, resources, personnel and management structure on the UNTHSC campus to provide better coordination and use of resources.
Strategy 4	Use customer satisfaction surveys to determine areas for improvement and areas of excellence.
Objective 3	Use a Geologic Information System for the mapping of public health related data collected and used by the School of Public Health.
Strategy 1	The School of Public Health will implement the use of GIS technology to organize its epidemiological data.
Strategy 2	A representative of the School of Public Health will participate in the Texas Geographic Information Council.
Strategy 3	The School of Public Health will provide a specialized computer laboratory suitable to train students on the use of GIS technology.
Objective 4	Strengthen database utilization and collaboration with the SPH for research and educational activities.
Strategy 1	Recently available database, such as Census 2000 data, will be acquired and made available (with the collaboration of GDL library) for biostatistical, epidemiological, and health management and policy research and saved as GIS database.
Strategy 2	With the collaboration of Biomedical Communications, WebCT database developed by SPH faculty/staff will be maintained and hosted.
Strategy 3	Internship opportunities will be developed for Biostatistics and Health Management and Policy Departments (such as Clinical Research and Health Informatics Programs) to enable students to

Table 1: Goals, Objectives and Strategies (continued)

Item	Description
	obtain hands-on experience.
Programs	This goal will affect the education, research and service programs of the institution.
Goal 3	UNTHSC will organize information resources and implement their supporting technology to ensure the privacy, security and historical integrity of information entrusted to it by faculty, staff, students, patients and business partners. This goal supports Texas IR Goal 3, which deals with privacy, security and integrity of information resources. All aspects of the UNTHSC Agency Strategic Plan are supported by this goal.
Objective 1	To ensure that all data collected and transmitted through electronic means will remain intact, secure and private.
Strategy 1	Implement strong authentication processes for all access to on-campus information resources.
Strategy 2	Implement and fine-tune firewall and proxy services to protect information resources from attack via the internet.
Strategy 3	Provide anti-viral protection for all servers and workstations throughout the institution.
Strategy 4	Monitor network activity to assure that all systems are functioning within acceptable limits and have not been modified inappropriately.
Strategy 5	Improve physical security for all intuitional servers.
Strategy 6	Provide Security training for UNTHSC employees.
Strategy 7	Implement all HIPAA rules and regulations.
Objective 2	Assure that mission critical information resources will be continuously available.
Strategy 1	Assure that appropriate backup and archiving procedures are in place for information resources throughout the institution.
Strategy 2	Provide adequate redundancy of major network components to minimize network downtime.
Strategy 3	Develop disaster recovery plans and business continuity plans for information resources according to the recent guidelines, published by DIR. Put specific disaster recovery plan development and participation activities into personnel job descriptions and evaluations. Train each employee on his or her roles in pre- and post- disaster activities.
Strategy 4	Test the disaster recovery plans and business continuity plans yearly. Refine and update plans to assure that they reflect current personnel and processes.
Objective 3	Assure long-term viability of electronic records through appropriate records management activities.
Strategy 1	The Records Management division of Information Technology Services department will continue to develop and implement policies and procedures to meet Texas requirements for electronic

Table 1: Goals, Objectives and Strategies (continued)

Item	Description
	records retention and viability standards.
Strategy 2	Patient medical records will be organized to facilitate electronic tracking, routing and record retention schedules. Electronic components will be appropriately referenced to paper records.
Strategy 3	Continue to implement the pilot program of the database entry for the Electronic Medical Record system to assure consistent high quality data collection and access. The pilot system will test appropriate security, records management and privacy standards.
Program	This goal will affect all areas of the institution.
Goal 4	Acquisition, use and management of information resources by UNTHSC will be driven by customer needs. This goal supports Texas IR Goal 4 that deals with making IR management more responsive to customer needs.
Objective 1	Web interfaces and other simple to use interfaces will be provided for access to all information resources by customers.
Strategy 1	The technology to organize, distribute and secure information using the web will be acquired as necessary to facilitate the provision of services by all elements of the institution.
Strategy 2	Train faculty and staff in new technology necessary to provide better customer service.
Strategy 3	Include service and technology information in the new hire orientation.
Objective 2	A policy for consistent use of technology for the organization and indexing of information will be used throughout the institution to facilitate access to information.
Strategy 1	Develop and implement a policy for organization and indexing of information consistent with new state standards.
Strategy 2	Implement technology that provides as much information as possible to students, staff, faculty and interested parties without intervention by information technology employees.
Strategy 3	Post all UNTHSC policies on the UNTHSC website.
Objective 3	Information Resource Management should be driven by customer needs.
Strategy 1	The Information Resources Steering Committee and Working Group will insure that customer needs are acknowledged in all technology projects.
Strategy 2	The Information Resources Working Group will review all information resources projects to insure an institutional prospective and will make recommendations to the Information Resources Steering Committee. The Information Resources Steering Committee will review recommendations and approve courses of action.
Programs	This goal will affect all areas of the institution.

