I. Minutes of May 7, 2004 Meeting

II. Facilities

A. Designer Selection Approved by Finance and Facilities Since Previous Meeting

   1. Designer Selection for Carol Belk Building
      Michael Hining Architects   Chapel Hill, NC

   2. Designer Selection for North Recreation Fields
      Site Solutions            Charlotte, NC

B. Status of Major Capital Projects

C. Schematic Design for Old Cafeteria

III. Finances

A. Budget Updates
   (Current information will be distributed as a handout at the meeting)

IV. Information Technology

A. Marketing Technology to Students

B. Year End Review
The Finance and Facilities Committee met on May 7, 2004. In attendance were Chair Mike Kelly and committee members David Brody, Steve Showfety, Margaret Ward, and Fielding Miller. George Harrell and Jeff Huskamp participated. The committee followed the agenda and discussed the following:

1. Minutes of the March 26, 2004 meeting were accepted as distributed in the Trustees materials. Motion to accept the minutes was made and approved.

2. Designer selection for the Eastern Carolina Cardiovascular Disease Institute that was approved.

3. Status of major capital projects was presented as a report. In response to a question concerning the Old Cafeteria Renovations project by Mrs. Ward, Dr. Harrell advised that a designer update would be available by the July Board meeting. Dr. Harrell recognized Bill Bagnell, Director of Engineering and Architectural Services for his diligent work in drafting the Guaranteed Maximum Price (GMP) for the Baseball Stadium and the Nursing/Allied Health Project during a time of construction market uncertainty.

4. Dr. Harrell requested that a towing fee of $20.00 and a lost decal fee of $25.00 be approved. Motion passed.

5. Dr. Harrell request approval of the East Carolina Parking Ordinance dated May 7, 2004 that included the approved fees and procedural updates. Motion approved.

6. Dr. Harrell requested site approval for the Gamma Knife addition to the MRI building at the Health Science Campus. In response to a question by Mr. Hill, Dr. Harrell responded that the approval did not constitutes approval of a lease agreement, however, that item would not normally come before the Board for action due to the dollar value.

7. Dr. Harrell introduced a request for design approval of the Pirate Ticket Office Project. Chair Kelly discussed moving the decision to the October Board meeting. There was consensus by the committee for this action.

8. Dr. Huskamp reported on Student Computer Requirement: Starting in Fall 2004, 14 programs at ECU will be requiring their students to purchase a computer and 6 others will strongly recommend a computer when the students enter their major. This will affect approximately 1700 students when fully implemented. ECU has created a strategic partnership with IBM and Apple Computer to supply wireless laptops for this program at a substantial discount from normal education pricing. This pricing can be utilized by any student, faculty or staff member. One percent of the laptops will be donated by our partners for financially needy students.

Students purchasing computers through this program will receive support, warranty services and loaner machines as needed on campus through our central Academic Computing support group. This program was rolled out at a press conference on April 21, 2004. This is
a strategic step forward for East Carolina University and will enable new teaching and learning tools to be utilized in the classroom for more effective instruction.

9. Dr. Huskamp also discussed Wireless Coverage on Campus. Wireless coverage on campus is increasing. Currently 56% of the building square footage on East Campus has wireless coverage with an anticipated increase to 73% by the end of this fiscal year. On West Campus, we now have 62% wireless coverage. To complete wireless in buildings on East Campus will require approximately $160,000 in funding. At the existing rate of expenditures on this project of $50,000/year, we expect to complete this in three years. For the West Campus, we need approximately $70,000 in funding. We will continue to look for opportunities to accelerate wireless implementation.
June 1, 2004

MEMORANDUM

TO: Bill Bagnell

FROM: Gail Jordan

SUBJ: Designer Selection – Carol Belk Building Renovation and Conversion to General Academic Use

We have received approval from four of the five Finance and Facilities Committee members approving the designer selection for the Carol Belk Building Renovation and Conversion to General Academic Use. You may proceed with the next steps of the process.

cc: J. Smith
    G. Harrell
May 21, 2004

MEMORANDUM

TO: Finance and Facilities Committee

FROM: Gail L. Jordan

SUBJ: Designer Selection – Carol Belk Building Renovation and Conversion to General Academic Use

Attached is the recommendation from the designer pre-selection committee in regard to the Carol Belk Building Renovation and Conversion to General Academic Use project.

I would appreciate it if you would review this recommendation, register your vote below and return by fax. Should you have any questions regarding this recommendation, please call Bill Bagnell at (252) 328-6858. Thank you.

Attachment

cc: J. Smith
    G. Harrell
    B. Bagnell

Approved Date

Disapproved Date
MEMORANDUM

TO: Dr. George W. Harrell
FROM: William E. Bagnell
DATE: May 12, 2004
SUBJ: Designer Selection
Carol Belk Building Renovation and Conversion to General Academic Use

The designer pre-selection committee recommends the following three firms in prioritized order:
1. Michael Hining Architects Chapel Hill, NC
2. Davis Kane Raleigh, NC
3. Walter Robbs Callahan & Pierce Winston-Salem, NC

The designer pre-selection committee consisted of Dr. George W. Harrell – Senior Associate Vice Chancellor Campus Operations, Dr. Henry Peel - Vice Provost, Dr. Glen Gilbert - Dean of Health & Human Performance, Mr. Ken Kisida – Executive Director of Facilities Services, Mr. William E. Bagnell – Director of Facilities Engineering and Architectural Services, Mr. Mark E. Myer, and Mr. Stephen D. Atkinson – Project Managers of Facilities Engineering and Architectural Services.

To the best of our knowledge and belief, all steps in this selection were conducted in accordance with requirements of the State Building Commission, as they apply to the institutions of the University of North Carolina.

This project is a bond project that will include the renovation of deferred maintenance needs and the conversion of the building to general academic use. Work will include asbestos abatement, roof replacement, updating the existing elevators, improving lighting and energy efficiency, upgrade and or retrofit of existing plumbing, mechanical, and electrical systems, handicap accessibility, building security and safety, space reconfiguration, fire sprinkler and fire alarm systems.

Approval by the Board of Trustees is requested. If you have any questions or need additional information, please do not hesitate to call.
June 23, 2004

MEMORANDUM

TO:    Bill Bagnell

FROM:  George W. Harrell

SUBJ:  Designer Selection-North Recreation Fields

We have received approval from four of the five Finance and Facilities Committee members approving the designer selection for the North Recreation Fields. You may proceed with the next steps of the process.

[Signature]

George W. Harrell, PhD
Senior Associate Vice Chancellor
for Campus Operations

Cc:    J. Smith
June 16, 2004

MEMORANDUM

TO: Finance and Facilities Committee

FROM: Kim Walters, Executive Assistant

SUBJ: Designer Selection-North Recreation Fields

Attached is the recommendation from the designer pre-selection committee in regard to the North Recreation Fields.

I would appreciate it if you would review this recommendation, register your vote below and return by fax. Please note that the fax number that you will now be using is (252) 328-4259. Should you have any questions regarding this recommendation, please call Bill Bagnell at (252) 328-6858. I can also be reached at the same number. Thank you.

