Request for IT Management Flexibility

Approved by
Western Carolina University Board of Trustees
September 5, 2003

Western Carolina University
Cullowhee, NC 28723
September 4, 2003

**Western Carolina University
IT Management Flexibility Plan**

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1. **Introduction**

Information Technology at Western Carolina University is in transition. For many years the university was well-served by a Computer Center, which provided mainframe support for business systems and a few specialized academic programs. With the emergence of the internet, client-server computing, and powerful desktop computers, that model was no longer adequate to meet growing demands and diverse technology needs. Furthermore, the university chose to make information technology a strategic factor by becoming the first University of North Carolina institution to require that all students own a desktop computer as part of the admissions standard. This policy was based on academic principles.   As a result of the policy, support for educational technologies became a major responsibility of information technology at the university.

In 2001, the Chancellor received the PricewaterhouseCoopers' report, *Information Technology Organizational Assessment,* <http://planning.wcu.edu/PwCTechReport.pdf> a report that recommended movement to a new model of IT management, led by a chief information officer, who would serve on the Chancellor's Executive Council, and who would provide strategic leadership at a university-wide level. The Chancellor chose to move in this new direction, and with the hiring of the university's first Chief Information Officer (CIO) later in 2001 a process of major change was initiated. In fall 2002, the Executive Council, Chancellor, and ultimately, the Western Carolina University Board of Trustees approved the CIO's *Proposal for a Division of Information Technology.* <http://www.wcu.edu/it/cio/planning/itproposal.pdf>

With these changes, Western Carolina University has taken a very deliberate step to manage information technology as a strategic resource of the university.

2. Information Technology Planning

a. *Western Carolina University's Strategic Plan*

Western Carolina University's strategic information technology (IT) plan is a component of the university's overall strategic plan. As such, it is driven by institutional mission and goals that are established by the Chancellor and Board of Trustees of Western Carolina University, as well as the overall University of North Carolina plans created by the Office of the President and the Board of Governors.

The development of Western Carolina University's strategic IT plan is the responsibility of the Chief Information Officer (CIO), who assures that the plan is aligned with the global strategic planning processes of the university and the university system. After the strategic IT plan is approved by the Chancellor, the CIO is responsible for assuring that it is implemented within the constraints of available resources. Under Western's strategic planning approach, each of the divisions of the university produces an annual action plan comprised of strategic, tactical, and operational components. The CIO's Action Plan is developed in conjunction with those of the other university division leaders and is subject to the approval of the Chancellor and review of the Board of Trustees. The synergy of the plans is a result of collaborative efforts among the participants rather than from a linear development process.

b. *The UNC IT Strategy*

Western Carolina University's information technology efforts are closely linked with the University of North Carolina IT strategy as described in ***A Roadmap to the Future: A Report to Faculty, Staff, Students, Trustees and Friends of the 16 Campuses***. <http://www.northcarolina.edu/content.php/ir/strategy/roadmap.htm> The following table outlines representative Western Carolina initiatives that support the five key focus areas of the university system strategy:

UNC Strategy Focus	Key Western Carolina Initiatives
Campus Teaching and Learning with Technology	• Active participation in TLT Collaborative. • Appointment of Associate CIO for Educational Technologies and creation of Educational Technologies Department. • Course Management System Task Force appointed jointly by Chief Academic Officer and Chief Information Officer. • Enhanced support for WebCT after its selection as institutional course management system.
Distance Education	• Establishment of Project Management master's degree as entirely on-line program. • Support for development of other on-line courses. • Increases in distance education enrollment. • Enhanced technology support mechanisms for distance education faculty and students in Department of Educational Technologies.
Services for Students	• Student computer requirement and subsequent provision of internet access to all on-campus students. • Development of ResNet support system to address connectivity needs of residential students. • Upgrading of student computer labs. • Implementation of Web for Students to provide on-line services. • Implementation of Campus Pipeline web portal. • Establishment of Information Technology Service Center for student on-site support. • Active promotion of help desk and other services to students through participation in student activities.
Administrative Systems	• Active participation in UNC Shared Services Alliance. • Active participation in Banner Conversion project. • Implementation of Web for Faculty and Web for Alumni products.
Logistical Needs	• Upgraded campus network to meet baseline standards. • Tripling of wide area bandwidth through NCREN. • Active participation in establishing regional high-speed access and further increasing campus bandwidth through the Education and Research Consortium of the Western Carolinas. • Proposed life-cycle technology replacement plan. • Initiation of university infrastructure plan for application, server, network, and security.