Table 2: Agency Databases and Applications

Database Name	SCT Banner Integrated System Database
Database Description	A comprehensive, integrated database to store student and financial aid data. Used by division of student affairs (including registrar and financial aid), Academic Information Service and the accounting department.
Database System	Oracle
Estimated Physical Storage Requirements	50 GB
GIS Data Class.	Not currently supported
Sharing	Texas Higher Educational Coordinating Board, US Department of Education data shared by FTP
Future	This system will be migrated to the new EIS.
Database Name	**Medical Services Research and Development Plan Database**
Database Description	Used to provide automated billing and tracking of collections for patient services rendered at UNTHSC clinic sites. Used by employees of MSRDP, clinical staff and faculty.
Database System	SMS Signature Database
Estimated Physical Storage Requirements	30 GB
GIS Data Class.	Does not support GIS
Sharing	Data is electronically transferred to Medicare. Will implement electronic transfers to Insurance carriers during next biennium.
Future	No plans to change the system.
Database Name	**OSTMED® Database**
Database Description	A national osteopathic literature citation database developed by the Lewis Library for the AOA and AACOM. Used by faculty, library patrons, and others to conduct online searches of the osteopathic literature over the Web.
Database System	STAR database system (Cuadra)
Estimated Physical Storage Requirements	4 GB
GIS Data Class.	No currently supporting GIS
Sharing	Data is shared over the internet, supplying search and download functionality.
Future	Continually upgraded.
Database Name	**AIS Student and Course Performance Database**
Database Description	Student exam results and course evaluations are stored in this database and accessed from two major applications. Used by Student Affairs, academic administrative personnel, course directors, and Academic Information Service to provide reports.
Database System	Focus
Estimated Physical Storage Requirements	2 GB

GIS Data Class.	Not supported.
Sharing	Data is used to generate reports for Texas Higher Education Coordinating Board
Future	Continually upgraded.
Database Name	**MSRDP Accounting System**
Database Description	Cost accounting / earnings distribution database. Used by MSRDP personnel, accounting personnel, MSRDP board members and clinic managers.
Database System	EPICOR
Estimated Physical Storage Requirements	20 GB
GIS Data Class.	Not supported.
Sharing	On system completion, data entered in this system will be uploaded by FTP to accounting database on UNT mainframe.
Future	Continue to write reports and train personnel in use of system. Will be integrated in new EIS.
Database Name	**CyberTools for Libraries**
Database Description	A comprehensive, integrated administration system that provides access via an online catalog to information resources and stores and manages local bibliographic, library user and financial data.
Database System	MSQL on UNIX
Estimated Physical Storage Requirements	4 GB
GIS Data Class.	Not supported
Sharing	Shared over the internet.
Future	Continually upgraded.

Application Name	**Banner Small School Administration System (BANNER)**
Application Type	Data Warehouse, Client Server Financial System, Web-enabled
Application Description	A comprehensive administration system that stores student and alumni data, including financial aid and official transcript information.
Database System	Oracle
Development Language	Micro Cobol, Java, HTML and C++
Sharing	Not shared
Future	Will be replaced by EIS.
Application Name	**Greentree Application Tracking System**
Application Type	Human Resources, web-enabled
Application Description	Used to track applicants from application to hiring. Human resources uses to present openings online, to collect applicant information online, and to route applicant information to those offering jobs on campus. HR personnel, applicants and supervisors campus-wide are

