Enterprise Resource Planning and Management Report

FY 2000-2001

University of West Florida
Table of Contents

I. Summary of the Year.................................................................1

II. Accomplishments ...............................................................2
   A. Milestones - ................................................................. 2
      Completed Strategic Projects Table ....................................... 5
   B. Ongoing - ......................................................................... 6
      Ongoing Strategic Projects Table ........................................... 10
   C. Measurements - ............................................................ 11
      "Balanced Scorecard" Performance Measurement Table ....... 12

III. Managing the Resource Portfolio ....................................... 14
   A. Technology Description and Strategies - ......................... 16
      Inventory Summary Table ............................................. 18
      Mainframe Inventory Detail Table ................................... 18
      Campus Networking Table ............................................. 19
      Wide Area Networking Table ......................................... 19
   B. Human Resource Strategies - ........................................... 20
   C. Financial Strategies - .................................................... 21
      Information Technology and Communication Expenditures table .... 22

IV. Collaboration ................................................................. 24

V. University of West Florida and the Internet.......................... 25

VI. The Future – Challenges and Directions .............................. 26
    Future Strategic Projects Table ....................................... 27

Report prepared by:
Michael F. Dieckmann
Associate Vice President for Information Technology and Chief Information Technology Officer
University of West Florida
11000 University Parkway, Pensacola, FL  32514
850/474-2558 SUNCOM 680-2558 FAX  850/474-2634 EMAIL MichaelDieckmann@uwf.edu

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I. Summary of the Year

In 2000-2001, the University of West Florida continued its emphasis on IT infrastructure renewal, instructional technology, and automated delivery of student services.

In IT infrastructure renewal, UWF achieved the initial deployment of gigabit Ethernet on segments of the campus backbone. The ResNet residence hall network was deployed and then expanded to all but the older south-side dorms. A major upgrade of enterprise servers and services began, with the implementation of a large-scale storage area network (SAN), and the migration to a fault-tolerant and scalable enterprise services architecture based on Windows 2000 clustered servers.

In instructional technology, the Classroom Technology Initiative equipped fifteen of the University’s general-purpose classrooms with multimedia presentation capability and network access. The Prometheus system from George Washington University was deployed as the web-based course delivery platform to replace WebCT. Progress was made toward equipping UWF faculty with powerful laptop computers. The GroupMail system allowed faculty members and academic administrators to easily send email to targeted populations of students, such as students enrolled in a particular course or program. Videoserving, H.323-based instructional videoconferencing, and portable classrooms of wireless laptop computers were all in the pilot phases by year-end. Major upgrades were made to instructional student computer labs.

In automated delivery of student services, the COMPASS student E-Services portal was significantly expanded. The web-based course registration system was released in November 2000, and the LightHouse web site for prospective students was also released. Development of a new student email system was underway by year-end.

Two major collaborative projects, the TOPAS state universities purchasing system and the UWF Payroll Consortium budget management system, both came to a halt as results of the restructuring of higher education governance in Florida. With this restructuring also came new system acquisition pressures with the mandate to become independent of state financial systems such as SAMAS.

As the year came to a close, UWF was facing major pressure from increasing demands for higher network performance and bandwidth. Threats from viruses, hackers, and other network intrusions made Internet and network security a paramount concern. Prospects of a disappointing budget year in 2001-2002 brought many major IT initiatives, such as classroom technology, largely to a halt.
II. Accomplishments


A. Milestones -

Significant accomplishments in information technology and information resource management during 2000-2001 include the following:

IT Infrastructure

UWF began a migration to its next generation platform for enterprise services, which is based on the concept of a network-based storage architecture combined with clustered servers providing robust, fault-tolerant and scalable systems. The initial phases of this project got underway in 2000-2001 with the acquisition of Dell PowerVault Storage Area Network (SAN) equipment and Dell PowerEdge servers. The first deployment of this new architecture will be in the ArgoMail project in late 2001. ArgoMail is UWF’s new student electronic mail system, based on Microsoft Exchange Server 2000.