c. ***Board of Governors' Strategic Directions for the University***

Western Carolina University's IT initiatives strongly support the Board of Governors' strategic directions for the university as described in *The University of North Carolina Board of Governors Long Range Plan 2002-2007* (2002). <http://intranet.northcarolina.edu/docs/aa/planning/reports/longplan/LRP2002-07.pdf>

Information technology supports many areas of the university's strategic directions,

Board of Governors' Strategic Direction	IT Supporting Activities
1. Access: Ensure affordability and access to higher education for all who qualify and embrace a vision of lifelong learning	IT helps to lower administrative costs through computer assistance for management activities. It also provides access through distance education to citizens who might otherwise be unable to participate in higher education.
2. Intellectual Capital Formation: Through high quality and relevant graduate, professional, and undergraduate programs, develop an educated citizenry that will enable North Carolina to flourish	IT supports Western's distance education Master's degree programs in Project Management, Two Year Community College Administration, and Entrepreneurship, as well as undergraduate programs in Birth-Kindergarten, Elementary, and Middle Grades education; Business Administration; Criminal Justice; Engineering Technology; and Emergency Medical Care. In addition, certificate programs are offered in Gerontology and Professional Project Manager.
3. K-16 Education: Continue to propose and support initiatives to serve the needs of the State's public schools	IT supports Western Carolina's distance learning programs in Education (see above), and special initiatives to encourage uses of technology in the K-12 classroom, such as the summer Music Technology and Multimedia workshop.

4. Creation and Transfer of Knowledge: Expand the frontiers of knowledge through scholarship and research and stimulate economic development in North Carolina through basic and applied research, technology transfer, and public service activities	IT contributes to the development of regional high speed internet access for the Western region through active participation in the Education and Research Consortium of the Western Carolinas. In addition, support of applied research by faculty in various departments contributes to economic development and public service to the region.
5. Internationalization: Promote an international perspective throughout the University community to prepare citizens to become leaders in a multi-ethnic and global society	IT provides support to the University's Jamaica Program, which provides teacher education programs. IT also enables access to international locations and resources through distance technologies.
6. Transformation and Change: Use the power of information technology guided by IT strategy and more effective educational, administrative, and business practices to enable the University to respond to the competitive global environment of the 21st century	IT contributions to this strategic direction are extensive and are documented in detail in the narrative immediately following this table.

The following highlights in greater detail Western Carolina initiatives that relate directly to the Board of Governors Strategic Direction six, which charges the university to "Use the power of information technology guided by IT strategy and more effective educational, administrative, and business practices to enable the university to respond to the competitive global environment of the 21st century" (p. 40).

This Board of Governors charge goes on to elaborate key areas for IT leadership. Some of those charges fall primarily to the Office of the President. The six areas presented here are those in which significant campus-based action has occurred, and a summary of Western's response to each is provided.

1. Board of Governors Charge: "Expand campus teaching and learning with technology (TLT) audiences beyond faculty to include librarians, instructional technologists, academic administrators, staff, and students; expand the portal to a professional

development portal, align TLT grants and workshops with e-learning strategies."

Western Carolina University Initiatives: Western has actively participated in the TLT Collaborative, including presentations at the annual TLT conference. Instructional technologists have been involved in these presentations and in campus activities through the Coulter Faculty Center, the Division of Information Technology, Hunter Library, and several colleges. Most technology training activities are open to faculty, staff, and students.

2. Board of Governors Charge: "Implement coordinated technology platforms and services for e-learning both off-campus and in traditional classrooms. Develop and market existing UNC e-learning programs and courses. Develop policies and standards for coordinated offerings."

Western Carolina University Initiatives: During fall 2002, Western conducted an extensive review of major course management systems, including a UNC system-wide teleconference. The recommendations in *WebCT vs. Blackboard: Report of the Course Management Task Force* (2002).
<http://www.wcu.edu/it/cio/planning/cmsfinalreport.pdf> explicitly call for coordinated platforms, policies, and standards. The reorganization of educational technology support into the Department of Educational Technologies within the IT Division was designed to extend and coordinate support as a university-wide resource.

3. Board of Governors Charge: "Create a UNC-wide data warehouse to simplify UNC-wide data collection, improve data retention, and provide more efficient and effective reporting capabilities. Plan the next generation of integrated administrative information systems. Align support services with e-learning strategies."

Western Carolina University Initiatives: Western has participated fully in the Office of the President's Finance Datamart project. In addition, the university has moved with the UNC Shared Services Alliance toward implementing SCT Banner as integrated administrative information systems. Western plans to implement these new systems within the integrated Banner/WebCT/Luminis framework so that e-learning support can be fully aligned with administrative systems.