	users.
Database System	Microsoft Access and Greentree software
Development Language	Prepackaged - Visual Basic, Vbscript, HTML
Sharing	Not shared with other agencies.
Future	Continue with same product
Application Name	**BlackBaud RaisersEdge software**
Application Type	Data Warehouse
Application Description	Used to track donors and donations made to program development activities of the health science center.
Database System	SQL database
Development Language	Prepackaged
Sharing	Not shared.
Future	Will be replaced with PeopleSoft
Application Name	**General Ledger Accounting System (GLAS)**
Application Type	Outsourced function, data warehouse
Application Description	Provides batch functions to support mass update and reporting, online functions available for individual account inquiries. Provides general ledger posting, claims processing for payments to vendors operating on a modified accrual basis, produces periodic accounting statements.
Database System	IADABAS
Development Language	OS/VS Cobol, Natural, Complete, Clipper
Sharing	UNT system shared by UNTHSC via a dedicated portion of a T1 line and internet access.
Future	This system will be replaced by PeopleSoft running on an Oracle database.
Application Name	**Human Resources Management Information System (HRMIS)**
Application Type	Outsourced function, data warehouse, human resources
Application Description	Automated payroll processing (including record keeping and reporting), provides management data for critical decision making. System includes four subsystems: 1) Employee maintenance; 2) payroll detail; 3) budget including fiscal year budgets (personnel and non-personnel); and 4) position control. Batch functions support mass update and reporting, online functions available for individual update and entry.
Database System	ADABAS
Development Language	OS/VS Cobol, Natural, complete, PC-Dos, clipper, dbase
Sharing	UNT system shared by UNTHSC via dedicated T1 and internet.
Future	Will be replaced by PeopleSoft.
Application Name	**Capital Equipment Account tracking system (CEATS)**
Application Type	Outsourced function, data warehouse
Application	Online updating and individual inquiry. Large reports are produced

Description	using patch processing. Collects, maintains and reports detail information about individual items of capital equipment.
Database System	ADABAS
Development Language	Natural, Complete
Sharing	UNT system shared by UNTHSC via dedicated T1 and internet.
Future	Will be replaced by PeopleSoft.
Application Name	**Quality**
Application Type	Data warehouse, research, web-enabled
Application Description	Test and course quality reporting is primarily designed to provide timely, online information to faculty and administrators regarding student course performance and student evaluation of course quality. Administered by the Academic Information Service division of Medical Education.
Database System	Focus database with web functionality
Development Language	Scripting within Focus, Perl, Java, HTML
Sharing	Not shared.
Future	Continue to improve system.
Application Name	**Assist**
Application Type	Data warehouse, research, web-enabled
Application Description	Provides student examination performance data to Student Affairs staff, Academic Assistance Office, and the academic departments. Administered by the Academic Information Service division of Medical Education.
Database System	Focus database with web-functionality
Development Language	Scripting within Focus, Perl, Java, HTML
Sharing	Not shared.
Future	Continue to improve system
Application Name	**Evaluation**
Application Type	Data warehouse, research, web-enabled
Application Description	Produces grade reports for distribution to students and departments. Provides production engine for evaluation services. Used by staff of Medical Education as production system.
Database System	Focus
Development Language	Scripting within Focus.
Sharing	Not shared.
Future	No changes planned.
Application Name	**Purchase Order Tracking System**
Application Type	Data Warehouse, Web-enabled
Application Description	Provides Purchasing / Central Services and purchasing coordinators with automated tools to aid in tracking and processing purchase order requests. Purchasing coordinator access is by web interface.

Database System	MS Access
Development Language	Visual Basic for applications, ColdFusion for web database functionality.
Sharing	Not shared
Future	Will be replaced by PeopleSoft.
Application Name	**Clinical Rotation / Lottery**
Application Type	Methodology
Application Description	Used to perform clinical matches between students or fellows and training positions. Used by Director of Clinical Education and his staff.
Database System	Oracle
Development Language	Micro Cobol using Oracle development tools and C++.
Sharing	Not shared.
Future	Continue to improve system
Application Name	**Health Science Center WWW Servers**
Application Type	Web-enabled, document management
Application Description	The institutional internet website provides information about the health science center programs, campus, general policies, employment opportunities and institutes to users worldwide. It also provides printable forms for application to various programs and links to online entry forms. The institutional intranet site provides internal policy documents, institutional forms, purchasing and receiving information, online employment applications, faculty / staff directory, course curriculum and other useful information for faculty, staff and students.
Database System	SQL and Oracle
Development Language	VB Script, JavaScript, ColdFusion database connectivity modules, HTML. Uses Microsoft IIS running on Windows NT 4.0.
Sharing	Not shared.
Future	The external website will be rewritten.
Application Name	**Financial Aid Tracking Program**
Application Type	Data Warehouse
Application Description	Application used to track Federal and In-house student loans.
Database System	Oracle
Development Language	Micro Cobol, C++, Developed using Banner security model
Sharing	Not shared.
Future	Modified yearly to meet changes required by Federal funding agencies.
Application Name	**General Access Information Network (GAIN)**
Application Type	Data Warehouse, web-enabled, document management, imaging
Application Description	Indexing application used to organize, index and cross-reference documents.