UWF also performed key upgrades to its core network infrastructure. The main router was upgraded from an older Cisco 7000 system to an Enterasys 8600 smartswitch router, with the major backbone architecture being gigabit Ethernet. Key network core switches were also upgraded, and a firewall system was acquired. UWF began the migration to dynamic IP assignment via DHCP across the entire enterprise.

In software infrastructure, UWF continued to site-license Microsoft software for faculty/staff use via the Microsoft Campus Agreement, and also acquired a faculty/staff site-license for Adobe Acrobat software. UWF made significant upgrades to the infrastructure of the university data center facility, including expansion of the uninterruptible power supply (UPS) system serving the data center.

Technology Support

In technology support, UWF continued to embrace a federated IT support model where support is coordinated between a central IT organization (the Information Technology Services division, or ITS) and local computing support providers in divisions, departments, and colleges.

Via outsourcing and other partnerships, the University provided a robust technology training program for employees, concentrating on Microsoft software applications licensed via the Campus Agreement. The University also made significant use of computer-based training available via the Northwest Regional Data Center.

ITS began the merger of its student/Internet and faculty/staff help desks into a single unit, and deployed a comprehensive call and work order tracking system across the division.

Student Services

Student services continued to be the major focus of applications development and deployment, as part of the University’s ongoing “Students First” initiative. The COMPASS student services web portal was significantly expanded. Web-based course registration was piloted in summer 2000 and deployed fully in the advanced registration for Spring Term 2001. UWF deployed LightHouse, a student web services portal...
for prospective and incoming students, and integrated several of its systems with the statewide FACTS system at facts.org.

The University integrated all key technology information for students into a single publication, the Student Technology Guide. The ResNet student residence hall network, providing a switched 10/100 Mbps connection for each student resident, was deployed initially in the Village apartment complexes and then expanded to Martin Hall.

Work began on a system for accepting credit card payments online and providing a consolidated bill presentation and payment acceptance service. Projects were also initiated to provide a new student electronic mail system, ArgoMail, and to deploy the next generation of the ArgoNet authentication/authorization environment that provides UWF students with integrated access to technology services and resources.

### Academic Computing

UWF upgraded fifteen of its general-purpose classrooms to include network connectivity and multimedia presentation ability, using a new “instructional podium” design that presumes the instructor has a laptop computer. The University also began the migration from WebCT to Prometheus as the main web-based course delivery platform.

The faculty laptop program continued, under the leadership of the Center for University Teaching and Learning. Several colleges upgraded their instructional student computer labs. ITS released GroupMail, a flexible web-based system for sending electronic mail to targeted populations of students, designed primarily for use by course instructors.

### Administrative Computing

UWF continued work on deploying automated financial aid award packing, which is now slated for release in Spring Term 2002. A new classroom scheduling system, based on the Schedule25 product, began development; the UWF system is a web-based system that provides significant enhancements to the base Schedule25 product.

A significant change in the UWF computing environment was the release of Report Navigator, a web-based system for distributing reports electronically. With Report Navigator, many paper-based reports and documents – especially those coming from the mainframe – have been made available electronically via the web.

The SUS purchasing directors halted the TOPAS project, which aimed to produce a web-based purchasing system for the universities. Likewise, late in the year the UWF Payroll Consortium halted its work on a web-based budget management system to be integrated with SAMAS. This system was made obsolete by changes in the governance structure of higher education in Florida.

UWF moved its property inventory and photocopier charges systems to a web-based interface. The Physical Plant division acquired a Computerized Maintenance Management System which it is deploying throughout the division. UWF’s data warehouse initiative continued in its Office of University Planning.
Television and Media

UWF began work with video streaming on the Internet when it hosted a meeting of the Board of Regents and provided live webcasting of the event. UWF continued this work with plans to deploy a robust video server, and is currently streaming much of UWF-TV’s original programming live to the Internet.