Attachment

Cc: J. Smith
    G. Harrell
    B. Bagnell

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MEMORANDUM

TO: Dr. George Harrell
FROM: Bill Bagnell
DATE: June 14, 2004
SUBJ: Designer Pre-Selection
North Recreation Fields
Code #: 40336 Item #: 306

The designer pre-selection committee recommends the following three firms in prioritized order:
1. Site Solutions Charlotte, NC
2. Cline Design Associates Raleigh, NC
3. The Landart Company Myrtle Beach, SC

The project is to provide master planning and incremental development of a 129 acre site outside the city limits of Greenville at the intersection of NC 33 and US 264 highways. The site is to include roadways, parking, infrastructure, support facilities, and fields for intramurals and club sport activities. Once the site is fully developed, fields would include but not be limited to football, soccer, softball, rugby, lacrosse, ultimate Frisbee, and field hockey. A large lake for boating and swimming, a skate park and a student services building is also planned.

The designer pre-selection committee consisted of Dr. George Harrell, Senior Associate Vice Chancellor for Campus Operations, Bill Bagnell and Gina Shoemaker, Project Manager of Facilities Engineering & Architectural Services, Ken Kisida, Executive Director of Facilities Services, Bill Clutter, Assistant Vice Chancellor for Student Life, John Gill, Assistant Director of Facilities Services-Grounds Services/Landscape Architect, Nancy Mize, Director of Student Recreation Services, Shannon O'Donnell, Board of Trustee Member & Student Body President.

To the best of our knowledge and belief, all steps in this selection were conducted in accordance with requirements of the State Building Commission as they apply to the institutions of the University of North Carolina.

Approval by the Board of Trustees is requested. If you have any questions or need additional information, please do not hesitate to call.
DESIGNER SELECTION SUMMARY RATINGS
North Recreation Fields

<table>
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<th>Design Firms</th>
<th>Shortlist Interviewers</th>
<th>Rating</th>
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<td>The Landart Company</td>
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Ratings Used
1. First choice
2. Second choice
3. Third choice
4. Fourth choice
5. Fifth choice

Interviewers
A. Bill Clutter
B. Ken Kisida
C. Gia Shoemaker
D. Nancy Mize
E. John Gill
F. Shannon O'Donnell
G. Dr. George Harrell
H. Bill Bagnell

Eastern Carolina Cardiovascular Disease Institute
Interview Evaluation Form Criteria

_How well does this firm show...?_

A project leader who has the leadership and relationship skills necessary for a successful project.

An overall approach to the special needs of an athletic facility

Organization to optimally address engineering issues unique to this project

Adequate experience in working with landscape design

Past success at masterplanning athletic fields and outdoor spaces

A successful approach to construction oversight that recognizes the challenge of managing low bid contractors

Utilization of Historically-Under Business (HUBs)
WEST END DINING:
A 600 seat dining hall offering food court venues and enhancing food service for students in the central and west areas of the campus. A formal campus plaza is also included. Design and Construction Costs are $12,675,000.
Designer: Calloway, Johnson, Moore and West, Winston Salem, NC
General Contractor: D.H. Griffin, Inc., Raleigh, NC
Project Completion Date: September 27, 2004
Anticipated Completion Date: October 29, 2004
PROJECT STATUS: Project is under construction and approximately 70% complete. The flat roof portion is complete. The storefront system has started. Glass installation should begin by the first week in July. All floor slabs are complete. Precast installation is 85% complete. Site masonry walls are complete. Curb and gutter work has begun. Final site grading has begun. Mechanical, electrical and plumbing rough-ins on the 1st floor are 85% complete. The contractor is claiming 18 days delay due to winter weather and rain.

RIVERS BUILDING ADDITION:
A three story, 35,000 SF addition and 4,000 SF Renovation to the Rivers Building. Space provided will include offices and classrooms for Nursing and Human Environmental Sciences. Design and Construction costs are $10,070,000.
Designer: Pearce, Brinkley, Cease & Lee Architects, Raleigh, NC
General Contractor: D.H. Griffin, Inc., Raleigh, NC
Project Completion Date: February 27, 2004.
Anticipated Completion Date: July 16, 2004
PROJECT STATUS: Project is under construction and approximately 90% complete. Drywall and studs are approximately 99% complete. Ceiling grid is complete, tile installation is 90% complete, painting is approximately 90% complete. Flooring is 90% complete. Plaza site and structural work is 60% complete. Pre-final inspections have started on the third floor, and the second and first floor pre-final inspections are scheduled for 6/22. Contractor has scheduled July 2nd for completion of the interior and the site work, except for the plaza area which will finish on July 16th. Contractor is claiming 89 days of delay for wet weather and foundation problems.
STATUS OF CAPITAL CONSTRUCTION PROJECTS
EAST CAROLINA UNIVERSITY

FLANAGAN BUILDING RENOVATION:
This structure will be renovated to address academic space needs for several academic units including: Archaeology, Anthropology, Geology, Institute for Coastal and Marine Resources, Coastal Resource Management, and Math & Science Education. Project Budget is $13,844,000.

Designer: Brown Jurkowski Lord Aeck Sargent, Raleigh, NC
General Contractor: Hudson Brothers Construction, Greenville, NC

Project Completion Date: November 7, 2004
Anticipated Completion Date: November 7, 2004

PROJECT STATUS: Project is under construction and approximately 45% complete. Most of the site utility relocations are completed. Prime Painting and ceiling grid have started on the 3rd floor. Roof replacements are underway. New windows have been installed on the 2nd and 3rd floor. Plumbing, HVAC, and electrical rough-ins are nearly complete on 2nd & 3rd Floor. Air Handling units are scheduled to arrive mid-July. Data/Telecom has started on all three floors. Gypsum board is nearly complete on the 2nd and 3rd floor and steel studs are 95% complete on the first floor.

ALLIED HEALTH, NURSING AND HEALTH SCIENCES LIBRARY:
New construction on the Health Sciences Campus that will re-locate the Schools of Allied Health, Nursing and the Health Sciences Library. The building will be a 3 and 4-story structure, consisting 303,000 SF, a 25-acre site with parking lots, and a new campus entrance.

Designer: Walter, Robbs, Callahan and Pierce, Winston Salem, NC
CM @ Risk: Bovis Lend Lease, Raleigh, NC

Project Status: The Construction Document Phase is complete and final drawings were approved by State Construction and the Department of Insurance. The Guaranteed Maximum Price submitted by Bovis Lend Lease has been reconciled and approved by the State Construction Office. The first set of bid packages are scheduled to be received on July 8th, and all significant bidding will be complete by the end of August. Anticipate mobilization on site to start July 2004.

HARRINGTON FIELD BASEBALL STADIUM EXPANSION:
Project consists of Construction of a new 3,000-seat baseball stadium to replace the existing seating bowl at Harrington Field. The new seating bowl will contain bleachers and individual seats, a press box and upgraded areas for booster club participants. Beneath the seating bowl will include coaching offices, locker, training and equipment rooms. Project budget is $7,500,000.

