INFORMATION TECHNOLOGY SERVICES
DIVISIONAL PLAN FOR 2003-2008
December 2003

PREFACE

With the appointment of a new University Chancellor in June 2008 and UNCG's participation in the UNC Tomorrow system-wide planning initiative, UNCG decided to delay the development of a new five-year plan. Work is underway in developing the UNCG 2009-2014 Plan and as soon as it is approved, ITS will develop a new Divisional Plan to help implement the new UNCG Plan. In the meanwhile, the 2003-2008 Divisional Plan remains in effect until the new UNCG 2009-2014 Plan is approved.

This plan reflects the goals of the Division of Information Technology and Planning. Together with the other four UNCG divisions, ITP is participating in the campus-wide effort to achieve the UNCG Vision 2008 and advance in the directions set by The UNCG Plan 2003-2008. The ITP Plan's Goals and Initiatives are arranged under selected Goal Clusters of selected Strategic Directions and Cornerstones of The UNCG Plan. The full UNCG Plan can be found at http://www.uncg.edu/cha/uncg_plan_03-08.htm, and the ITP Plan can be found at http://www.uncg.edu/apl/ITP_plan_03-08.pdf.

Because of the rapid changes in technology and the uses of technology, some sections of the ITP plan are intended to cover a three-year period (2003-2006), with the intent that a mid-point review will be developed in 2006 for an overlapping 2006-2008.

The ITP plan was developed by Vice Chancellor James Clotfelter, with input from the ITP senior management, an IT staff committee chaired by Joff Thyer, the University's Self-Study, and partners and clients around the campus. It benefited from the recommendations of three 2002-2003 task forces – on email (co-chaired by Lyn Lawrance and Kenneth McCollum); wireless computing (co-chaired by Bruce Michaels, Chuck Curry, and Lacey Diggs); and portals (co-chaired by Jim Black and Kenneth McCollum). With an appreciation for the many state and federal organizations that have an interest in how campuses manage information technology, the ITP Plan recognizes the requirements of federal and state laws and regulations. UNCG was the first UNC campus approved as an Information Technology Management Flexibility campus in May 2002, and this state legislation imposes certain requirements. (The ITMF legislation and the UNCG request for approval can be found at: http://www.uncg.edu/apl/ITMFplan_all.pdf.)

ECONOMY, SERVICE, AND SECURITY

The ITP departments and offices are committed to the overall goals of economy, service, and security.

The IT and Telephone Services organizations provide cost-effective services – benefiting from the economies of scale found in almost every area of technology, and from the economies enjoyed by an integrated technology organization. ITP seeks to employ staff in the most cost-effective way by spreading the cost of specialized skills across the entire campus, and by ensuring that skilled employees are fully utilized at all times. Per-unit economies are often not apparent to clients, because clients buy more of a service or buy services at a higher-performance level. For example, Telephone Services has reduced rates three times in three years, while departments have purchased both an increasing number of and more expensive services. UNCG's Internet access charges have dropped considerably in recent years, but UNCG's utilization has increased considerably. Efforts to improve economy include IT's uniform desktop project and increasing standardization of purchases around the Supported Products Policy.

As technology makes more services feasible, clients everywhere - in the public and private sectors - are demanding more and better services from technology organizations. Benchmarking studies show that UNCG's IT staffing and funding are average or slightly below average for comparable universities. Even so, ITP has committed itself to meeting and, in some cases, exceeding client expectations. This commitment is reflected in ITP's Vision Statement – that states where the division aspires to be in 2008, not where it is now. Here is *the ITP Vision for 2008:*

> *ITP provides excellent client service and technology leadership for students, faculty, and staff – our partners in carrying out the UNCG Vision 2008. Together, we provide technology and data solutions that are reliable, secure, and cost-effective, 24 hours a day, 7 days a week.*

Efforts to improve service include the call management system, increased use of metrics, increased network monitoring, hardware upgrades, and the Banner Finance/HR implementation.

The security of the network and networked data is the responsibility of ITP, which implements policies set by the Executive Staff. The events of the past two years have made security an even higher priority for federal and state governments, the UNC system, and UNCG. The campus expects protection from a variety of security threats, including illegal access into or tampering with UNCG computer systems by "hackers", and vulnerability to malicious programs and algorithms such as worms and viruses. People off-campus expect protection from a variety of security, copyright infringement, and network disruption threats that might involve UNCG IT resources.

The Data and Planning staff provide services designed to facilitate reliable and user-friendly data access and usage, current space efficiencies, and strategic planning for University growth in these and other areas. These activities support the division's commitment to economy and service.