UWF’s Save the Films project completed the conversion of older instructional videotape media to VHS format for the University and for other academic clients such as the University of Florida. The University produced a new employee orientation CD and an admissions CD for prospective students.
### Completed Strategic Projects Table

<table>
<thead>
<tr>
<th>Name of Project:</th>
<th>Description:</th>
<th>Est. Total Budget</th>
<th>Beginning FY</th>
<th>Ending FY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UWF has no projects falling under the criteria defined for reporting in this table.</td>
<td></td>
<td></td>
<td>2000-01</td>
</tr>
</tbody>
</table>

* Criteria are projects that had a budget of $500,000 or more in one year, involved another state agency, or affected another state agency.
B. Ongoing -

Major ongoing projects and initiatives for 2001-2002 are described below.

**IT Infrastructure**

In IT infrastructure, UWF’s efforts in 2001-2002 will concentrate on renewal of the campus data network and establishing the next-generation platform for enterprise services. The greatest area of IT investment will be the network, with projects in the *Next Generation Network Initiative* including:

- Replacing all remaining shared Ethernet hubs on the campus backbone and migrating all backbone segments to either gigabit or duplexed 100 Mbps Ethernet.
- Establishing multiple levels of firewall protection.
- Establishing a new domain name services (DNS) and dynamic IP assignment (DHCP) architecture.
- Deploying several 802.11B wireless networking pilots.
- Deploying robust intrusion detection mechanisms.
- Establishing redundancy for core routers and upgrading all edge routers.
- Migrating all core enterprise switches to the Enterasys Matrix E7 platform.
- Establishing quality of service and bandwidth prioritization and management capabilities.
- Establishing improved monitoring and management capabilities.
- Experimenting with directory-based routing for wireless network security.
- Upgrading most of the network cabling in the university data center.

For enterprise services, UWF will deploy phase one of its network-based storage architecture via the Dell PowerVault storage area network (SAN). The first system to use this architecture will be the new ArgoMail student email system. UWF will also release its initial deployment of a new integrated enterprise-wide directory service based on Microsoft Active Directory Services. ArgoMail will be the start of the next generation of our ArgoNet account and IT services environment, known as ArgoNet II. Other components of ArgoNet II will include ArgoMessage, a new faculty/staff electronic mail, messaging, electronic forms, and workflow system based on Microsoft Exchange Server.

A key component of UWF’s IT infrastructure is the database services architecture, which is based on Microsoft SQLServer for local systems and IBM’s DB2 for mainframe-resident systems at the Northwest Regional Data Center. UWF has established a new SQLServer database administrator position, who in 2001-2002 will make significant improvements to SQLServer architecture and administration.

UWF’s *Data Center Initiative* seeks to upgrade the University Data Center facility to industry standards, and to improve Data Center environmental systems, security, operations, and management procedures.

UWF will upgrade the ailing student dial-in network service at the Fort Walton Beach campus to fully digital service comparable with services at the Pensacola campus.

Security of the IT infrastructure and enterprise systems is an increasing concern as threats from viruses, hackers, and other sources continue to rise exponentially. UWF has established the Internet Security Initiative to address these concerns. As part of this initiative, the University will establish a comprehensive database catalog of all servers at the University.
**Technology Support**

UWF’s major thrust in technology support continues to be implementing the *Federated Technology Support* model of distributed services between the central IT organization and distributed support units. As a companion to this, the Information Technology Services (ITS) division is reorganizing around the concept of *tiered support* based on internal service- and operating-level agreements between workgroups combined with use of a comprehensive, integrated call and work order processing system. As part of the federated support initiative, ITS’ Client Services and Technology Support Services workgroups are dramatically increasing support programs for computing local service providers, college Prometheus administrators, and distributed server administrators.

The ITS division is also integrating its separate student and faculty/staff helpdesks into a single unit focused on providing high-quality phone support to clients. This integrated helpdesk will coordinate closely with other service providers, while providing a single point of contact “front end” interface for clients. The ITS division is also increasing its use of formal service level agreements with clients, and operating level agreements for services.

The ITS division also established a Director of Technology Outreach position at the close of 2000-2001. In the coming year, this position will focus on improving internal communications within the ITS division as well as external communications with clients. Major projects include establishing internal and external bimonthly newsletters, revamping all ITS division web pages, and providing client communication plans for all major ITS projects and initiatives.