4. Board of Governors Charge: "Complete remaining web-enabled student services and implement the Prospective Student Portal."

Western Carolina University Initiatives: Western served as the main campus site for development of the Prospective Student Portal. With the transfer of that program to SCT Corporation as part of a university business transaction, Western has remained ready to be the first implementer of the Portal under the new business relationship. Currently, student services are web-enabled through Campus Pipeline and Web for Students.

5. Board of Governors Charge: "Implement second phase of campus network build out. Expand campus network maintenance; enhance user support and training."

Western Carolina University Initiatives: The campus network has been enhanced to provide a one gigabit backbone with 100 megabit Ethernet to desktops in university buildings. The student residential network has been partially upgraded to this status. Available bandwidth has been expanded to 155 meg/second. Expansion to 622 meg/second will be achieved fall 2003 with completion of the Education and Research Consortium (ERC) backbone. User support and training have been accomplished through the implementation of the IT Services Help Desk system, with training provided to new faculty and to students during orientation programs.

6. Board of Governors Charge: "Develop an IT policy framework for acquiring, managing and implementing IT on UNC campuses. Expand and enhance inter-campus and inter-education sector networking."

Western Carolina University Initiatives: Through its leadership role in the Education and Research Consortium of the Western Carolinas, the university has expanded inter-campus and inter-education sector networking. In addition, the College of Education and Allied Professions has been active in promoting networking through the Adventure of the American Mind project supporting use of U.S. Library of Congress materials in K-12 school settings.

As these examples illustrate, information technology management at Western Carolina University has directed its energies and resources toward the established goals of the University of North Carolina System.

d. *System-wide Information Technology Planning*

The Division of Information Technology participates on behalf of Western Carolina University in system-wide planning in collaboration with the UNC Division of Information Resources. Among the key planning activities are those of the UNC Chief Information Officers group, those of the UNC Teaching and Learning with Technology Collaborative, and those of the UNC Shared Services Alliance.
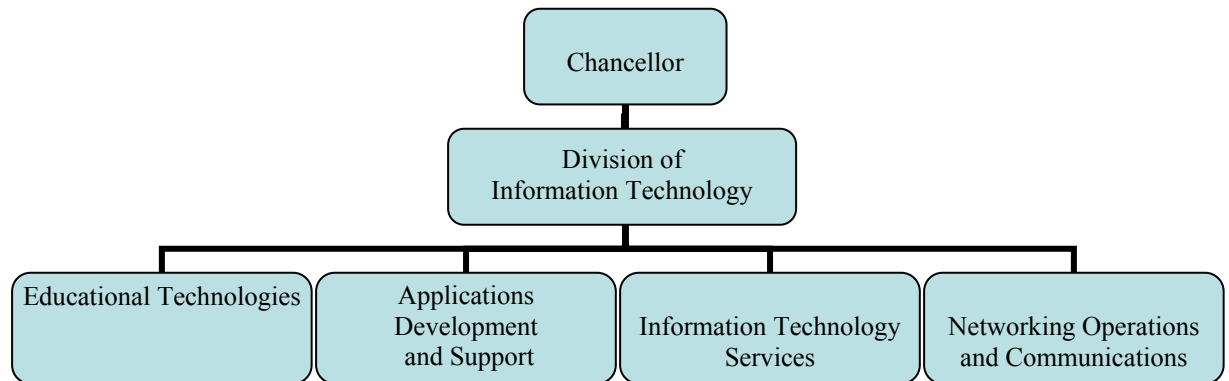
e. *Infrastructure Planning*

The Division of Information Technology develops, implements, and maintains an enterprise technical infrastructure in order to meet strategic and operational goals while using resources efficiently.

3. Organization

a. *IT Organization Chart and Functional Responsibilities*

The Division of Information Technology at Western Carolina University is headed by the Chief Information Officer, reports to the Chancellor, and consists of the following major organizational units:

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                        Chancellor
                            |
                     Division of
                Information Technology
        ┌───────────┬───────────┬───────────┐
  Educational   Applications   Information   Networking Operations
  Technologies  Development     Technology   and Communications
                and Support     Services
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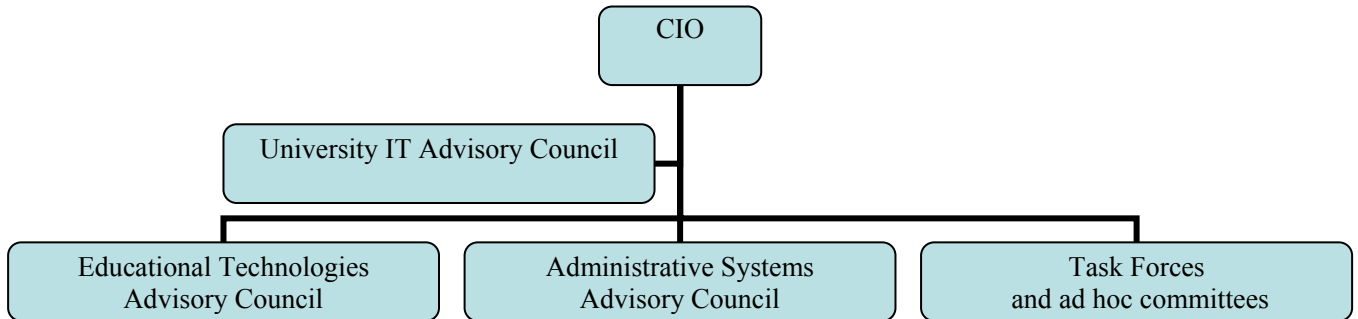
It is the responsibility of the CIO to regularly review and assess the effectiveness of the division's organization, making modifications as needed.

b. *Standing IT Committees*

Effective information technology management in the university requires mechanisms for broad, active participation of those

affected by technology decisions. The following advisory system provides the mechanism for such involvement:

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                              ┌──────────┐
                              │   CIO    │
                              └──────────┘
        ┌──────────────────────────────┐
        │ University IT Advisory Council│
        └──────────────────────────────┘
   ┌────────────────────┐  ┌────────────────────┐  ┌────────────────────┐
   │ Educational        │  │ Administrative     │  │ Task Forces        │
   │ Technologies       │  │ Systems            │  │ and ad hoc         │
   │ Advisory Council   │  │ Advisory Council   │  │ committees         │
   └────────────────────┘  └────────────────────┘  └────────────────────┘
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A brief description of each group's role follows:

The Chief Information Officer (CIO): It is the responsibility of the CIO to regularly review and assess the effectiveness of the IT advisory system, making modifications as needed.

The University IT Advisory Council: This council advises the CIO on IT high-level policy and planning issues. In collaboration with other advisory groups, it participates in developing a strategic technology plan for the university that supports the university's overall strategic plan. This group is chaired by the CIO.

The Educational Technologies Advisory Council: This council advises the CIO on issues, policies, and plans related to educational technologies, including labs and classrooms, as well as the student computer requirement. It addresses issues that are brought from college technology committees as needed to assure responsiveness to college-specific needs, and it also addresses issues related to ResNet and student computing. This group includes representatives from each college, the Student Affairs Division, and the student body. It is chaired by the Associate CIO for Educational Technologies.

The Administrative Systems Advisory Council: This council advises the CIO on issues, policies, and plans related to administrative systems, including the enterprise business systems of the university. It addresses issues of coordination in implementing operations, changes, upgrades, and data integrity and consistency among the business systems. This council includes representatives from each of the functional areas

responsible for one of the business systems, and it is chaired by the Director of Applications, Development and Support.

In addition to these formal advisory councils, several colleges and service units at the university have technology committees. The IT Division maintains a system of customer service representatives to assure close coordination with functional units of the university.

c. *The IT Decision-making Process*

IT decisions are the responsibility of the Chief Information Officer, who is accountable to the Chancellor. Processes for making decisions vary, but all decision makers are required to comply with legal requirements and the policies of the State of North Carolina, the University of North Carolina, and Western Carolina University. Decisions are also guided by the *Division of Information Technology Operations Handbook* and by process maps included as documentation within the IT Services Help Desk system.

Day-to-day operational IT decisions are delegated to IT department directors. When necessary or desirable, decisions impacting more than one IT department will be reviewed at the regular IT Directors' meeting.

Strategic IT decisions or issues with institutional impact are made by the CIO, usually following review with the Chancellor's Executive Council or the executive administrators of affected areas. Such decisions are also reviewed with the University Attorney as needed. Some decisions of this type, especially those requiring allocation of institutional resources, are recommended by the CIO for final resolution by the Chancellor.

4. IT Infrastructure, Standards and Policies

a. *Western Carolina University's IT Infrastructure*

Applications: Western Carolina University supports on-line instruction with WebCT Campus Edition as the current course management system. In addition, a netware server is provided for general course support. Specialized academic applications may be housed on this server or on various departmental servers. A standard suite of desktop products is provided for student use in general computer laboratories.