IT FUNDING IN PROCESS OR UNFUNDED

Information Technology staff expenses, and some hardware, software, and maintenance are paid for by state and fee budgets. Telephone Services is an auxiliary service organization, fully supported by user charges. UNCG always has relied on institutional funding to pay for major hardware upgrades, and initiatives such as introduction of a new enterprise-level system. All capital projects are paid for by institutional funding. When institutional funding is not available for these purposes, initiatives cannot be pursued.

As this plan was being written, institutional funding plans were being developed (but had not yet been approved) for:
- the 2004 hardware and database upgrade, including the transition from VMS to a form of UNIX (see C2:1:6)
- the 2004-2007 Banner Finance/Human Resources implementation (see C3:2:2)
- the buildout of networking – and, subsequently, technology services - for the JMC North Campus (see SD4:2:1)

As this plan was being written, no institutional or UNC system plans were in place to fund:
- the buildout of wireless computing for common areas (see SD1:4:4)
- development of a staff to support wireless computing across the campus (see SD1:4:4)
- the renewal of central campus network equipment that should begin this decade (see C2:2:11)
- maintaining and improving Greensboro RPOP (Regional Point of Presence) services, as part of the NCREN (NC Research and Education Network) (see C2:2:9)

- UNCG participation in a possible UNC "identity management" system to provide access to networked resources across the UNC campuses (see C2:2:5)
- developing, implementing, and maintaining a UNCG enterprise portal, as part of long-term enterprise resource planning (see C2:3:2)
- other potential services listed under C2:1:21

Initiatives for which some funding is available, but more remains to be done, include redundancy for hardware (see C2:2:12), and IT production and development servers for Web services.

RISKS

The ITP plan must include the kind of disclaimer included in corporate reports. All information technology decisions are made under conditions of uncertainty and risk. The life cycle of technology is often short, and changes in technology abrupt and dramatic. Users may change their preferences quickly. Costs reflect IT industry conditions. IT industry changes may alter or eliminate choices. Whereas higher education is inherently slow-moving, the IT industry is fast-moving.

For the past decade, despite budget constraints, UNCG and ITP have made decisions on hardware and software, platforms, and vendors that have been consistent with best practices nationally and regionally. For example, many campuses have had great difficulty implementing new administrative systems. Almost a decade ago, UNCG was the first UNC campus to begin implementing Banner as an integrated, database-backed, campus-wide system. UNCG's implementation of Banner was and will be challenging - but 13 other UNC campuses recently have decided to follow UNCG's lead and implement Banner across all administrative areas.

There can be no guarantee that future choices on hardware, software, platforms, and vendors will be successful. ITP will use great care, and will combine the best judgment from on-campus and off-campus, but this area has inherent risks and uncertainties. These risks include some (e.g., vendors going out of business, being acquired, or changing focus) that are beyond the control of a single campus or even of the entire higher education community. The proposed acquisition of SCT by SunGard is an example.

THE ITP PLAN

The ITP divisional plan follows. UNCG Strategic Directions and Cornerstones are listed as SD1, SD2, etc. UNCG goal clusters, ITP goals and ITP initiatives are listed in the format SD1:1:1:1. The plan includes 211 ITP initiatives under 93 ITP goals.

ITP DIVISIONAL PLAN FOR 2003-2008

STRATEGIC DIRECTION #1

Teaching and Learning:
Promote excellence in teaching and learning as the highest university priority.

SD1:4 Goal Cluster:
Expand use of technology to improve teaching and learning for students on campus and at a distance.

SD1:4:1   Goal: Maintain wired computing labs to meet instructional and open-access needs.
Initiatives:
SD1:4:1:1   Determine future needs for and maintain instructional labs
SD1:4:1:2   Determine future needs for and maintain open-access labs
SD1:4:1:3   Increase access to software of broad interest through "concurrent use" licensing and monitoring
SD1:4:1:4   Increase efficiency of lab support through implementation of "Virtual Helpdesk"

SD1:4:2   Goal: Support Blackboard and other Course Management Software.
Initiatives:
SD1:4:2:1   Continue server support for Blackboard as identified in Memorandum of Understanding with UTLC
SD1:4:2:2   Provide continued system administration for Blackboard servers including OSpatches, server monitoring and backups
SD1:4:2:3   Maintain interfaces with Banner Student System

SD1:4:3   Goal: Increase campus technology training opportunities, as funding permits.
Initiatives:
SD1:4:3:1   Continue to identify faculty, staff, and student training needs
SD1:4:3:2   Develop a mix of in-house and outsourced training to meet campus needs
SD1:4:3:3   Implement improved interface for on-line computer-based training system; publicize, monitor use, and develop related training/certification programs as appropriate

SD1:4:4   Goal: Design, build, operate, and support wireless networking on timetable determined by the campus and as funding permits.
Initiatives:
SD1:4:4:1   Ensure that all wireless infrastructure complies with Wireless Communications Policy
SD1:4:4:2   Implement security and other recommendations in the Wireless Computing Task Force report
SD1:4:4:3   Design, build, and operate campus-wide wireless network for common areas, when that is funded
SD1:4:4:4   Develop models and plan for 6+ year transition from wired to wired-plus-wireless environment