**Student Services**

Automated student administrative services, and support of students’ use of information technology, will continue to be major goals in the coming year. UWF will continue to expand its web-based electronic services portals for students, which include COMPASS for current students, LightHouse for prospective students, and integration with the statewide FACTS system. The focus for FACTS will be completing admissions processing modules.

A new student electronic mail system, ArgoMail, will be a major change in the student computing environment. Coincident with the release of ArgoMail, UWF is adopting electronic mail as an official means of communicating with students. Associated utilities such as E-Minder, an automated electronic reminder system integrated with administrative processes, will help make ArgoMail a robust and full-featured communications mechanism for students.

UWF will also upgrade its open access student computer labs to the Windows 2000 platform, and will significantly upgrade all back-end student technology infrastructure (such as file storage, printing, and the like) in the release of ArgoNet II.

UWF continues to explore cost-effective ways to extend ResNet to remaining student residence halls, and in 2001-2002 will examine wireless networking as an option for these older housing units.

The second edition of the comprehensive Student Technology Guide will be released.

**Academic Computing**

In 2001-2002 the Classroom Technology Initiative is largely coming to a halt due to lack of funding. Emphasis will be on providing critical upgrades to older technology-equipped classrooms as equipment begins to fail. UWF is also piloting the use of laptop computers in wireless networking equipped classrooms as an alternative to static computer workstations and network ports.
The ongoing enhancement of the Prometheus web-based course delivery platform will continue to be the major focus for academic computing. In concert with the ongoing expansion of Prometheus and technology-enhanced instruction, the UWF Center for University Teaching and Learning continues to expand its faculty support and training programs.

UWF’s electronic mail LISTSERV system, which is used primarily for academic purposes, will be upgraded with a web-based interface.

UWF is developing facilities for H.323-based instructional videoconferencing over the Internet, and will pilot this with a cooperative program with Chipola Junior College.

**Administrative Computing**

The major focus of administrative computing at UWF will be planning for the acquisition of a new integrated financial management system to replace state systems such as SAMAS. As other Florida public universities continue similar projects, the UWF payroll system consortium will begin dismantling and aiding consortium members in moving to their new local systems.

UWF will release automated financial aid award packaging during Spring Term 2002. The advancement division’s Millennium system, which maintains alumni and donor records, will be upgraded.

UWF’s new web-based classroom request and scheduling system will be released. The Report Navigator system will continue expansion as hardcopy report printing is increasingly moved to electronic transmission and viewing. UWF will continue to move casual mainframe use to the web via its Crew’s Control web front-end interface.

In electronic services, UWF is planning a major redesign of its NAUTICAL intranet system to a portal-like architecture. Concurrently, electronic service portals such as COMPASS, LightHouse, and FirstMate will be expanded and integrated with the new NAUTICAL portal. UWF will continue to integrate web-based services with the statewide FACTS system. A version of GroupMail for employees will be released to complement the student GroupMail system. A new system for electronic bill presentation and payment acceptance over the web will also be released.

In support of electronic business and commerce, UWF will release ArgoMessage, a comprehensive electronic mail and messaging system for faculty and staff based on Microsoft Exchange Server. ArgoMessage will be the platform for integrated electronic forms and workflow processing. UWF will also pilot document imaging technology in its Enrollment Services division. A web-based online employment application and hiring system will be released. Several electronic forms are also being moved to web format, using Adobe Acrobat as a primary delivery mechanism.

Organizationally, UWF will consolidate its two administrative computing services workgroups into a single organization with a new director in 2001-2002.
**Television and Media**

Administrative and instructional videoconferencing continues to be a major focus for video media at UWF. In the coming year, UWF will establish network enhancements to support H.323 IP-based videoconferencing, especially for instructional purposes.

UWF also plans to complete deploying its central video server system for both instructional and administrative uses. A web-based interface, currently called CastNet, will provide a portal to video media accessible via the Internet.

UWF’s Save the Films project will continue to provide academic clients across the country with a cost-effective means to preserve older film media by conversion into new formats. The project also plans to expand to include audio media recovery services.