WCU's core business applications are a combination of SCT Plus product line (FRS, SIS, etc...) and locally developed applications. The Campus Pipeline product is in place as a student portal for email and student record access. Several locally-developed applications provide web-based access to other systems. A student debit-card system is in place based on the CBORD debit-card system.

Microsoft Exchange 2000 is used as the primary groupware tool for faculty and staff. Web operations are served via Microsoft IIS and Apache. Web database applications are run using both ASP and Cold Fusion as middleware to MS Access and MS-SQL databases.

Servers: The current OS for core business applications is the OpenVMS operating system. Student, faculty and staff email accounts also exist on the OpenVMS system. The Campus Pipeline portal and some network applications (DNS, NNTP) operate on the Solaris operating system. File and print services for faculty, staff, and labs run on NetWare 4.11 systems. Web, middleware, database, and other 'canned' applications run on Microsoft Windows 2000 Advanced Server or Microsoft Windows NT 4.0 Server. The WebCT course management system is being migrated from Microsoft Windows NT to Microsoft Windows 2000.

Hardware for most servers is workgroup or enterprise-class hardware with integrated RAID functionality. Compaq Proliant1600 and ML370 are the predominate server hardware platforms.

Network: WCU's current network architecture is a flattened switch/hub network based on the Enterasys SecureFast product. Cisco's 6509s in HSRP mode provide access control and routing between SecureFast VLANS. All administrative and academic buildings are switched 10/100Mb/s to the desktop while most residential buildings are shared 10Mbs. Building to building connections are mostly 1000Mb/s fiber connections. 802.11b wireless is implemented in limited areas on campus with a locally developed control system in place to control user access.

Protocols active on the network include TCP/IP, IPX/SPX, AppleTalk, and DecNet.

IP-based MPEG-2 video conference facilities use the campus fiber-optic infrastructure to access remote sites via the state network (NCREN). Campus data and interactive video is combined on the edge campus router and accesses the state network and the

Internet via an OC-3 connection provided by DukeNet. Residential students are provided network access in their rooms, while off-campus students provide their own connectivity. Students do not have access to dedicated network storage.

Clients: Desktop systems used by faculty and staff include Win9.x, WinNT, Win2000, WinXP, MacOS 8.x, MacOS 9.x, MacOS X, and some limited Linux. Desktop productivity applications are based mainly on the Microsoft Office product suite. Both Netscape Navigator and Microsoft Internet Explorer are used as web browsers. Both Palm and Windows CE hand-held devices are currently in use. Students are required to own a Macintosh or Intel computer with Microsoft Office.

b. *IT-related Policies*

Western Carolina University has two primary institutional policies for information technology:

Policy 52: Use Of Computers and Data Communications. (Revised December 2002).
<http://www.wcu.edu/chancellor/index/universitypolicy/policy52.html>

Policy 67: Personal Computers. (June 1999).
<http://www.wcu.edu/chancellor/index/universitypolicy/policy67.html>

In addition, the following university policy establishes the role of the Chief Information Officer related to information technology contracts:

Policy 62. Execution of Contracts (Revised June 2002).
<http://www.wcu.edu/chancellor/index/universitypolicy/policy62.html>

c. *Technical Standards*

Technical standards are recorded in the following documents:

Western Carolina University Division of Information Technology Policy Handbook. (June 2003).
<http://www.wcu.edu/it/cio/policies_standards/pol2003.pdf>

Western Carolina University Division of Information Technology Operations Manual. (Revised November 2002). (This document contains sensitive information related to IT security. Please contact the WCU Office of the CIO if more information is needed.)

Computer Center Web Application Development Standards.
(July 2002).
<http://www.wcu.edu/it/cio/policies_standards/web.pdf>

Network Security Standards. (2003).
<http://www.wcu.edu/it/cio/policies_standards/SecStandards.pdf >

WCU Computer Requirement. (2003-2004).
<http://www.poweryourmind.com/compreq.html>

5. Management Processes

a. *Process Planning and Project Planning*

Western Carolina University's Strategic Information Technology
Plan is implemented through operational plans for effective
deployment of IT resources and effective implementation of IT
projects and initiatives. Operational IT planning at the university
consists of two major areas: process planning and project
planning.

The Division of Information Technology at Western Carolina
University utilizes process improvement methodology to
operationalize major recurring IT responsibilities. For planning of
new processes, planning begins with needs analysis, comparison of
alternative means for meeting those needs, and development of
adequate support plans that identify both (1) IT divisional roles
and responsibilities and (2) functional user roles and
responsibilities. An IT departmental "owner" is assigned for all
roles and responsibilities within the IT Division. Specific processes
are mapped as part of the planning process, and that map
becomes part of the support documentation. Process planning
includes establishing performance indicators and service-level
standards.