SD1:4:4:5	Support, as appropriate and funded, AAF wireless initiatives in the classroom
SD1:4:4:6	Coordinate planning for data and voice wireless services, as part of identification of future voice communications infrastructure
SD1:4:4:7	Develop and carry out policy governing use of personal digital assistants (PDAs) on the campus network
SD1:4:4:8	Develop and carry out policy regarding use of personal/non-standard equipment on the campus network
SD1:4:4:9	Develop staff to support wireless computing across the campus

SD1:4:5   **Goal: Support implementation of possible AAF or Faculty Senate decisions to require student ownership of computers or PDAs.**

Initiatives:

SD1:4:5:1	Set and implement campus-wide standards regarding computer or PDA equipment owned by students
SD1:4:5:2	Identify equipment to be supported
SD1:4:5:3	Provide support staff, as funding permits

SD1:4:6   **Goal: Support other AAF initiatives relating to technology, as funding permits.**

SD1:4:7   **Goal: Provide interactive video facilities (IRCS Telelearning Center) to meet needs for instruction and meetings.**

Initiatives:

SD1:4:7:1	Renovate and upgrade Telelearning Center facilities and equipment, adding wireless capabilities when that is funded

SD1:4:8   **Goal: Support video streaming, as funding permits.**

Initiatives:

SD1:4:8:1	Develop policies and processes for video streaming
SD1:4:8:2	Purchase and support additional video streaming servers, as funding permits
SD1:4:8:3	Publicize IT streaming media services and solicit streaming media projects
SD1:4:8:4	Replace Campus Broadband video service with IP video streaming service, as funding permits

SD1:4:9   **Goal: Increase off-campus access to UNCG-related computing resources for students, faculty, and staff.**

Initiatives:

SD1:4:9:1	Identify and secure opportunities to provide software licenses for personal equipment at reduced prices through academic discount programs; publicize opportunities to campus constituents

STRATEGIC DIRECTION #2

Creation and Application of Knowledge:
Strengthen research, scholarship, and creative activity.

SD2:8 Goal Cluster:
Use technology to expand and enhance research.

SD2:8:1	**Goal: Develop and implement strategy for support of Web development, research computing, and applications.**

Initiatives:

SD2:8:1:1	Develop and implement process for application development requests for academic projects
SD2:8:1:2	Enhance database support for research
SD2:8:1:3	Enhance server and disk capacity and provide non-production servers, for faculty and student web development and testing, as funding permits
SD2:8:1:4	Develop and support standards for web development

SD2:8:2	**Goal: Meet high performance computing needs of faculty and graduate students.**

Initiatives:

SD2:8:2:1	Participate in NC Grid computing initiative
SD2:8:2:2	Where appropriate, develop UNCG clustered computing environment
SD2:8:2:3	Identify, define and publicize UNC system-wide high performance computing (HPC) resources available to UNCG faculty, staff, and students, and facilitate access

SD2:8:3	**Goal: Utilize Internet 2 to support faculty and student needs.**

Initiatives:

SD2:8:3:1	Provide network routing speed equivalent to Internet 2 members
SD2:8:3:2	Join Internet 2, if AAF sees programmatic advantages
SD2:8:3:3	Plan and implement Internet Protocol Version 6 within select parts of the campus

SD2:8:4	**Goal: Provide faculty, staff, and students with access to UNCG institutional data sources.**

Initiatives:

SD2:8:4:1	Develop a term-based, longitudinal data warehouse
SD2:8:4:2	Develop a data dictionary that provides guidance in the proper use of institutional data

STRATEGIC DIRECTION #3

Campus Community:
Become a more diverse and actively engaged community of students, faculty, staff, and alumni.

SD3:6 Goal Cluster:
Ensure a positive and supportive environment for faculty, staff, and students.

SD3:6:1	**Goal: Provide positive working environment for ITP staff.**
Initiatives:	
SD3:6:1:1	Implement 2003 ITP performance evaluation system for all EPA and SPA staff
SD3:6:1:2	Closely monitor ITP staff work plans, to encourage successful performance
SD3:6:1:3	Develop and use "ITP Standards of Conduct"

SD3:6:2	**Goal: Provide management assistance to ITP managers, to encourage positive personnel management relationships.**
Initiatives:	
SD3:6:2:1	Identify appropriate management training opportunities
SD3:6:2:2	Provide training for senior managers

SD3:6:3	**Goal: Create and utilize an IT staff committee to recommend solutions to select issues that cut across IT departments.**
Initiatives:	
SD3:6:3:1	Utilize the Directors' Advisory Group