UWF-TV will upgrade its transmission infrastructure to direct fiber optic transmission rather than microwave, and will continue to provide streaming of its live original programming to the Internet. UWF-TVs photography service will continue expansion into digital media.
### Ongoing Strategic Projects Table

<table>
<thead>
<tr>
<th>Name of Project:</th>
<th>Description:</th>
<th>Est. Total Budget</th>
<th>Beginning FY (actual or projected)</th>
<th>Ending FY (actual or projected)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UWF has no projects falling under the criteria defined for reporting in this table.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Criteria are projects that have a budget of $500,000 or more in one year, involve another state agency, or affect another state agency.
C. Measurements -

“Balanced scorecard” performance measures are presented in the table on the following pages.

For the “measurement data” columns, N/A indicates that the measure was not available, or was not collected for the indicated reporting period. U/D indicates that the means of measurement are still under development.

System uptime availability measures, and the means to collect them, are currently under development as part of the Data Center initiative.

Statistics on course sections using web-based delivery will now be available starting in 2001-2002 as part of the Prometheus course management system.
### "Balanced Scorecard" Performance Measurement Table

<table>
<thead>
<tr>
<th>Goal Area</th>
<th>Infrastructure or Application (I or A)</th>
<th>Description</th>
<th>FY 1998-99 Measurement Data</th>
<th>FY 1999-00 Measurement Data</th>
<th>FY 2000-01 Measurement Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Achieving the Strategic Needs of the Entity</td>
<td>I</td>
<td>Percent of campus buildings at current target network architecture.</td>
<td>U/D</td>
<td>U/D</td>
<td>48% (31/65)</td>
</tr>
<tr>
<td></td>
<td>I</td>
<td>Percent of workstation inventory less than 5 years old.</td>
<td>79%</td>
<td>77%</td>
<td>78%</td>
</tr>
<tr>
<td></td>
<td>I</td>
<td>Percent of student computer labs at current target technical architecture.</td>
<td>U/D</td>
<td>U/D</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>Percent of UPC-IT priorities met this year.</td>
<td>N/A</td>
<td>31% (5/16)</td>
<td>28% (5/18)</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>Number of strategic IT projects completed, initiated, and continued.</td>
<td>U/D</td>
<td>U/D</td>
<td>5 completed 12 initiated 1 continued</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>Size of major application deployment backlog.</td>
<td>U/D</td>
<td>U/D</td>
<td>15 systems</td>
</tr>
<tr>
<td>2. Satisfying the Needs of Individual Customers</td>
<td>I</td>
<td>Percent of student residents with ResNet available.</td>
<td>N/A</td>
<td>N/A</td>
<td>74% (704/953)</td>
</tr>
<tr>
<td></td>
<td>I</td>
<td>Percent of classrooms multimedia-capable.</td>
<td>N/A</td>
<td>22% (18/80)</td>
<td>40% (32/80)</td>
</tr>
<tr>
<td></td>
<td>I</td>
<td>Remote access lines per students; per faculty.</td>
<td>N/A</td>
<td>Students = 1/34 (239/8146). Faculty N/A.</td>
<td>Students = 1/35 (239/8264). Faculty N/A.</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>Percent of student residents with ResNet capability using ResNet.</td>
<td>N/A</td>
<td>N/A</td>
<td>54% (381/704)</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>Percent of enrolled students using COMPASS.</td>
<td>N/A</td>
<td>89%</td>
<td>84% (6,942/8,264)</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>Percent of course sections using course management system.</td>
<td>N/A</td>
<td>4%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