Documentation of IT processes is provided in the following
documents:

*Western Carolina University Division of Information Technology
Policy Handbook.* (June 2003).
<http://www.wcu.edu/it/cio/policies_standards/pol2003.pdf>

*Western Carolina University Division of Information Technology
Operations Handbook.* (Revised November 2002).   (This document

contains sensitive information related to IT security. Please contact the WCU Office of the CIO if more information is needed.)

Disaster Recovery Plan, Western Carolina University, Office of the Chief Information Officer. (Revised November 2002). (This document contains sensitive information related to IT security. Please contact the WCU Office of the CIO if more information is needed.)

Additional management processes are documented in the process maps incorporated in the IT Services Help Desk System.

IT project management is discussed in section D below.

b. *IS/IT Audit Performance*

The State of North Carolina conducted an information systems audit at Western Carolina University during fall 2002.

The university has received a satisfactory statement of completion from the University's internal auditor and from the Office of the President. These statements are attached in Appendix A.

c. *Enterprise IT Purchasing*

The IT Division serves as the primary contact for IT vendors and manages enterprise-wide, IT-related purchasing of hardware, software, and services in collaboration with the university's Purchasing Department. Enterprise IT includes the following:

- All hardware that connects to the voice/video/data networks (both wired and wireless)
- All software that is part of standard desktop configurations (including operating systems and general use applications such as word processing, spreadsheets, etc.), and other software that is in use or made available to broad segments of the university community
- Major business and administrative applications, including the administrative applications suite (currently SCT Plus)

  Other software:

- The division does not select or purchase discipline-specific academic software, which is the responsibility of the individual academic departments. However, the division does evaluate

such discipline-specific software for compatibility with the university's IT infrastructure, including the software's capability for operating in university student computer labs and over the university's network.

- The division does not select or purchase business or administrative software intended for a specialized, individual need of an office or service area.   However, the division participates in the review and selection of any such application that will share data with the major business and administrative applications or that will contain mission-critical data (that is, data that is legally required or protected, or that needs to be retained for more than one semester). It also evaluates such office-specific software for compatibility with the university's IT infrastructure, including the software's capacity for operating over the university's network.

- The division also assures that prior to purchase, adequate support plans are in place for all software implemented at the university. Such support plans identify both IT divisional roles and responsibilities and functional user roles and responsibilities.

d. *Process for Major IT Implementation Projects*

Projects are defined as activities with a specific start and finish and with specific measurable outcomes. The Division of Information Technology at Western Carolina University is committed to project management based on the standards of the Project Management Institute (PMI) as encoded in *A Guide to the Project Management Body of Knowledge. (*Project Management Institute, 2000). <http://www.pmibookstore.org/productdetail.asp?productid=4108>

e. *IT Life Cycle Management Efforts*

IT life cycle management efforts have been applied most directly to instructional technology. With the publication of *The Cost of Instructional Technology Refresh.* (July 22, 2002). <http://www.wcu.edu/it/cio/planning/InstructionalTechnologyReplacement2002.pdf>, the Division of Information Technology adopted a life cycle view. The university allocated substantial funds to update instructional technology. In addition, the Chief Information Officer has proposed funding options to institutionalize support for life cycle needs. As part of the technical infrastructure plan currently under development, life cycle plans will be developed for applications, servers, and networks. Although the university has not yet been able to fully

fund these life cycle plans due to current budget restraints, the plans provide the basis for moving to a life cycle approach.

f. *IT Professional Development and Training Efforts*

The Division of Information Technology attempts to fund IT staff professional development and training based on the concept of $1,000 per year per full-time employee. IT professional development and training is planned in conjunction with the IT strategic and operational plans.

Training for the IT staff and the university as a whole is supported by an internal training program offered by the IT Division in collaboration with the Department of Human Resources' comprehensive training program. The division is establishing an equipped IT training room to enable regularly scheduled offerings to enhance the training of all university constituencies.

6. Assessment and Accountability

a. *IT Success Measures*

Formal annual assessment of information technology is accomplished through the university's planning process. The Chief Information Officer reports on progress in achieving the goals of the CIO's action plan, and the Chancellor reviews progress and evaluates the CIO accordingly. Assessment of individual staff contributions occurs through the State of North Carolina's employee evaluation system.

### b. *IT Accountability Measures*

In addition to this annual summative evaluation, IT management processes include formative evaluation of process improvement efforts. Furthermore, a customer service representative program provides on-going assessment of IT effectiveness.