SD3:6:4	**Goal: Provide opportunities for IT staff retraining and reclassification.**
Initiatives:	
SD3:6:4:1	Maintain staff training budget at a level higher than the UNC and national peer average
SD3:6:4:2	Provide retraining opportunities in association with transitions for Operations Center, Network Services, and Network Operations Center (NOC)
SD3:6:4:3	Combine IRCS Technical Services and Lab Technician staff, providing training to expand skills and reclassifying staff as appropriate
SD3:6:4:4	Develop program for certification requirements

STRATEGIC DIRECTION #4

Economy and Quality of Life: *Be a leader in strengthening the economy of the Piedmont Triad and enhancing the quality of life for its citizens.*

SD4:1 Goal Cluster: **Establish and maintain collaborations and alliances among academic institutions, Action Greensboro, economic development agencies, and industry.**

SD4:1:1	**Goal: Support university-community partnerships identified by Chancellor and Vice Chancellor for ITP.**
Initiatives:	
SD4:1:1:1	Given demographic trends toward an older population, maintain the data and planning capacity (developed by ITP over 4 years) for partnerships with existing and new retirement institutions and facilities
SD4:1:1:2	Given the continuing Triad interest in economic development, maintain the data and planning capacity to work with community institutions that may become interested in economic development benefits related to information technology.

SD4:2 Goal Cluster: **Establish, with N.C. A&T State University, The Joint Millennial Campus.**

SD4:2:1	**Goal: Plan for and implement networking for JMC North Campus, as funding permits.**
Initiatives:	
SD4:2:1:1	Plan for and implement data networking for North Campus
SD4:2:1:2	Plan for and implement voice networking for North Campus

SD4:2:2	**Goal: Plan for and implement space management for North Campus.**
Initiatives:	
SD4:2:2:1	Work with BAF to develop facilities renovation plans, and implement
SD4:2:2:2	Work with AAF and BAF to develop space utilization plans, and implement
SD4:2:2:3	Plan for space inventory and reporting for North Campus

SD4:2:3	**Goal: Create management mechanism for technology services on North Campus, in concert with A&T and JMC non-profit corporation.**

SD4:2:4	**Goal: Participate in planning for JMC South Campus.**

SD4:3 Goal Cluster: **Develop and promote new opportunities for lifelong learning.**

SD4:3:1	**Goal: Provide technology infrastructure to support AAF distance education plan, as funds permit.**

SD4:3:2	**Goal: Provide technology infrastructure on satellite campuses at the airport and elsewhere, as needed and as funds permit.**
Initiatives:	
SD4:3:3:2	Plan with AAF for required network access and connection to the main campus

STRATEGIC DIRECTION #5

Access and Student Success: *Recruit and retain students with the potential to succeed in a rigorous academic environment.*
SD5:2 Goal Cluster: **Increase enrollments at all levels and among various student populations.**

SD5:2:1	**Goal: Provide systems support for Enrollment Services.**

SD5:2:2	**Goal: Develop Virtual Advising system, as staff resources permit.**

CORNERSTONE #1

Public and Private Support: *Pursue and effectively use all sources of public and private support.*
C1:4 Goal Cluster: **Improve capacity of UNCG to raise private funds and provide proper stewardship.**
C1:4:1   **Goal: Support information systems needs of Development and College/Schools.**

CORNERSTONE #2

Technology: *Strengthen technology resources for effective use in academic programs and administrative services.*
C2:1 Goal Cluster: **Strengthen technology services available to the campus, while implementing cost-effective technology solutions that take advantage of economies of scale.**
C2:1:1   **Goal: Build on cost-effectiveness of central computing organization to achieve economies of scale, while providing good service and security.** Initiatives: C2:1:1:1   Maintain and expand the use of corporate approaches to the application of technology for higher education support & auxiliary services C2:1:1:2   Acquire and implement a software monitoring system to enable cost-effective software licensing and delivery
C2:1:2   **Goal: Make Information Technology a more client-centered, partner-centered service organization.** Initiatives: C2:1:2:1   Ensure IT is aligned with client needs C2:1:2:2   Adopt and implement ITP Vision Statement, and IT Supported Services Statement and List C2:1:2:3   Make client service part of every ITP staff member's work plan C2:1:2:4   Provide customer service training to all IT staff C2:1:2:5   Implement an IT outreach program to publicize IT activities and improve communication between IT and clients
C2:1:3   **Goal: Improve IT call management/incident management system.** Initiatives: C2:1:3:1   Implement, evaluate, and modify (as needed) 6-TECH and 6-TECH routing system C2:1:3:2   Develop and use 6-TECH metrics to improve client services C2:1:3:3   Improve 6-TECH call support system by transitioning from student to full-time first-level support staff