Designer: Walter, Robbs, Callahan and Pierce, Winston Salem, NC
CM @ Risk: TA Loving Construction, Goldsboro, NC

Project Completion Date: February 17, 2005
Anticipated Completion Date: February 17, 2005

PROJECT STATUS: The Project is under construction and approximately 5% complete. Demolition and site grading for the building pad are complete. TA Loving is currently pouring footings and installing underground utilities. Masonry work is scheduled to begin the week of June 21 and Steel erection is scheduled to begin mid July. A web camera has been established to observe the construction @ www.taloving.com/ecubaseball.
STATUS OF CAPITAL PROJECTS UNDER DESIGN
EAST CAROLINA UNIVERSITY

PIRATE CLUB AND TICKET OFFICE:
Construction a new facility for the Pirate Club Offices and Athletic Ticketing Operations. Project budget
is $2,500,000. The building will be a 13,700 GSF two story structure with offices, operations areas and
conference room

Designer: Davis Kane Architects, Raleigh, NC

Project Status: Schematic Design is complete and comments have been received from State
Construction and Department of Insurance. Project is awaiting Board of Trustee approval of the
Schematic Design and Building Elevations. The review and approval was deferred until the October BOT
meeting.

COLLEGE HILL SUITES – PHASE I:
Project consists of construction of a new 488 bed Residence Hall in a suite style arrangement. Project is
sited between Tyler Residence Hall and Todd Dining

Designer: Burt Hill Kosar, Philadelphia, PA
CM @ Risk: Skanska USA Building, Inc., Raleigh, NC

Project Status: The Design Development Drawings were submitted to State Construction and the
Department of Insurance on April 15th. DOI comments were received June 17, 2004. Construction
Manager @ Risk selection is complete, and Skanska USA Building, Inc was selected and we have an
executed contract for preconstruction services. We are currently in the process of reconciling the cost
estimate differences between the Architect’s and CM@Risk’s DD cost estimate.

FLETCHER MUSIC ADDITION:
Project consists of a 17,000 GSF addition to the Fletcher School of Music. The addition will add
rehearsal and practice room to meet the student growth of the School of Music.

Designer: Calloway, Johnson, Moore & West, Greensboro, NC

Project Status: Construction Documents are approximately 97% complete and will be ready to
submit to State Agencies for review and approval end of July 2004.

OLD CAFETERIA RENOVATION:
Renovation of the 54,800 GSF building constructed in 1909. The renovation will primarily address
defered maintenance needs related to mechanical, electrical, plumbing and building systems. The project
will include modernization of the building to office space and renovation of Student Financial Aid offices.
The South Wing ground floor offices including Student Loans and the Cashiers Office were recently
renovated and will remain unchanged.

Designer: Davis Kane Architects

Project Status: Schematic Design and reviews have been completed. Design Development
Documents and planning are underway with the focus on flexible programmatic space and offices.
June 25, 2004

MEMORANDUM

TO: East Carolina University Board of Trustees

FROM: Jack Brinn
Interim CIO

SUBJECT: Marketing Technology to Students

In response to your question of how we informed our students about the availability of computer technology at ECU and the more specific requirements of departments, I gathered the following information with the assistance of Mr. Clint Bailey, Director of Marketing, and Ms. Wendy Creasey who oversees ITCS’ Academic Computing Environment (ACE) program.

- The Computer Requirement is first introduced to prospective students in the application booklet that accompanies both the Initial Contact Piece and the Viewbook.
- If a prospective student is admitted, he/she then receives a Campus Living viewbook which contains an article about our "high-tech" computing environment on campus.
- In March/April, Admissions sends admitted students a detailed brochure, provided by ACE, regarding departmental computer requirements and general student computer support. This information is also provided at all orientations.
- In addition, The East Carolinian and other media such as posters are used to inform students of technology issues such as peer-to-peer file sharing.

I will provide further details on the financial aid issue as it pertains to computer purchases on July 13.
# Table of Contents

**Introduction** ........................................................................................................................................ 1

**Management** .................................................................................................................................... 2
  - Contract Management ....................................................................................................................... 2
  - IT Management Flexibility ................................................................................................................ 2
  - Voice over Internet Protocol National Conference ......................................................................... 2

**Academic Information Technology** .................................................................................................. 2
  - Smart Class Rooms .......................................................................................................................... 2
  - Austin ................................................................................................................................................ 2
  - Brody School of Medicine Smart Classrooms .................................................................................. 2
  - Industrial Technology Conference Rooms ...................................................................................... 2
  - School of Business Classrooms ....................................................................................................... 2
  - Science & Technology ....................................................................................................................... 3

**Student Initiatives** ........................................................................................................................... 3
  - Academic Computing Environment Project ...................................................................................... 3
  - Peer-to-Peer Awareness ..................................................................................................................... 3
  - Student Computing and Technology Fee .......................................................................................... 3

**Technology Initiatives** ..................................................................................................................... 4
  - Technology Resource Center (TechRC) .............................................................................................. 4
  - Seamless Academic Technology Web Site .......................................................................................... 4
  - Statistical Analysis System Day ........................................................................................................ 4
  - Videoconferencing Improvements .................................................................................................... 4

**Campus Infrastructure** ...................................................................................................................... 4
  - Active Directory ................................................................................................................................. 4
  - Admissions – E-print .......................................................................................................................... 5
  - Board of Trustees Paperless Initiative .............................................................................................. 5
  - Critical Users Data Backup ................................................................................................................ 5
  - ECU Multipoint Control Unit (Bridge) ............................................................................................... 5
  - Enhancing ECU’s Web Presence Initiative ....................................................................................... 5
  - Exchange Upgrade ............................................................................................................................. 5
  - Microsoft Desktop Operating System Updates .................................................................................. 6
  - Optical Carrier 12 & Regional Point of Presence .............................................................................. 6
  - PirateDrive .......................................................................................................................................... 6
  - Purchasing Savings ............................................................................................................................. 6
  - SCT Banner Finance ........................................................................................................................... 6
  - SCT Banner Enterprise Resource Planning (ERP) System ................................................................. 6
  - Security Enhancements ...................................................................................................................... 6
  - Signup .............................................................................................................................................. 7
  - Web Services ...................................................................................................................................... 7
    - OneStop E-commerce for Tuition and Fees .................................................................................... 7
    - OneStop E-commerce for Undergraduate Admissions ................................................................. 7
  - Wireless Network Updates ................................................................................................................ 7
  - Workstation Virus Protection Identification ..................................................................................... 7

**Communication** ............................................................................................................................... 7
  - Campus/Public Relations .................................................................................................................. 7
    - Academic Computing Environment Communications ................................................................. 7
    - Peer-to-Peer/File Sharing Communications ................................................................................ 8
  - Voice over Internet Protocol Strategies & Implementation Conference Communications .................. 8

**Health Sciences** ................................................................................................................................. 8
  - Channel Health e-Commerce Batch Eligibility ............................................................................... 8
  - Channel Health e-Commerce Claims ................................................................................................ 8
  - Logician Disaster Recovery ................................................................................................................ 8
  - Master Patient Index Link Insurance Processing ............................................................................ 9

**Outreach and External Grants/Contracts** ............................................................................................ 9
Introduction

The office of the CIO, the Directors, Managers and Staff proudly present the summary report of ITCS accomplishments for the year 2003-04. During this reporting period we have significantly raised the bar for excellence in our role as the University’s primary information technology support provider as well as boosting East Carolina University’s national reputation in the technical arena.

Among the highlights of this report, we have significantly enhanced support for the faculty through the creation and staffing of the Academic Resource Center that brings together the many independent faculty support groups together under one umbrella. In cooperation with the Chemistry Department and the UNC Office of the President, we have created a high performance computing resource for computational chemistry that serves users at ECU and around the state.