Table 2: Agency Databases and Applications (continued)

Database System	Microsoft SQL
Development Language	C++
Sharing	Not shared.
Future	Will be used to index active and inactive administrative and medical records, maintain retention schedules, and provide alerts for records for destruction. In addition, will be used to route and track active records use between departments.
Application Name	**TMA System**
Application Type	Data Warehouse, document management, web enabled
Application Description	Facilities service order tracking and request program
Database System	Omnis 7.0, Netware
Development Language	Script within database, JAVA, HTML
Sharing	Not shared.
Future	No changes planned
Application Name	**PRIVPlus**
Application Type	Data Warehouse, document management.
Application Description	Maintains credentials for all faculty, preceptors, and licensed contract employees.
Database System	Proprietary
Development Language	Unknown
Sharing	Not shared
Future	No changes planned.
Application Name	**WebCT**
Application Type	Curriculum Development
Application Description	Provide faculty the ability to develop web based courses
Database System	Proprietary
Development Language	Unknown
Sharing	Not shared
Future	No changes planned.

Table 3: Information Resources Management Organizations, Policies, and Practices

Category	Brief Summary / Overview
Priorities	Institutional information resources priorities are set through the agency strategic planning process and implemented through the annual budget process. Information Resources priorities are recommended by the Information Resources Working Group to the Information Resources Steering Committee.
Planning	Overall planning at UNTHSC starts at the executive level in major strategic planning sessions. Planned activities that require major IR components are identified by managers and reported to the IR strategic planning group in response to a formal call for submissions. This group includes the IRM and ITS managers as assigned. IR planning centers around customer interaction with the Department of Information Technology Services (ITS) and interaction with the IR Steering Committee. Customer IR needs are assessed by ITS management and recommendations are made for solutions. In addition, recommendations are made for network maintenance and upgrades to ensure a stable, high performance infrastructure. If significant funding is required for an individual project, the request is forwarded to the IR Steering Committee for action. In some cases, direct requests are made to the IR Steering Committee by non-IT departments.
Quality Assurance Practices	Planning project development. The current planning process includes analysis of project scope, definition of deliverables, time estimates, personnel estimates, special training needs for personnel, identification of potential risks that would impact on time, cost or success of delivery and development of formal project plan using MS Project. Determining projected benefits. Benefits are assessed in terms of facilitation of agency mission, simplification of processes, work hours saved, improved service delivery (volume and time), and cost / benefit ratio. Currently only projects as defined by DIR have received significant benefits analysis, while enhancement projects and smaller internal projects have been assessed primarily based on their importance to agency mission. Developing and Implementing Management Control Processes. The types of management control processes used are determined by the scope of the project. For large projects that have formal project plans, managers routinely monitor personnel activities, obtain weekly progress reports and have regular team meetings to determine progress, identify problems or obstacles, and make adjustments to plan as necessary. At completion of each deliverable, the performance of the plan is compared to the original specifications and cost. For smaller projects monitoring and control processes may be simple interactions with supervisors or more

Table 3: Information Resources Management Organizations, Policies, and Practices (continued)

Category	Brief Summary / Overview
	formal reports at status meetings.
	Projecting the budget for a project. After initial analysis and determination of hardware, software and personnel needs, a budget is estimated including initial and ongoing costs for each element. This includes personnel and user training costs, maintenance costs, and potential costs related to loss of personnel (requiring some cross-training of personnel).
	Risks are assessed for items such as extended availability of funds, loss of key personnel, failure of business partners, etc. Planning is done for dealing with most critical risks.
	Establishing standards by which the effectiveness and efficiency of a project can be evaluated. Formal project planning, timeline development and tracking would aid in this process considerably and will be instituted more effectively over the next biennium.
	Evaluating and reporting on the project after implementation. Currently, we do customer surveys to determine satisfaction levels for service and deliverables.
PC Replacement Schedule	The institution recommends that PCs be replaced after three years of use. However budget restrictions make this impossible. PCs are replaced as needed to support the software necessary to run on the machine.
Procurement	Each department head defines which products are needed for the department. The request for equipment is included in the budget request and is either funded or not funded. If funded, the department orders the equipment with the advice of the Information Technology Department.
Disaster Recovery/ Business Continuity Planning	The priorities for IR Disaster Recovery Planning at the Health Science Center are set by the IR Security Manager and institutional Risk Manager in cooperation with the IR Working Group.
	During the next biennium, the Health Science Center will be participating in an iterative process of disaster recovery planning and testing using the recommendations published by DIR to extend planning to a much wider range of potential disasters. Many of the health science center's disaster recovery plans and continuation plans for business processes are dependent on UNT as the provider of data processing services. Disaster recovery planning for mainframe services provided to UNTHSC by UNT will be adopted using processes developed for their systems. At this time no plans have been made to use the West Texas Disaster Recovery Operations Center (WTDROC) for testing disaster plans, but it will be considered during the upcoming process.
Data Center Operations	While we have no plans at present to use the services of the WTDROC, our disaster recovery process is under active change. Our mainframe services are housed and provided by UNT. We are bound by their decision to use WTDROC or not.