C2:1:3:4	Develop and improve IT service request tracking software system

C2:1:4	**Goal: Increase campus understanding of technology-related events, and increase IT understanding of client timetables.**
Initiatives:	
C2:1:4:1	Manage Critical Events Calendar for the campus
C2:1:4:2	Notify campus of all planned and unplanned service interruptions

C2:1:5	**Goal: Increase use of metrics and benchmarking to improve client service.**
Initiatives:	
C2:1:5:1	Use ITP metrics (KSI) as management tool
C2:1:5:2	Use Educause and State of NC IT data to create detailed benchmarking studies
C2:1:5:3	Expand use of UNC and ITP surveys and focus group studies as management tools
C2:1:5:4	Continue development of key metrics and data collection methods

C2:1:6	**Goal: Implement and manage major upgrade in hardware for administrative systems.**
Initiatives:	
C2:1:6:1	Recognizing the considerable risks involved in choosing a new platform, select a Unix platform from among proprietary and open-source options
C2:1:6:2	Identify timetables and funding for 2004 upgrade, and implement
C2:1:6:3	Provide for full redundancy for hardware supporting enterprise applications, as funding permits
C2:1:6:4	Provide staff training needed for transition from VMS to UNIX

C2:1:7	**Goal: Implement and manage upgrades in all systems supporting enterprise applications.**
Initiatives:	
C2:1:7:1	Replace Campus Pipeline Server
C2:1:7:2	Replace and expand general Unix file space servers
C2:1:7:3	Implement redundant services, as funding permits
C2:1:7:4	Identify funding for Oracle campus-wide license and maintenance
C2:1:7:5	Identify funds for other software maintenance

C2:1:8	**Goal: Increase staff to support all IT areas, as funding permits.**
Initiatives:	
C2:1:8:1	Increase staff in database administration and other Systems areas
C2:1:8:2	Increase staff in MIS to support Banner Finance/HR
C2:1:8:3	Increase staff in Networks for Network Operations Center implementation
C2:1:8:4	Increase staff in IRCS for call management and tech services
C2:1:8:5	Build staff to support wireless computing, in line with campus needs (see SD1:4:4:9)

C2:1:9	**Goal: Move toward provision of 24x7 IT support, as funding permits.**
Initiatives:	
C2:1:9:1	Move toward goal of 24x7 Operations and On-Call IT staff
C2:1:9:2	Extend hours for computing labs

C2:1:9:3	Extend hours for Help Desk, to continue to stay ahead of UNC and national peer benchmark standards for Help Desks

C2:1:10 **Goal: Maintain and improve e-mail communication.**
Initiatives:
C2:1:10:1 Implement single e-mail system, with smooth transition from old systems
C2:1:10:2 Implement and manage virus and spam filtering systems

C2:1:11 **Goal: Provide cost-effective, high-quality voice communications service.**
Initiatives:
C2:1:11:1 Provide cost-effective, high-quality Centrex telephone service through current UNCG contract
C2:1:11:2 Conduct Voice over IP tests
C2:1:11:3 Study alternative means of providing voice services, and select most cost-effective for 2005 and beyond
C2:1:11:4 If needed, issue and respond to RFPs for campus-wide voice service, and negotiate new contract to replace 2002-2006 contract

C2:1:12 **Goal: Manage Telephone Services as cost-effective service organization.**
Initiatives:
C2:1:12:1 Meet budget targets for TSV
C2:1:12:2 Meet service targets for TSV
C2:1:12:3 If cost-effective, implement a telemanagement software package to improve voice services billing and work order processes.

C2:1:13 **Goal: Coordinate (and integrate as appropriate) data and voice networking services, while keeping funding and reporting lines separate.**
Initiatives:
C2:1:13:1 Coordinate moves/adds/changes for voice and data services

C2:1:14 **Goal: Expand IT project management, as management tool.**
Initiatives:
C2:1:14:1 Continue project management development
C2:1:14:2 Identify improved software tools for work plan and resource tracking

C2:1:15 **Goal: Maintain clear priority-setting process internal to ITP and for IT administrative systems clients.**
Initiatives:
C2:1:15:1 Implement new service request model for MIS
C2:1:15:2 Expand MIS model to IT Systems and Networks

C2:1:16 **Goal: Provide adequate facilities for ITP departments to permit ITP to provide a more-than-adequate level of service.**
Initiatives:
C2:1:16:1 Plan for renovation of bond-funded buildings that include ITP staff/facilities
C2:1:16:2 Plan for renovation or construction of other buildings that include ITP staff/facilities

C2:1:17	**Goal: Cooperate with UNC Alliance and other UNC initiatives as appropriate.**

C2:1:18   **Goal: Encourage economy through campus-wide lifecycle planning for IT products and services.**

Initiatives:

C2:1:18:1   Use leases and other means for IT purchases
C2:1:18:2   Increase campus understanding of and compliance with Supported Products Policy and List
C2:1:18:3   Cooperate with Purchasing to maximize economy and compliance with policies
C2:1:18:4   Cooperate as appropriate with state agencies interested in IT purchases
C2:1:18:5   Develop computer depot concept, where desktop procurement is coordinated on an enterprise basis, and IRCS handles computer equipment as it arrives and leaves campus

C2:1:19   **Goal: Maintain split-funded IRCS technician program as long as campus-wide program meets School and ITP needs.**

Initiatives:

C2:1:19:1   Maintain communication between IT and School supervisors to ensure success of split-funded technician program

C2:1:20   **Goal: Implement single-user name and password in non-administrative systems by 2004-2005.**

Initiatives:

C2:1:20:1   Create authentication tree in NDS
C2:1:20:2   Implement NDS authentication in Solaris, e-mail, and Campus Pipeline environments
C2:1:20:3   Implement password syncing between NDS and ADS

C2:1:21   **Goal: Set priorities and timetables and, where appropriate, identify funding sources for presently unbudgeted projects.**

Initiatives:

C2:1:21:1   Web services development and production environment
C2:1:21:2   Portal (Luminus) project
C2:1:21:3   Enterprise systems backup across all platforms
C2:1:21:4   Redundancy for services lacking redundancy
C2:1:21:5   Lab and desktop image delivery server
C2:1:21:6   Development environment for space management system (FAMIS)
C2:1:21:7   Renewal of equipment in TeleLearning Center (interactive video facilities, connected to NCREN/NCIH)
C2:1:21:8   UNCG participation in UNC system initiatives on NC Grid and High Performance Computing
C2:1:21:9   Wireless computing

C2:1:22   **Goal: As resources permit, meet other needs of UNCG faculty, staff, and students for data and voice services.**

C2:2 Goal Cluster:
Protect and enhance the reliability, security, and capacity of UNCG networks, and the servers that support UNCG administrative enterprise systems.

C2:2:1   Goal: Make security of network and networked data a high UNCG priority.
Initiatives:
C2:2:1:1   Support UNCG Information Security Committee
C2:2:1:2   Implement all Executive Staff-approved security policies
C2:2:1:3   Cooperate with federal, state, and UNC offices interested in information security
C2:2:1:4   Comply with all federal and state laws relating to technology
C2:2:1:5   Encourage faculty, staff, and student compliance with all federal and state laws relating to technology

C2:2:2   Goal: Implement and manage Enterprise Systems Policy (ESP).
Initiatives:
C2:2:2:1   Complete initial ESP project with identified servers
C2:2:2:2   Continue to identify ESP server candidates and move servers that meet ESP criteria
C2:2:2:3   Provide continuous power and network access to ESP server area

C2:2:3   Goal: Increase standardization and security of desktop computers.
Initiatives:
C2:2:3:1   Complete project to establish and maintain a single base-image for all IT-delivered and supported PC's
C2:2:3:2   Investigate and evaluate desirability of programs to have vendors ship computers with base images
C2:2:3:3   Limit IT support to those desktop operating systems still actively supported and maintained by the vendor
C2:2:3:4   Systematically investigate new OS releases prior to their use on campus

C2:2:4   Goal: Implement and manage Network Operations Center (NOC), to improve monitoring of network performance.
Initiatives:
C2:2:4:1   Complete NOC design, identifying space, personnel, and tools
C2:2:4:2   As funding permits, implement project plan to build and staff the NOC
C2:2:4:3   Plan for McNutt renovation to hold the NOC

C2:2:5   Goal: Implement and manage identity management and authentication policies.
Initiatives:
C2:2:5:1   Manage campus authentication
C2:2:5:2   Cooperate with UNC system in developing cross–campus "identity management" system

C2:2:6   Goal: Improve network security and reliability by protecting and enhancing ITP wiring closets.
Initiatives:
C2:2:6:1   Implement access management for wiring closets
C2:2:6:2   Ensure that conditions in wiring closets are within acceptable working standards

C2:2:7   Goal: Improve network reliability by adding generator and UPS in key sites.
Initiatives:
C2:2:7:1   Add generator and UPS in Forney
C2:2:7:2   Connect Jackson core distribution facility into Jackson emergency generator

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C2:2:8   Goal: Improve hardware capacity planning.
Initiatives:
C2:2:8:1   Create metrics to monitor current hardware capacity
C2:2:8:2   Create trend analysis model for services provided

C2:2:9   Goal: Cooperate with NCREN to strengthen UNCG network resources.
Initiatives:
C2:2:9:1   Protect and enhance Greensboro RPOP
C2:2:9:2   Cooperate with NCREN 3