Significant improvements to the information technology infrastructure have been implemented over the past year including the creation of a remote point of presence (RPoP) at ECU that has made us the networking hub in Eastern North Carolina and has increased our bandwidth to the Internet by a factor of four. Another step was assuming responsibility for implementing and supporting classroom technology to ensure that faculty and students have a baseline of technology available for teaching and learning.

Our first Voice-over-IP (telephony) Conference brought registrants from across the nation to discuss and learn about this new technology. ECU has become a national leader in the adoption of voice-over-IP in a production environment. ECU is also taking the lead in adopting collaborative technologies across campus. We were the first to have a production Access Grid available for our faculty, staff and students. We are now offering access to a videoconferencing bridge to bring guests into our classroom from around the world. We are also experimenting with new technologies such as Microsoft Conference XP and VRVS to determine how they can best be integrated into learning environments.

An important milestone was the initiation of the student computer requirement for fourteen schools and departments across the University. This effort will yield significant savings for all students wanting or needing to purchase a computer, and combined with our wireless environment and technology-enhanced classrooms will also be a significant step toward creating a new learning environment based on real-time interaction.

A major commitment to updating the University’s administrative computing systems occurred with the initiation of the SCT Banner project. The first fruits of this multi-year, multi-million dollar effort should come with a new financial system being available on July 1, 2005. Subsequent productivity enhancements in human resources, advancement, financial aid and student systems will follow.

The past year has seen many significant successes as you will note in this report. But this is only the beginning. ECU is poised to take a giant leap forward in creating an integrated information environment for faculty, staff and students. Tomorrow starts here…and now.
Management

Contract Management
Administrative Services re-designed the process for Contract Management. Maintenance agreements and service contracts are less likely to expire and more lead-time is now given to renewing or possibly re-bidding these contracts than ever before. The new process has also aided in tracking fixed costs and a more accurate picture of our service agreements is accessible and easier to understand.

IT Management Flexibility
ITCS in conjunction with Materials Management implemented a policy regarding requisitions pertaining to information technology (IT) expenditures exceeding $25,000 by departments outside of ITCS. The purpose of this policy is to ensure that the purchase of IT equipment listed on state contract is compliant with ITCS initiatives and infrastructure and that ITCS is able to support this equipment. This project supports the IT Management Flexibility that was granted to ECU by the University of North Carolina (UNC) Board of Governors in November 2002. This project is fully implemented, and requisitions totaling $371,022.41 have been approved by ITCS through December 2003. Administrative Services and staff from IT Software Development Services and Materials Management collaborated on this project.

Voice over Internet Protocol National Conference
In May 2004, ITCS in conjunction with Internet2 hosted a national Voice over Internet Protocol (VoIP) Conference. Over 100 national and international guests participated in the three-day event joining attendees with telecommunication specialists, vendors and enterprise IT managers to learn about successful implementation of Internet telephony or VoIP. Administrative Services assisted in the planning and implementation of this conference in addition to providing administrative support for the event.

Academic Information Technology

Smart Class Rooms

Austin
In August of 2003, Academic Computing coordinated the installation of sixteen Technology-Enhanced Rooms. Twelve of these rooms were equipped with projectors and appropriate connections. The other four were equipped with level 3 TER technology, including projectors, document cameras, SMART Sympodium, AMX control systems, microphones, H.323 videoconferencing, and video streaming capabilities. These rooms can serve as sources for the new Windows Media 9 – based multicast / unicast system for classroom video.

Brody School of Medicine Smart Classrooms
In August 2003, new Smart Classrooms were completed at the Brody School of Medicine. This $300,000 bond referendum renovation project was necessary to accommodate the medical student laptop initiative and allow faculty to better integrate technology into the curriculum.

Industrial Technology Conference Rooms
Academic Computing consulted with the department of Industrial Technology to design and oversee the upgrading of three conference rooms in the Science & Technology building to include liquid crystal display (LCD) projectors, motorized screens, and appropriate audio visual (AV) connections and switching.

School of Business Classrooms
Academic Computing consulted with the School of Business to design and oversee the upgrading of five classrooms in the Bate building to include LCD projectors, motorized screens, podiums, remote control and monitoring capability via IP, and appropriate AV connections and switching.
Science & Technology
The new Science & Technology (S&T) building opened featuring 28 technology-enhanced labs, 4 lecture halls, and the Global Classroom, a reconfigurable classroom space and videoconferencing center. All of these rooms are comprised of level 3 technology, including one or more projectors, document cameras, SMART Sympodium, AMX control systems, microphones, H.323 videoconferencing, internet protocol (IP) monitoring, Americans with Disability Act (ADA) hearing assisted systems, voice reinforcement, and surround audio systems. Academic Computing assumed the support role for this equipment with exception of the Global Classroom. In addition to responding to technical support calls and pages, the team conducts regular introductory Question & Answer sessions for faculty and staff utilizing the Technology-Enhanced Rooms.

Student Initiatives

Academic Computing Environment Project
The Academic Computing Environment (ACE) Project is a comprehensive, campus wide effort addressing the support of student computers. Beginning in the fall of 2004, many academic programs will begin requiring their students to have access to a computer. Working with a committee of ECU faculty, the ACE staff developed a proposal to meet the needs of students and faculty affected by these requirements. This proposal was approved and adopted by the Information Resources Coordinating Council (IRCC) in May 2003.

As a pilot program, ACE began supporting medical students’ laptops in the fall of 2003, providing full service support to those students in the Brody School of Medicine. Recommendations were also provided for any ECU students wanting to purchase computers. Working with the ECU Student Stores and Materials Management, a request for purchase (RFP) was developed to identify preferred computer vendors and establish pricing discounts for the students. Participating academic departments and the ACE staff developed technology requirements and established standard configurations to meet the needs of the students based on their academic curricula.

Peer-to-Peer Awareness
Given the copyright infringement issues related to peer-to-peer file exchanges, an awareness campaign was initiated by a collaborative group including Academic Computing, Security, Strategic Initiatives, Technology Transfer, Student Life, and the University Attorney’s office. The goal of the campaign was to inform the community on copyright misuse and the penalties thereof. A poster of copyright misuse frequently asked questions (FAQs), articles, and advertisements were developed by the group.

Student Computing and Technology Fee

Deepfreeze Security Software Implementation
Deepfreeze security software was customized and deployed in all General Purpose and Student Computing Technology Fee (SCTF) supported Departmental Labs. This software guards against hacking, unauthorized configuration changes and software installations while in turn increasing security and reducing PC downtime for maintenance. The implementation was completed at the beginning of fall semester 2003.

Intra Domain Conversion
In preparation for Active Directory implementation all Student Computing Technology Fee (SCTF) supported computers were migrated from the ECU Domain to the Intra Domain. This change will increase remote administration and customization capabilities for SCTF Computer Labs. Additionally, usage by application and volume will now be measurable. This was completed at the beginning of the fall 2003 semester.

Pitt/Greene County Technology Partnership
Two hundred and fifty five computers, removed from service at the end of their three year cycle in SCTF labs, were sold to the Pitt County School system. This partnership allows the school systems to extend their limited funds and provide a valuable service to the local education community.