7. Funding

a. *IT Funding Sources*

IT funding at Western Carolina University includes state appropriations and student fee revenues from Education and Technology fees and other fees, such as those supporting the

residential student network which is supported by revenues from the Office of Residential Living.

WCU Information Technology Funding Sources

- State Funds — 74%
- Student E&T Fees — 21%
- Other Fees — 5%
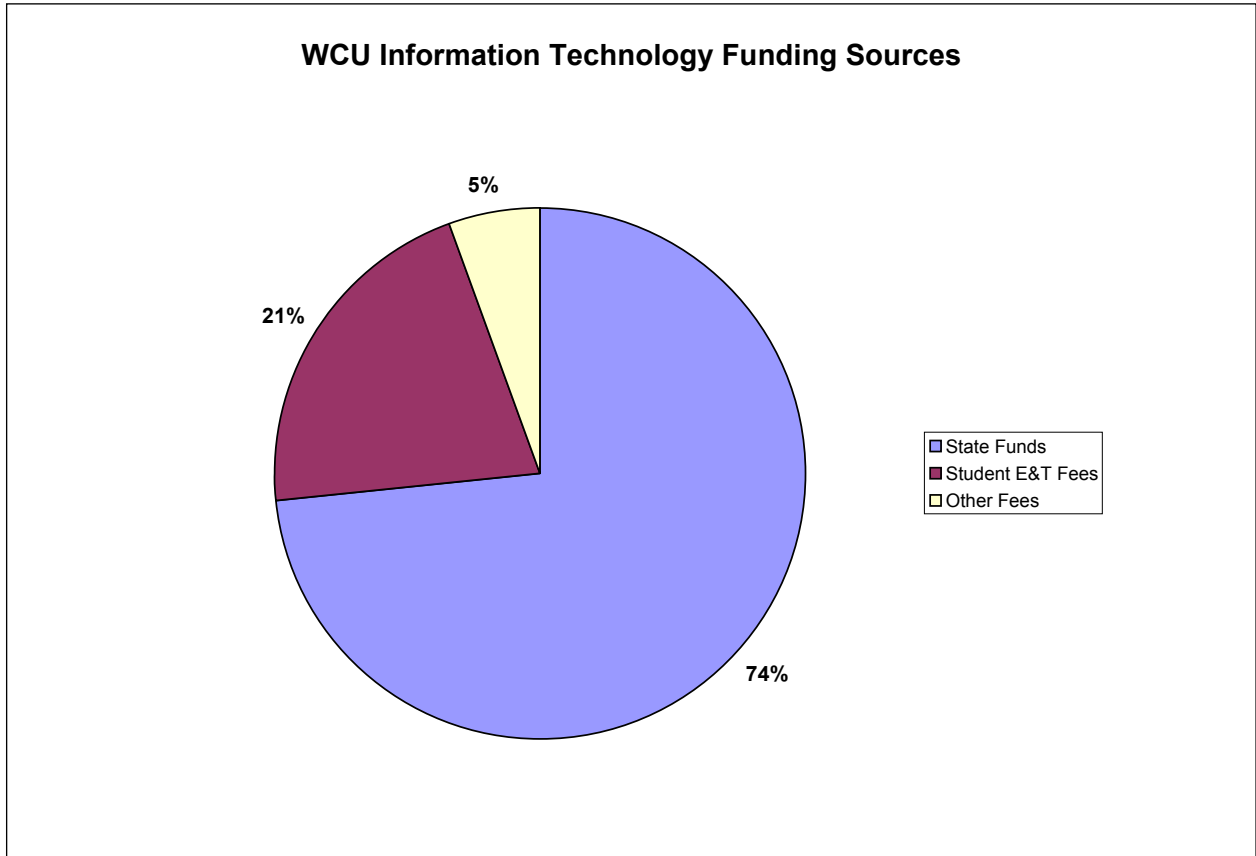
b. *Uses of Centrally-provided IT Funds*

Central IT funds are used to support the IT infrastructure and to support campus-wide services, including general student labs and electronic classrooms.

8. Conclusion—The Case for Effective IT Management

Western Carolina University has demonstrated IT management effectiveness through creation of policies, standards, and effective process management strategies. The recent successful State of North Carolina information systems audit further documents the effectiveness of the university's IT management.