C2:2:10   Goal: Manage UNCG physical resources related to telecommunications and computing.
Initiatives:
C2:2:10:1 Adopt and implement duct bank policy
C2:2:10:2 Continue to reserve building roofs for ITP use, to provide service to UNCG
C2:2:10:3 If cost-effective, implement a telemanagement software package to consolidate tracking of voice/data wiring infrastructure

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C2:2:11   Goal: Plan for renewal of network equipment.
Initiatives:
C2:2:11:1 Seek ways to return to plan in UNC 1999 ITS (logistical needs section) to identify funding for regular replacement of network equipment
C2:2:11:2 Seek ways to return to UNC 1999 ITS PricewaterhouseCoopers plan to increase network/systems funding and staff to meet national benchmarking standards
C2:2:11:3 Develop replacement plan based on technology needs

C2:2:12   Goal: Increase redundancy for servers supporting enterprise and academic systems, as funding permits.
Initiatives:
C2:2:12:1 Provide redundant Academic Oracle servers
C2:2:12:2 Provide redundant Academic Solaris servers
C2:2:12:3 Provide redundant Data Analysis/Research services on Solaris
C2:2:12:4 Provide redundant Campus Pipeline servers
C2:2:12:5 Provide redundant Space Management servers
C2:2:12:6 Provide redundant Help Desk (magic) servers
C2:2:12:7 Provide redundant Uniprint servers
C2:2:12:8 Provide redundant General File Space Solaris servers

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C2:2:13   Goal: Expand and maintain network services to adjoining areas with UNCG facilities.
Initiatives:
C2:2:13:1 Expand and maintain networking for 1605 Spring Garden Street

C2:2:13:2   Expand and maintain networking for Becher-Weaver and 2900 Oakland warehouse

C2:2:14   **Goal: Adjust residence hall network utilization of network resources, as needed.** Initiatives: C2:2:14:1   Educate campus about file -sharing C2:2:14:2   Explore advances in traffic shaping and service delivery

C2:2:15   **Goal: Study possible benefits of Linux to UNCG and, where appropriate, implement Linux.**

C2:3 Goal Cluster: **Make UNCG a Web-enabled campus, using the Web as a regular means of doing business and providing service to students, faculty, staff, alumni, and the community.**

C2:3:1   **Goal: Use integrated resources of ITP to support Web development uses by faculty, staff, and students.** Initiatives: C2:3:1:1   Provide IT Webmaster support C2:3:1:2   Establish development and production platforms for all Web services, as funding permits C2:3:1:3   Cooperate with Web Oversight Committee in implementation of WEB 3 C2:3:1:4   Develop a unified IT web site, simplifying client access to IT web resources

C2:3:2   **Goal: Take steps, as funds permit, toward establishment of an enterprise portal, as recommended by the Portal Task Force.**

C2:3:3   **Goal: Provide online information and support for accessing and utilizing institutional data in support of reporting and planning processes.** Initiatives: C2:3:3:1   Create a data management web site C2:3:3:2   Create an online dictionary of computerized institutional data C2:3:3:3   Develop Faculty On-Line Activities Journal, as staff resources permit

C2:3:4   **Goal: Expand and improve web-based aids for Records Management.**

C2:4 Goal Cluster: **Maintain UNCG's status as an Information Technology Management Flexibility campus, and comply with appropriate federal and state technology standards.**

C2:4:1   **Goal: Maintain UNCG's ITMF status.** Initiatives: C2:4:4:1   Inform and work with UNCG BOT ITMF committee C2:3:4:2   Inform and work with UNC CIO and BOG C2:3:4:3   Inform and work with state CIO, and others named in ITMF statute

C2:4:2	**Goal: Develop, get approval for, and implement Network and Networked Data Security Policy.**
C2:4:3	**Goal: Develop, get approval for, and implement Appropriate Use of Computing Policy.**
C2:4:4	**Goal: Develop, get approval for, and implement any additional ITMF policies in areas identified by the UNC CIOs.**

CORNERSTONE #3

Administration: *Use effective policies and processes to deliver services to the University community.*
C3:1 Goal Cluster: **Maintain accountability and fiscal integrity over all financial operations to include clean audits / unqualified opinions and no major audit findings.**
C3:1:1   Goal: Maintain IT technical standards and organizational control so that any findings from state Information Systems audits do not endanger UNCG's financial audit or budget flexibility status.
C3:2 Goal Cluster: **Upgrade and improve the functionality and efficiency of administrative systems and processes.**
C3:2:1   Goal: Continue development of UNCG Enterprise Resource Planning (ERP) systems.
C3:2:2   Goal: Implement Banner Finance and HR systems. Initiatives: C3:2:2:1   Identify timetables, funding, and staffing for Banner, and (with Business Affairs partner) implement C3:2:2:2   Support legacy Plus systems as needed
C3:2:3   Goal: When implemented, manage Banner enterprise systems in coordinated way, with all clients involved.
C3:2:4   Goal: Develop, implement, and manage a campus-wide data management function. Initiatives: C3:2:4:1   Data Management department to develop data management plan C3:2:4:2   Develop data warehouse C3:2:4:3   Cooperate with UNC Data Mart, as appropriate C3:2:4:4   Improve data quality and usefulness of data for all UNCG clients

C3:2:5	**Goal: Support administrative initiatives involving technology – in all divisions – as funding permits.**

C3:2:6	**Goal: Revise IT Disaster Recover/Business Continuity Plan.**
Initiatives:	
C3:2:6:1	Given increased security risks, and auditors' interest in disaster recovery and business continuity, develop a more detailed, redundant, and frequently tested plan.