Technology Initiatives

Technology Resource Center (TechRC)
The Technology Resource Center was initiated in the fall of 2003 with the collaborative efforts of Joyner Library, ITCS, Instructional Technology Consultants, and Brody School of Medicine. The West Campus facility provided resources and support of statistical software has moved to a by-appointment schedule. The East campus facility (Austin 103) provides support and resources in technologies such as digital video, statistical research, DVD functions, editing tools, general support for all supported software and much more. Customer support is provided on a walk-in basis, by phone, and e-mail requests. Publications in Pieces of Eight, The East Carolinian, and brochures were developed in collaboration with the Strategic Initiatives Communication and Design team to market the awareness of the center. The center operates five days a week, 8:30 am to 5:00 PM, staffed a rotating schedule of all the consultants (instructional and academic computing).

Seamless Academic Technology Web Site
The Seamless Academic Technology (SAT) group is a collaborative team whose purpose was to create a seamless Web site for all technologies used in teaching, training, help pages, and more. The SAT team created and designed what is known as the “The Tech Place”, a Web site pooling the majority of technologies across campus into a single location for faculty, staff, and students. The site has built in update functions for the database, descriptive tags, search functions and is designed to inform the user of their location and where he/she has been on the site. The site became available on May 1, 2004.

Statistical Analysis System Day
The Statistical Analysis System (SAS) Day Regional Conference was held on October 22 promoting SAS tools. Academic Computing, in collaboration with the Faculty Development Center helped organize and conduct SAS day events.

Videoconferencing Improvements
ITCS installed a Polycom MGC-25+ videoconferencing bridge, which is capable of coordinating group videoconferences with up to sixteen endpoints. To complement the services offered by the bridge and to simplify the process of starting or engaging in a conference, a software solution was acquired that allowed users to dial others by an e-mail address or room number, instead of lengthy IP addresses. Also available are meeting rooms where up to sixteen users can meet simultaneously using a variety of videoconferencing devices, with no operator intervention necessary.

Campus Infrastructure

Active Directory
Active Directory has been successfully implemented. Computers and users from the ECU and INFO-1 domains have been migrated to the new INTRA Domain structure. This project has significantly reduced overall domain management effort by eliminating duplicative activities required in a multiple domain environment. The remaining domains will be incorporated into the Active Directory structure in the next academic year. Since Microsoft will be discontinuing support for the Windows NT 4.0 operating system by 2005, this project has ensured compliance with Microsoft policies to receive future maintenance, service pack, and security fixes. Domain security has been drastically improved by utilizing updated tools available only in the Active Directory environment.
Admissions – E-print
ITCS converted some very large printouts for the Admissions Office to E-print, including the monthly Academic Competency Test and Scholastic Aptitude Test reports, which are now viewable by the Admissions Office via a Web site for E-print. E-print is a Scholastic Competency Test product that allows computer-generated printout to be stored in a file for subsequent viewing on-line by functional users, thus eliminating the need to print large volumes of reports in the computer center.

Board of Trustees Paperless Initiative
To streamline the transmission and sharing of materials for Board of Trustees meetings, paper copies of Board of Trustees (BOT) materials will be replaced with electronic copies. Implementation of this project required purchasing a laptop and printer for each Trustee not already owning a suitable laptop with wireless networking capability. Training was provided at the Cotanche Building and the new service was kicked off at the May 2004 meeting. The first two meetings were “dual mode” – paper and electronic. Beginning with the September 2004 meeting, the electronic format will be used exclusively. All items for this project have been procured at a cost of $22,000. Board members personally owned laptops have been loaded with the necessary software. Training for the Chancellor’s staff and Executive cabinet has also been completed.

Critical Users Data Backup
IT Support Services proposed a solution to ensure that identified ‘critical’ user’s data is backed up to a network device without user intervention. One hundred copies of the necessary software were procured at a cost of $4,600. IT Support Services is in the process of upgrading the existing file storage device that the user data will be stored on. Once this device is in place, the software will be configured and installed for these users ensuring that critical university data residing on user’s desktop is backed up.

ECU Multipoint Control Unit (Bridge)
The Bridge was part of a total implementation of Technology-Enhanced Rooms in the Cotanche building for use by ITCS personnel. A bridge at ECU enabled collaborative communication between 12-16 different sites. The equipment purchased allows multi-point conference capability and has speed matching, supports duo video, plug and play, support videoconferencing equipment from multiple vendors, has embedded security encryption, optimizes network resources, and enables scheduling.

Enhancing ECU’s Web Presence Initiative
Departments and other campus units will soon be able to easily and effectively create and edit information contained within the Web pages of ECU’s collective Web site through the acquisition and implementation of a Web content management system called CommonSpot, which includes the purchase of new hardware and software. Through the browser interface of CommonSpot, users will be able to create professional Web pages without having to understand hypertext markup language (HTML) or other Web programming technologies.

In coordination with University Marketing, Strategic Initiatives has developed a new Web site design for ECU. This design brings a consistent look to the University Web site reflecting the professionalism that ECU embodies. To introduce the campus community to the new Web presence and content management system, several demonstrations were held and regularly scheduled training sessions are planned.

Together, these efforts will ensure that current and prospective members of the campus community have Web pages that are accessible to the widest audience possible and that ECU has a more dynamic, up-to-date Web presence.

Exchange Upgrade
Exchange 5.5 has been successfully upgraded to Exchange 2000. More than 40,000 user mailboxes were migrated. A new version of the Outlook Web access was implemented, which closely replicates
the functionality of the full version of Outlook. Backup and restore times have been reduced exponentially ensuring maximum uptime for clients.

Microsoft Desktop Operating System Updates
In November 2003, IT Support Services implemented a process that ensured campus workstations are receiving critical Windows operating system updates. This process automated the download and installation of Windows Critical Updates on a user’s computer when those updates become available. The project helped to ensure that campus workstations have the latest security patches available from Microsoft. This update feature has been implemented on 3,920 university owned computers across East and West campuses.

Optical Carrier 12 & Regional Point of Presence
The campus Internet connection was upgraded from an OC-3 (Optical Carrier 155 megabits per second) to an OC-12 (Optical Carrier 622 megabits per second connection). This upgrade effectively quadruples the university’s Internet connection speed and enables more robust communications with other universities for research and collaboration. ECU has been designated a Regional Point of Presence (RPoP) for the North Carolina Research and Education Network (NCREN). This RPoP will connect other universities, county/city governments, and school systems in Eastern North Carolina and enable ECU to better fulfill its mission of assisting the region in development and accessibility.

PirateDrive
The initial phase of the network attached storage solution designated “PIRATEDRIVE” has been successfully implemented. Designated clients have been allotted disk space on this device to save critical data which can be accessed from anywhere at anytime. Proper steps have been taken to ensure the data saved to this device can be recovered easily in the event of hardware failure. An upgrade is scheduled to offer this service to all campus users.

Purchasing Savings
Partnerships with Dell and Apple Computer have allowed ECU to leverage buying power for microcomputers to obtain substantial savings. The total cost savings per unit was over and above normal educational discount. These negotiated discounts allowed for the following program savings:

- Faculty Workstation Program Upgrades $91,345.28
- Administration and Finance Staff Upgrades $38,537.62

SCT Banner Finance
ITCS and Financial Services began the implementation of the SCT Banner Finance module to replace the existing and outdated SCT Financial Reporting System (FRS). The Banner Finance module, which is Internet based and runs on an Oracle database platform, is scheduled to go into full production status on July 1, 2005.