Appendix A

Audit Letters

WESTERN
CAROLINA UNIVERSITY

OFFICE OF THE INTERNAL AUDITOR

June 6, 2003

Mr. Jeffrey R. Davies
Vice President – Finance
UNC General Administration
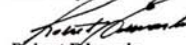P. O. Box 2688
Chapel Hill, NC 27515-2688

Dear Mr. Davies:

I have completed my review of the findings identified in the (IS) audit of Western Carolina University. These findings were considered sensitive in nature and were communicated in a management letter to the University pursuant to the provision of North Carolina G.S. 147-64.6©(18). The purpose of my review was to determine if the University had made satisfactory progress towards resolving the findings outlined in the management letter.

It is my opinion, based on the results of my review of the identified conditions and the corrective actions implemented by the University's IT management, that satisfactory progress towards resolution of the findings has been made by the University. To ensure complete resolution of the findings, I have scheduled one additional review during the first quarter of calendar year 2004.

North Carolina G.S. 116-30.1 requires special responsibility constituent institutions to make satisfactory progress in resolving the findings within a three month period commencing with the date of receipt of the management letter. Western Carolina University's three-month period began on March 17, 2003 and will end on June 16, 2003. The fieldwork for my review was completed on June 5, 2003 and I respectfully submit this report.

Sincerely,

Robert Edwards
Internal Auditor

cc: President Molly Corbett Broad
        Mr. Ralph Campbell, State Auditor
        Dr. John Bardo, Chancellor
        Mr. George Burnette, Associate Vice President for Finance
        Mr. George W. Wooten, Vice Chancellor for Administration and Finance
        Dr. Tom Franke, Chief Information Officer

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Western Carolina University is a campus of The University of North
Carolina and an affirmative action/equal opportunity institution.

The University of North Carolina

GENERAL ADMINISTRATION

POST OFFICE BOX 2688, CHAPEL HILL, NC 27515-2688

JEFFREY R. DAVIES, *Vice President – Finance*

Telephone 919 962-1591

Fax 919 962-0008

e-mail: jrd@ga.unc.edu

RECEIVED

JUN 16 2003

Appalachian State
University

East Carolina
University

Elizabeth City
State University

Fayetteville State
University

North Carolina
Agricultural and
Technical State
University

North Carolina
Central University

North Carolina
School of
the Arts

North Carolina
State University
at Raleigh

University of
North Carolina
at Asheville

University of
North Carolina
at Chapel Hill

University of
North Carolina
at Charlotte

University of
North Carolina
at Greensboro

University of
North Carolina
at Pembroke

University of
North Carolina
at Wilmington

Western Carolina
University

Winston-Salem
State University

An Equal Opportunity/
Affirmative Action
Employer

June 6, 2003

Chancellor John Bardo
Western Carolina University
Cullowhee, N. C. 28723
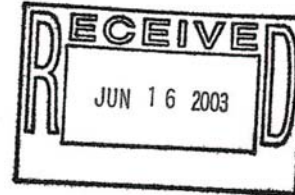
Dear Chancellor Bardo:

Regarding the State Auditor's report "Audit of the Information System General Controls" and the referenced management letter, I am writing you at this time to inform you that Western Carolina University (WCU) has satisfactorily complied with the audit finding resolution requirements of General Statute 116-30.1. This statute requires the President's Office, in consultation with the State Auditor, to determine that WCU has made satisfactory progress towards resolving the reportable audit findings. Based upon the internal auditor's report, discussions with your Director of Internal Audits, and consultation with the Office of the State Auditor, it appears that WCU has either resolved or made satisfactory progress towards resolving the audit findings outlined in the above referenced management letter. As a result of WCU's compliance with General Statute 116-30.1, I will recommend to the President of the University of North Carolina that WCU be allowed to maintain their "Special Responsibility Constituent Institution" designation.

I want to commend you and your staff for the dedicated manner in which the audit findings were addressed. I know you believe as I do that, as public officials, we have a responsibility to maintain fiscal integrity over the State's resources and that the resolution of audit findings is a critical component of maintaining the public trust.

In addition, I would like to remind you of the requirement that your internal auditor perform an additional review of these findings. This review should be done during the first quarter of calendar year 2004. A copy of the report outlining the internal auditor's conclusions should be forwarded to Associate Vice President George Burnette. I feel this additional testing is necessary to ensure on-going compliance with the corrective actions.

If you have any further questions or concerns, please contact either Associate Vice President George Burnette or me.

Sincerely,

Jeffrey R. Davies

cc: President Molly Corbett Broad
Mr. Ralph Campbell, Jr., State Auditor
Mr. George Burnette, Associate Vice President for Finance
Dr. Thomas Franke, Chief Information Officer
Mr. Robert Edwards, Director of Internal Audits
Mr. Martin Vernon, Director of Information Systems Audits

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