1 In previous year’s reports, this was reported as the percentage older than five years, rather than younger.
<table>
<thead>
<tr>
<th>Goal Area</th>
<th>Infrastructure or Application (I or A)</th>
<th>Description</th>
<th>FY 1998-99 Measurement Data</th>
<th>FY 1999-00 Measurement Data</th>
<th>FY 2000-01 Measurement Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Internal Business Performance</td>
<td>I</td>
<td>Uptime availability of core enterprise systems.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>Uptime availability of Internet connectivity.</td>
<td>U/D</td>
<td>U/D</td>
<td>U/D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Uptime availability of cable television network.</td>
<td>U/D</td>
<td>U/D</td>
<td>U/D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number of service level agreements (SLAs); percent of SLAs met.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent of projects on-time, on-budget.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent of helpdesk calls completed within service target.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent of projects using project management methodology.</td>
<td>U/D</td>
<td>U/D</td>
<td>U/D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent of projects involving technology modernization.</td>
<td>U/D</td>
<td>U/D</td>
<td>U/D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent of projects advancing architectural goals or service improvement goals.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent of IT staff completing target training levels.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent of IT staff completing target certifications.</td>
<td>U/D</td>
<td>U/D</td>
<td>U/D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unplanned IT employee turnover.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Data for FY 1998-99:
- Uptime availability of core enterprise systems: N/A
- Uptime availability of Internet connectivity: U/D
- Uptime availability of cable television network: U/D
- Number of service level agreements (SLAs): N/A
- Percent of projects on-time, on-budget: N/A
- Percent of helpdesk calls completed within service target: N/A
- Percent of projects using project management methodology: N/A
- Percent of projects involving technology modernization: N/A
- Percent of projects advancing architectural goals or service improvement goals: N/A
- Percent of IT staff completing target training levels: N/A
- Percent of IT staff completing target certifications: N/A
- Unplanned IT employee turnover: N/A

Data for FY 1999-00:
- Uptime availability of core enterprise systems: U/D
- Uptime availability of Internet connectivity: U/D
- Uptime availability of cable television network: U/D
- Number of service level agreements (SLAs): N/A
- Percent of projects on-time, on-budget: N/A
- Percent of helpdesk calls completed within service target: N/A
- Percent of projects using project management methodology: N/A
- Percent of projects involving technology modernization: N/A
- Percent of projects advancing architectural goals or service improvement goals: N/A
- Percent of IT staff completing target training levels: N/A
- Percent of IT staff completing target certifications: N/A
- Unplanned IT employee turnover: N/A

Data for FY 2000-01:
- Uptime availability of core enterprise systems: N/A
- Uptime availability of Internet connectivity: U/D
- Uptime availability of cable television network: U/D
- Number of service level agreements (SLAs): N/A
- Percent of projects on-time, on-budget: N/A
- Percent of helpdesk calls completed within service target: N/A
- Percent of projects using project management methodology: N/A
- Percent of projects involving technology modernization: N/A
- Percent of projects advancing architectural goals or service improvement goals: N/A
- Percent of IT staff completing target training levels: N/A
- Percent of IT staff completing target certifications: N/A
- Unplanned IT employee turnover: N/A
<table>
<thead>
<tr>
<th>Major Project</th>
<th>Strategic?</th>
<th>Used PM Methodology?</th>
<th>Involved Technology Modernization?</th>
<th>Advanced architectural or service improvement goals?</th>
<th>State (I, C, F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Directory Services</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>I</td>
</tr>
<tr>
<td>ArgoMail (new student email system)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>I</td>
</tr>
<tr>
<td>ArgoMessage (e-messaging system)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>I</td>
</tr>
<tr>
<td>ArgoNet II</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>I</td>
</tr>
<tr>
<td>Automated financial aid award packaging</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>C</td>
</tr>
<tr>
<td>Classroom Technology Initiative</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>C</td>
</tr>
<tr>
<td>Classroom Scheduling System</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>I</td>
</tr>
<tr>
<td>DHCP across network</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>I</td>
</tr>
<tr>
<td>Document imaging</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>I</td>
</tr>
<tr>
<td>Electronic bill presentation and payments</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>I</td>
</tr>
<tr>
<td>Federated IT support</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>I</td>
</tr>
<tr>
<td>FirstMate web site initial deployment</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>F</td>
</tr>
<tr>
<td>GroupMail for students</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>F</td>
</tr>
<tr>
<td>LightHouse web site initial deployment</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>F</td>
</tr>
<tr>
<td>SLA for strategic training</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>F</td>
</tr>
<tr>
<td>NAUTICAL revitalization/web portal</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>I</td>
</tr>
<tr>
<td>Network-based storage</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>I</td>
</tr>
<tr>
<td>Network firewall</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>I</td>
</tr>
<tr>
<td>Next Generation Network Infrastructure</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>I</td>
</tr>
<tr>
<td>Prometheus course management system deployment</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>F</td>
</tr>
<tr>
<td>Report Navigator</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>I</td>
</tr>
<tr>
<td>ResNet deployment and expansion</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>F</td>
</tr>
<tr>
<td>Develop student technology guide</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>F</td>
</tr>
<tr>
<td>ITS help desks merger</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>I</td>
</tr>
<tr>
<td>Upgrade UWF-TV transmission to fiber from microwave</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>I</td>
</tr>
<tr>
<td>Videostreaming</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>I</td>
</tr>
<tr>
<td>Web registration system</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>F</td>
</tr>
<tr>
<td>Wireless networking</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>I</td>
</tr>
<tr>
<td>TOTAL “Yes” COUNTS:</td>
<td>28</td>
<td>4</td>
<td>21</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