SCT Banner Enterprise Resource Planning (ERP) System
ITCS spearheaded a time-sensitive and thorough Systems Development Life Cycle analysis of the SCT Banner suite of administrative products with the assistance of approximately 150 staff members from the ECU community. The end result was a signed contract in December 2003 with SCT for the licenses to the Banner Human Resources, Financial Aid, Student and WorkFlow modules. The Banner Finance module was procured in a previous agreement that allowed ECU to acquire the module at no cost (called a LEAP agreement by SCT) since ECU already had SCT’s FRS module. Implementation of these modules will occur over the next three years.

Security Enhancements
The following changes and additions have been made to the ECU network to provide a more secure computing environment:

- Firewall service modules were place in the front end of our critical servers and services on campus.
- The university has evaluated and chosen a security product, Perfigo, for wireless networking.
The Brody School of Medicine’s telephone phone switch was more fully secured by the installation of firewalls to control access to critical servers.

**Signup**
A Web-based password management solution has been implemented. Eighty percent of the calls to the help desk are related to password management. Now our clients can change or reset their passwords via a secure Web page instead contacting the help desk. This technology will enable users to quickly unlock their accounts and continue their normal job functions without ITCS intervention.

**Web Services**

**OneStop E-commerce for Tuition and Fees**
Applications were designed to allow the University cashiers to receive electronic payment for student tuition and fees via credit card within the OneStop portal. In the process, an application was also developed in conjunction with the Software Development Services (SDS) Student Team to allow students to view their tuition and fee bills. To date, the tuition and fees payment application has electronically received over $2,000,000 in tuition and fees via OneStop. Receiving payments in this manner eliminates the need for those students to come to campus and stand in line to make payments and reduces the manual collection work done by staff members.

**OneStop E-commerce for Undergraduate Admissions**
An admissions application was designed to allow the office of Undergraduate Admissions to receive electronic payment for the undergraduate admissions application fee via credit card within the OneStop. To date, the Undergraduate Admissions office has received nearly $200,000 in admissions application fees via OneStop.

**Wireless Network Updates**
ECU has expanded the campus focus for wireless coverage from academic areas to a campus wide initiative with a goal of obtaining 95% saturation. In Fiscal Year 2003-2004, 79 access points were added to the East Campus wireless environment. The West campus wireless environment has been enhanced by 12 additional Access points. Campus coverage percentages have grown to 56% of East campus and 62% of West campus, respectively.

**Workstation Virus Protection Identification**
IT Support Services has implemented a process that identifies the version of virus protection software loaded on Microsoft operating system, university owned campus computers. Having the latest version of virus protection software as well as the latest virus definitions is essential in providing a safe, secure computing environment. In addition this project will determine if a workstation is infected with a monitored virus, thus enabling ITCS to take another proactive approach in helping reduce the propagation of viruses on campus. To date ITCS has scanned 4,763 computers and identified 165 systems that were infected with viruses.

**Communication**

**Campus/Public Relations**

**Academic Computing Environment Communications**
Strategic Initiatives’ Communications and Design Team collaborated with IT Support Services’ Academic Computing group to develop an awareness campaign addressing student computers in the academic environment. Various components of this extensive campaign include: a flyer delivered to admitted, current and prospective students (~20,000 flyers); a Web site; an informational article published in *Pieces of Eight* and *The East Carolinian*; a Frequently Asked Questions (FAQ) document; a student newspaper advertisement; and approximately 1000 posters to be placed in
buildings across campus. Team members will also work with marketing specialists from IBM to develop a joint news release and plan a fall 2004 news conference.

Peer-to-Peer/File Sharing Communications
Strategic Initiatives’ Communications and Design Team collaborated with IT Support Services’ Academic Computing group to develop an awareness campaign addressing peer-to-peer file sharing systems and copyright infringement on campus. Various components of this extensive campaign include: an informational article published in Pieces of Eight; a student-written article published in The East Carolinian that was prompted by the Communications and Design Team; a student newspaper advertisement; and a poster to be hung in buildings across campus. Subsequently, an article highlighting ECU’s campaign that contained an image of the poster was printed in The Daily Reflector (Tuesday, February 24, 2004, Look at the Way We Live section), Greenville’s newspaper.

Voice over Internet Protocol Strategies & Implementation Conference Communications
Collaborating with Internet2, ECU jointly hosted a conference on May 12-13, 2004 that provided participants with the latest knowledge related to deployment of VoIP. Conference contributors include Cisco Systems, Inc., Dimension Data, and 4Front Systems. Strategic Initiatives’ Communications and Design Team worked with IT Services, Administrative Services, and Internet2 to coordinate logistics and implement a successful marketing plan for the conference, which included developing the conference Web site; working with ECU’s Printing & Graphics department on a logo, signs, banner, and program; advertising the conference through various electronic listservs and event calendars; and disseminating information through Greenville’s Chamber of Commerce.

Health Sciences

Channel Health e-Commerce Batch Eligibility
The BSOM implemented batch eligibility via IDX eCommerce to provide a HIPAA-compliant solution to improve insurance eligibility verification for the Brody School of Medicine. Patient appointments are selected seven days in advance for insurance verification with the following trading partners: Aetna, Tricare, United Health, Cigna, and Humana. Patient Access staff work a response queue to update the patient’s insurance in registration. With the process, the Brody School of Medicine has received the following benefits:

- Data stored on-line allows staff the ability to refer to a patient’s eligible insurance at any time from any IDX application module, eliminating a paper file.
- Enhanced workflow enables staff members work on-line to document eligibility outcomes.
- Time and money are saved by sending data electronically instead of via paper.
- Patient satisfaction is improved by providing more accurate and up-to-date claim and eligibility information.

Channel Health e-Commerce Claims
To become Health Insurance Portability and Accountability Act (HIPAA) compliant, the Brody School of Medicine decided to submit all government claims electronically via IDX e-commerce claims. Medicare was the first payer converted to the new HIPAA 837 claim format mandated by new HIPAA compliant format in October 2003. BCBS and Medicaid claims were converted to the new format in March 2004. The Brody School of Medicine is now able to send all government claims to a single destination thereby enhancing claim accuracy, tracking, and accountability of claim submission.

Logician Disaster Recovery
A new failover solution has been implemented for the Logician electronic medical records server. This solution automatically copies critical medical data to another server for disaster recovery purposes. In the event of hardware failure on the primary server, failover to the secondary server can be achieved in minutes instead of several hours. Downtime for server backup has been virtually eliminated.
Master Patient Index Link Insurance Processing
The Brody School of Medicine and Pitt County Memorial Hospital (PCMH) combined efforts to replace the existing customized interface to Enterprise Access Directory (EAD) at PCMH to include the sharing of patient’s insurance as well as demographics. MPI Link allows the BSOM user to select and compare insurance information stored and captured at the EAD by PCMH. The query process is initiated when an IDX user enters the patient’s name, and then allows the IDX users to display insurance at the EAD level for the IDX patient. This prevents overwriting of good data with inaccurate data.