C3:2:7	**Goal: Maintain an updated University Policy Manual.**

C3:5   Goal Cluster:
Maintain a personnel system that meets the needs of the University and the staff.

Goal: (*see all goals under SD 3:6)*

C3:7 Goal Cluster:
Implement University planning and research.

C3:7:1	**Goal: Monitor UNCG Plan 2003-2008.**
Initiatives:	
C3:7:1:1	Assist Divisional coordinators in developing and updating UNCG Plan 2003-2008
C3:7:1:2	Publish and distribute UNCG 2003-2008 document
C3:7:1:3	Develop and implement annual strategic plans
C3:7:1:4	Develop and distribute annual assessment of strategic plans ("Planning Outcomes")
C3:7:1:5	Establish and monitor Metrics for UNCG Plan 2003-2008
C3:7:1:6	Prepare for 2008-2013 UNCG Plan in 2006-2008

C3:7:2	**Goal: Work with University Planning Council to coordinate University-wide planning.**

C3:7:3	**Goal: Develop and implement UNCG Data Warehouse (see C3:2:4).**
Initiatives:	
C3:7:3:1	Develop rules for reporting against production database

C3:7:4	**Goal: Plan for development of on-line metrics for UNCG planning and ITP.**

C3:7:5	**Goal: Prepare midpoint review of ITP Plan for second half of five-year planning cycle.**

C3:7:6	**Goal: As resources permit, meet other needs of University faculty, staff, and students for data, planning, and management services.**

C3:8 Goal Cluster:
Enhance and maintain the security of legally protected information.

C3:8:1	**Goal: Work with Information Security Committee and functional departments, to maintain security.**
Initiatives:	
C3:8:1:1	Work with Information Security Committee in complying with HIPAA
C3:8:1:2	Work with Information Security Committee in complying with DMCA
C3:8:1:3	Comply with all federal/state laws (see C2:2:1)
C3:8:1:4	Associate Vice Chancellor for Data and Planning Services to provide leadership on IT-related compliance

C3:8:2	**Goal: Assist functional departments with maintenance of University records in compliance with state Public Record Laws.**
Initiatives:	
C3:8:2:1	Update and create Program Schedules for departments with unique records
C3:8:2:2	Provide training, resources, and advice to increase records management compliance and efficiency in maintaining University records

CORNERSTONE #4

Facilities:
Build and maintain high-quality facilities that permit good academic and support programs to operate.

C4:1 Goal Cluster:
Design and construct new and renovated facilities on schedule and within budget.

C4:1:1	**Goal: Through University Planning Council and Space Management process, cooperate in setting priorities for facilities outside the 2001-2008 bond-funded package.**
Initiatives:	
C4:1:1:1	Set priorities for 2008+ bond package
C4:1:1:2	Set priorities for other construction, renovation, purchase

C4:5 Goal Cluster:
Manage University space, including use of accurate and detailed space management data.

C4:5:1	**Goal: Strategic planning for space.**
Initiatives:	
C4:5:1:1	Develop space plan for growth
C4:5:1:2	Do location planning (classroom buildings on central campus, periphery, and off the main campus)
C4:5:1:3	Provide space data to support indirect cost recovery

C4:5:2	**Goal: Tactical management of space.**
Initiatives:	
C4:5:2:1	Manage inventory, assignments, and reporting
C4:5:2:2	Coordinate space management with partners in all divisions

C4:5:3	**Goal: CAFM system (supported by Space Management and IT) to become university-wide resource.**
Initiatives:	
C4:5:3:1	Tool for OSM and Facilities
C4:5:3:2	Data for state reporting and state/UNC analytical studies
C4:5:3:3	Read-only resource for the campus

C4:5:4	**Goal: Continue to implement Facility Use Policy to improve use of University facilities by on-campus and off-campus groups.**
Initiatives:	
C4:5:4:1	Evaluate and refine event planning processes to facilitate ease of planning events through regular meetings of event managers, reserving offices, and Facility Use Advisory Committee
C4:5:4:2	Advertise and communicate Facility Use policy to campus through training sessions, and other opportunities