1 I = initiated, C = continued, F = finished/completed.
Major Applications Backlog – Details

1. Online purchasing system.
2. Integrated financial management system.
3. Human resources system.
4. Online hiring system.
5. Document imaging.
6. Electronic forms and workflow system.
7. Online bill presentation/payment processing system.
8. Information system for academic department chairs.
9. Integrated web portal (NAUTICAL revival).
10. GroupMail system for employees.
11. Nautilus card gateway system.
12. Videoserver portal (CastNet).
13. Integrated enterprise directory.
15. ArgoMessage.

University Planning Council-IT Committee
Priorities Details

<table>
<thead>
<tr>
<th>Priority</th>
<th>Completed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deploy web-based course registration.</td>
<td>Yes</td>
</tr>
<tr>
<td>Deploy web-based admissions application.</td>
<td></td>
</tr>
<tr>
<td>Continue COMPASS development.</td>
<td>Substantial Progress</td>
</tr>
<tr>
<td>Insure all new classroom construction and renovation includes technology.</td>
<td>Yes</td>
</tr>
<tr>
<td>Develop comprehensive plan for classroom technology improvement.</td>
<td>Substantial Progress</td>
</tr>
<tr>
<td>Insure all new construction or renovation includes full cost of networking.</td>
<td>No</td>
</tr>
<tr>
<td>Develop multi-year plan for expansion of the data network.</td>
<td>Substantial Progress</td>
</tr>
<tr>
<td>Provide network connectivity to student residence halls.</td>
<td>Yes</td>
</tr>
<tr>
<td>Develop comprehensive plan for providing local support.</td>
<td>No</td>
</tr>
<tr>
<td>Fund the support program as quickly as possible.</td>
<td>No</td>
</tr>
<tr>
<td>Begin planning for additional videoconferencing studios.</td>
<td>No</td>
</tr>
<tr>
<td>Increase connectivity to the University’s videoconferencing network.</td>
<td>No</td>
</tr>
<tr>
<td>Develop data warehouse and OPERA-IS.</td>
<td>No</td>
</tr>
<tr>
<td>Develop information systems for academic department chairs.</td>
<td>No</td>
</tr>
<tr>
<td>Support the technology needs of students with alternative needs, including adhering to ADA standards for web pages.</td>
<td>Some Progress</td>
</tr>
<tr>
<td>Acquire a University site license, or other mechanism, to make Adobe Acrobat PDF production available to all UWF departments.</td>
<td>Yes</td>
</tr>
<tr>
<td>Provide better support for Macintosh computer users, especially software support, possibly contracting externally for this service.</td>
<td>No</td>
</tr>
<tr>
<td>Encourage student computer ownership via special purchase/lease plans and other incentives.</td>
<td>No</td>
</tr>
</tbody>
</table>
III. Managing the Resource Portfolio

A. Technology Description and Strategies -

Technology Description

Telecommunications. UWF’s telecommunications system is based around two Siemens switches that utilize both fiber and copper distribution to campus buildings. The digital phone service includes features such as voicemail and interactive voice response.