Outreach and External Grants/Contracts

Department of Defense/Collaborative and Distance Learning Technologies
The Collaborative and Distance Learning Technologies (CDLT) Functional Area (FA) in the Program Environment and Training (PET) Program provides the Department of Defense (DoD) High Performance Computing (HPC) users with the capability to conduct research, provide training, facilitate collaboration, hold meetings, and exchange information efficiently and routinely without regard to distance or time. The CDLT team is a joint effort between ECU and High Performance Technologies, Inc. (HPTi) and is funded entirely by the DoD.

National Computational Science Leadership Program
As part of a $1.13 million National Science Foundation (NSF) Teacher Enhancement grant, ECU continues to lead efforts to provide training sessions focused on high performance computing (HPC) skill building, upgrading computational science expertise among teachers, and leadership seminars centered on preparing teachers for sharing skills with other colleagues. Specifically, the teachers participating in this program received instruction in the use of practical Web-based tools and educational software such as STELLA, Mathematica, ChemViz, SimSurface, GalaxSee, Project InterActivate, Biology Bench, and Microsoft Excel while incorporating hands-on physics, biology, chemistry and math modeling activities into their professional skills portfolio. With the conclusion of this grant (July 2004), more than 200 teachers from across the nation will have developed enhanced HPC skills, which they are actively integrating into their local school curriculum.

National Science Foundation Teacher Enhancement Program
The National Computational Science Leadership Program (NCSLP) will come to closure in August 2004. The 42-month rigorous professional development program involving more than 200 high school teachers across the nation has succeeded in developing a national reservoir of secondary teachers interested in effectively utilizing computational science as a means to enhance science and math education.

Rural Educators Using Visualization to Inspire Teacher Advancement and Learning to Improve Science and Mathematics Education (REVITALISE)
As part of a $1.46 million grant from the National Science Foundation (NSF), ECU continues to lead a collaborative effort involving faculty from Elizabeth City State University, National Center for Supercomputing Applications, Office for Mathematics, Science, and Technology Education (MSTE), University of Illinois at Urbana-Champaign, Shodor Education Foundation, and the ECU Electronic Visualization Laboratory to addresses the critical shortage of mathematics and science teachers throughout the United States, particularly in rural areas. The goal of the program is to support teacher retention and renewal through professional development institutes for two cohorts, consisting of 160 middle and high school mathematics and science teachers (56 teachers in cohort one and 104 teachers in cohort two) from North Carolina and Illinois rural areas over 48 months.

Supercomputing 2003 Industry Exhibits
The nation’s premier supercomputing conference, SC (Super Computing) 2003, featured premier exhibits from leading vendors in high-performance computing, communications, networking, data storage and management, and scientific visualization, brought together scientists, engineers, and managers to see new products and new technologies and the latest innovations in high-performance computing, networking and related disciplines. Members of the ITCS Strategic Initiatives team lead the SC2003 Industry Exhibits Committee as well as efforts to recruit the nation’s leading computing
vendors to the conference, giving attendees the opportunity to get hands-on experience and obtain a wealth of information gathered from conference sessions.

**Professional Development**

**Academic Computing On-line Training**
Free on-line training is available to ECU faculty, staff, and students through New Horizons On-line Educational Center. On-line/anytime learning offers classes on Microsoft Office products, Operating Systems, Internet Explorer, Netscape, Hypertext Markup Language (HTML), and other topics. This year additional classes on Web page design, Dreamweaver, Fireworks, Flash, Adobe Photoshop and other graphical applications were made available to users. These courses offer faculty, staff and students a chance to learn computer skills anytime without having to wait for classes to be offered. ECU members must register online at [http://www.ecu.edu/itcs/act/ontl_training.htm](http://www.ecu.edu/itcs/act/ontl_training.htm) to receive a userid/password in order to access this free training. As of April 15, 2004 168 of the 175 office licenses are in use and 37 of 50 licenses for the Web design are in use.

**Departmental Information Technology Training**
Academic Computing staff offered “Spotlight Training Sessions” for both academic and staff departments, presenting training that was individualized for each department’s requirements. The Spotlight Training offered solutions that fit into a department’s busy schedule, letting them decide what they need or want via a menu of available options. Training focused on increasing productivity through the use of Microsoft Outlook, Word, Excel, and Access and providing instructions on basic maintenance and utilities. The sessions took place in the departments on East and West campuses, in our training room, and with the use of our projector and laptop in the conference rooms.

**Faculty and Staff Training**
Academic Computing conducted hands-on training sessions for ECU faculty, staff, and students during the 2003-2004 school year. Training sessions covered software applications such as Microsoft Access, Excel, PowerPoint, Word, Outlook, Macromedia Dreamweaver, Computer Fundamentals, and a variety of other software packages. Special sessions for facilities staff on basic computer use, the Internet, and e-mail were conducted. These sessions were conducted in the Joyner East 204 facility.

**Staff Loaner Program**
This program provides staff members below the pay grade 55 the opportunity to borrow a computer for use at home. ITCS’ Academic Computing team coordinates the refurbishing, upgrading and distribution of computers taken out of service. Each eligible staff member can check out the computer for a period of one year before having to renew or return the computer to ITCS. Currently, there are 18 individuals participating in the program, including ten new participants who received computers this past year.

**Research**

**Collaborative Technology Initiative**

**H.323 Technology**
Strategic Initiatives has also been investigating H.323 technologies which enable audio and video collaboration at a distance. Polycom has been the method of choice for this delivery, but there are others as well. A Polycom MGC-25 Multipoint Control Unit (MCU) was purchased for ITCS/ECU and has been put into production. This enables multi-point audio and video connections (up to 16 points) for anytime communication and collaboration. Another communication device put into place, which works in conjunction with the MCU, is a Polycom ViaVideo. This is a desktop camera that allows immediate connection for collaborative communication, also enabling document sharing, markup,
desktop sharing, and chat. Polycom Viewstations were placed in ITCS conference rooms and can be used by the department to participate in meetings at a distance.

**Microsoft Windows SharePoint Services**

Windows SharePoint Services (SharePoint) is a software solution that provides a Web-based, portal environment wherein teams of individuals can create, maintain and extend their own virtual workspaces with only a minimal technical skills and effort. This environment offers a wide range of features, enabling team members to customize and, more importantly, optimize their information sharing and project-related collaboration experiences. Strategic Initiatives has adopted SharePoint for internal use, including project tracking, document sharing and other team-oriented activities including production of this report.

**Virtual Rooms Videoconferencing Systems (VRVS)**

SI is also testing VRVS, a web-based system for videoconferencing and collaborative work over Internet Protocol (IP) networks. VRVS uses the collaboration tools: MBone, H.323, QuickTime, Desktop/Application sharing and chat on various platforms. VRVS allows users from all over the world to meet in virtual rooms.

**Convergence Devices in Rural Medicine with the Center for Wireless and Mobile Computing**

Using Sprint’s 3G convergence devices, five first-year medical students, two Brody School of Medicine residency fellows, and two Brody School of Medicine Project Directors are using these devices at eastern North Carolina rural sites. This technology enables medical professionals to access evidence-based medicine information and to document patient pharmacology and specific disease processes. The availability of this technology will place more knowledge in the hands of practitioners and improve their efficiency and effectiveness in patient care.