Table 3: Information Resources Management Organizations, Policies, and Practices (continued)

Category	Brief Summary / Overview
Standards	The information technology standards cover all phases of the information technology. These polices and procedures will be rewritten and in accordance with DIR guidelines.

Table 3: Agency Platforms, Systems, and Telecommunications

Category	Type	Operating System	Database Management System	Capacity/ Size / Count	Comments / Descriptive Information
Mini-computer	Sun	UNIX	Oracle	4 Solaris	Banner Student Sys production and dev, student email / websites, incoming email server
Network					100 % Ethernet Switched - Star topology, fig 1
LAN Servers (Central)	Compaq Proliant Servers, SUN	Novell Netware 5.1 / Windows NT 4.0 / WIN 2K Solaris	NDS, Microsoft SQL SQL 2K	22 Novell 37 NT 1 Solaris	GroupWise servers, intranet and internet servers, general file service, application and database services, gateway and print services, Terminal server, DHCP,DNS, WINS and authentication services, Network Management
LAN Server (Remote)	Compaq Proliant, SUN, MAC	NT 4.0/2K MAC UNIX Solaris	Varied	2 MAC 2 NT 4.0 7 UNIX	Database and service department production, special interest Web servers, and library services.
LAN Client/ Work-stations (Central)	PC & MAC	Windows 9.x/ Win 2K/WinXP MAC 8./9. and X	Access Filemaker Pro	825 PC 150 MAC	Number of units regularly logged in to network from main campus.
LAN Client/ Work-stations (Remote)	PC & MAC	Windows 9.X, Win2K/XP MAC 8./9. and X	NDS	92 dialup VPN 100 users/ 8-T1 Lines	Access to on campus resources
Number of	PC, MAC,	Windows	Access	2600	Used to access

Table 3: Agency Platforms, Systems, and Telecommunications (continued)

Computers Devices on Campus	Laptops, PDA	9.X, Win2K/XP MAC 8./9. and X Palm	Filemaker Pro	Computer devices	data, Internet, instrumental data, Video conference Email, Schedules
Stand alone PC Work-stations	PC & MAC	Windows 9.X, Win2K/XP MAC 8./9. and X	Varies	400 PC & MAC	Used primarily for word processing or instrumental data collection.
Internet Service Provider Shared Network	UNT Computer Services and Quest				UNT provides mainframe access. Use UNT / Quest system for internet access and video Services.
Shared Network	Texas A&M system				Texas A&M for video services
Shared Network	Shared Medical Systems				MSRDP billing and scheduling services

Figure 1: UNTHSC Network Topology

University of North Texas
Health Science Center at Fort Worth

Wireless network node on all floors

James L West

President

Seminary

Northside

Dallas/Ft Worth Medical Center

Westside

Southside

Internet

UNT

Richardson

Activity Center

Geriatrics

200 Meg

100 Meg

Bldg. Dis.Switch

Cisco 4003

OC3

OMCT

Vidnet

Multiple T1s

Gig Ethernet

AA1

AA2

GSB/ Facilities /

West Annex

Saginaw

FMC Ft Worth

EAD 8 Floors

LIB 4 Floors/ Data Center

PCC 6 FLoors

RES 4 Floors

Core Switch/ Router

External

VPN server

Server Switch

Internal / DMZ

Cisco 6509

Cisco 4006

Video servers

Network Management Station

Dial-In / Cisco 5300

Remote user

SWB

SMS system Malvern, PA.

SWB

Accord MCU

Cisco 7206

Bldg. Dis.Switch

Cisco 4006

Bldg. Dis.Switch

Cisco 4006

Bldg. Dis.Switch

48 Strand Fiber