**High Performance Computing**

A new high performance computer has been installed and is being tested. It is being utilized by designated faculty and will soon be used by statewide universities. SI is developing the sharing protocols to enable statewide availability. This project will continue to grow in size and importance and make ECU well known within the state as a distinction of higher education and possibly at a national level for research opportunities for designated faculty, staff, and students. It is the goal for ECU to become a hub since the state’s high performance computing HPC center has been disbanded.

**Middleware Initiative (Grid/Linux Initiative)**

ECU has created a “grid” group that will investigate this distributed sharing technology and its relevance to teaching and research. The purpose of the “grid” is to use high speed networking to make computing and data resources, both on and off campus (at other institutions), appear as local resources. This technology facilitates sharing of resources among different organizations. We will bring up a test “grid” in spring of 2004 and begin interacting with other “grid nodes” on campus during the next academic year. The new School of Engineering is working with us to develop this technology. We intend to work with similar test beds at other universities within 18 months. Full operation of a “grid” is still 3-5 years away, assuming steady progress is made through national software development initiatives.

**Security**

**ECU Secure Computing Initiative**

The ECU Secure Computing Initiative is a strategic plan for enhancing the availability and security of critical information systems. Strategies include:
- Isolating healthcare computing systems and crucial clinical workstations from the effects of unrelated security incidents and threats.
- Shifting the responsibility for technical workstation security from users to a centralized, automated process.
- Preventing direct access to healthcare and administrative computing resources from workstations and networked devices that fail to meet minimum security requirements.

The first element of the plan is the isolation of the university’s healthcare computing systems. This project includes a number of interrelated tasks including:
- The campus network backbone has been reconfigured to allow establishment of network security “zones” that will help isolate critical computing systems from attack;
- Security models for highly secure application services, such as proxy application servers, are being developed;
- Network firewalls are installed.

The second is a data network “penalty box” that limits network access for campus computers that have become a threat to the university’s IT resources.

**Information Technology Audits**

In response to audits of disaster recovery tests conducted in 2002 and 2003, ITCS made the following improvements to the disaster recovery planning process:
- Critical applications are tested periodically on a predetermined schedule.
- The ITCS Disaster Recovery Plan is reviewed and updated at least once every two years.
- Future ITCS disaster recovering planning and testing activities will be coordinated with the University Disaster Recovery Plan and the Facilities Services Disaster Recovery Plan.
- The Brody School of Medicine computer room has been authorized as a disaster recovery hot site, allowing for a more cost effective recovery and testing process as compared to contracted, out-of-state recovery sites.

In response to an audit of the university’s wireless data network ITCS made the following improvements:
- Implemented a security product that reports unauthorized wireless equipment on the campus network to IT support staff.
- Installed security software on a selected group of wireless workstations. When this product is implemented campus wide, it will require that workstations have the latest security safeguards in place before accessing the wireless network.
- Blocked direct access to critical administrative systems by wireless devices, unless they are using the university’s data encryption services.

**Health Insurance Portability and Accountability Act Security Compliance, Phase I**

Phase I of the Health Insurance Portability and Accountability Act (HIPAA) Security Compliance project involved the assessment, analysis, and reporting of the safeguards currently in place for university healthcare computing systems. This phase was completed on May 28, 2004 and included the following activities:
- Security Assessment – A 900-page report that documents the security measures currently in place on university healthcare computing systems.
- Gap Analysis of HIPAA Compliance – A documented analysis of the “gaps” between current security measures and those required for HIPAA compliance.
- HIPAA Reporting Software Implementation – A specialized HIPAA reporting tool purchased to assist with generating compliance reports and monitoring progress toward compliance.
- HIPAA Staffing – An IT Security Analyst was hired in April 2004 to assist with university-wide compliance efforts.
- HIPAA Security Kickoff Meeting – The HIPAA Security Analyst held a meeting in May 2004 to share information about compliance gaps and lay the groundwork for starting Phase II; the final phase of this project.
Vulnerability Scanning Software
This product was installed in the Network Operations Center (NOC) to allow IT Security, Network Engineering, and Systems support personnel to identify known security weaknesses (Internet Information Server vulnerabilities, buffer overflows, etc.) in critical IT systems. This information has proven to be crucial in protecting these systems from computer hackers, viruses, and worms. In addition, this product has been used to mitigate the effect of university-wide computer infections by sweeping the campus network and identifying vulnerable or infected systems, allowing IT support staff to focus their efforts on a targeted population.
Appendix A: Presentations/Articles/Technical Papers

Presentations

4. Collins, Sharon; Fischer, James; Hare, Jennifer; Huskamp, Jeffrey; Moses, Jennifer. "Presentation to Aeronautical Systems Center (ASC)." Dayton OH. October 2003.
5. Collins, Sharon; Fischer, James; Hare, Jennifer; Huskamp, Jeffrey; Moses, Jennifer. "Presentation to Aeronautical Systems Center Simulation and Analysis Facility (SIMAF)." Dayton, OH. October 2003.
6. Collins, Sharon; Fischer, James; Hare, Jennifer; Huskamp, Jeffrey; Moses, Jennifer. Presentation to Air Force Institute of Technology (AFIT). Dayton, OH. October 2003.
17. Collins, Sharon; Fischer, James; Hare, Jennifer; Huskamp, Jeffrey; Moses, Jennifer. "Presentation to Navy Research Laboratory (NRL)." Washington, DC. April 2004.
18. Collins, Sharon; Fischer, James; Hare, Jennifer; Huskamp, Jeffrey; Moses, Jennifer. "Presentation to Army Research Laboratory (ARL)." Aberdeen, MD. April 2004.
26. Collins, Sharon; Fischer, James; Hare, Jennifer; Huskamp, Jeffrey; Moses, Jennifer. CDLT Days at ASC, ARL, ERDC, NAVO. 2004.
27. Collins, Sharon; Fischer, James; Hare, Jennifer; Huskamp, Jeffrey; Moses, Jennifer. Presentation at 2003 Tech Review. Atlanta, GA. 2004.
Articles and Technical Papers

1. Collins, Sharon; Fischer, James; Frschingbauer, Jon; Hare, Jennifer; Huskamp, Jeffrey; Moses, Jennifer. “Polycom ViaVideo 3.0 Toolkit.” Updated 25 July 2003.
3. Huskamp, Jeffrey; Collins, Sharon; Fischer, James; Hare, Jen; Moses, Jennifer. “CDLT Program Plan.” Updated 14 August 2003.
9. Collins, Sharon; Fischer, James; Frschingbauer, Jon; Hare, Jennifer; Huskamp, Jeffrey; Moses, Jennifer. “Presenter One Live Webcast Toolkit.” Updated 2 December 2003.
16. Collins, Sharon; Fischer, James; Frschingbauer, Jon; Hare, Jennifer; Huskamp, Jeffrey; Moses, Jennifer. “Virtual Room Videoconferencing System (VRVS) 3.x Toolkit.” 02 April 2004.
17. Collins, Sharon; Fischer, James; Frschingbauer, Jon; Hare, Jennifer; Huskamp, Jeffrey; Moses, Jennifer. “Polycom ViaVideo 5.1 Toolkit.” 20 April 2004.
21. Collins, Sharon; Fischer, James; Frschingbauer, Jon; Hare, Jennifer; Huskamp, Jeffrey; Moses, Jennifer. “Access Grid / Personal Interface to the Grid (PIG) 2.x Toolkit.” 11 May 2004.
Publications