Data network. UWF’s data network is based upon gigabit ethernet technology using both multimode and single mode fiber distribution to approximately 50 campus buildings. The basic switch and hub technology is based on Enterasys (formerly Cabletron) equipment. The core infrastructure is based on an Enterasys SmartSwich 8600 router and Matrix E7 enterprise switches. Dial-in services provide 32 simultaneous connections at the Fort Walton Beach campus. At the Pensacola campus, 207 simultaneous connections for students and 46 simultaneous connections for faculty and staff are supported.

Wide area network. UWF serves as the Pensacola POP for FIRN and hosts one of FIRN’s DS-3 Internet gateways. UWF uses FIRN as its ISP and Florida network provider. Two private T1 circuits, one for IP traffic and one for H.320 videoconferencing, link the Fort Walton Beach campus to the Pensacola main campus. A T1 provides IP connectivity to UWF’s Pensacola Downtown Center. Main telecommunications services to the Pensacola campus are provided by BellSouth using OC-12 SONET service. Internet connectivity for UWF’s Institute for Machine & Human Cognition is provided by QWEST.

Video network. Building 37 serves as the hub of the campus cable television network, which is outsourced to Cox Communications for operation and maintenance. UWF broadcasts UWF-TV on cable television using Cox Communications channel 4 in Escambia county, and provides closed-circuit television service to academic buildings on campus.

Videoconferencing. UWF uses H.320 ISDN connectivity to link interactive distance learning studio classrooms at its Pensacola and Fort Walton Beach campuses. A dedicated network for H.323 instructional videoconferencing is under development.

Data center. The University data center, located in Building 79, serves as the central hub of the fiber optic cable plant and the network operations center for both the data and videoconferencing networks. The data center houses approximately 35 enterprise servers based on Novell, Windows NT, and Windows 2000 architectures, supporting services such as electronic mail, electronic calendaring, file storage and printing services, and account authentication.

Computer labs. UWF has approximately fifty student computer labs including four major open-access ArgoNet labs, two on the Pensacola campus and two at the Fort Walton Beach campus.

Technology-equipped classrooms. UWF has completed the equipping of 32 of its 80 general-purpose classrooms with network connectivity and ability for multimedia-based instruction.
Technology Strategies

Networking. Ongoing modernization of the data networking infrastructure is the fundamental IT imperative at UWF. Moving the backbone to gigabit Ethernet is an ambitious goal, as the campus cable plant has little single-mode fiber in place at present. Work is underway to completely eliminate all shared Ethernet hubs and move to a totally switched 10/100 Mbps environment. Wireless networking is now deployed in isolated pilot projects, but will become a major access strategy over time. An increasingly major concern is network security and protection from intrusions from both the Internet and from within the university network itself. The campus network is being moved to large-scale dynamic IP assignment via DHCP.

Enterprise services. The major initiative in enterprise services is to move to a fault-tolerant and scalable architecture based on appropriately-tiered services, network-based storage, and clustered servers. UWF is deploying a Dell PowerVault storage area network (SAN) as the basic storage architecture for main enterprise services such as electronic mail and web hosting. UWF has a heavily Microsoft-based environment, and is moving from Windows NT server to Windows 2000 server as the major server operating system platform. Microsoft’s Active Directory Services is becoming the main authentication and authorization architecture for all enterprise services.

Videoconferencing. UWF is abandoning H.320 ISDN-based videoconferencing in favor of H.323 Internet-based (IP-based) videoconferencing, especially for instructional purposes.

Classroom technology. UWF’s classroom technology model increasingly presumes that faculty are equipped with powerful laptop computers. Our classroom technology podium provides access points for networking and multimedia display for laptops.

E-Services. UWF continues to use the web and its ArgoNet account architecture as the primary E-Service delivery mechanism, particularly to prospective and current students. For faculty and staff, services based on Microsoft Exchange 2000 server will become a larger component of electronic business, commerce, and E-Services.

Administrative systems. Administrative systems increasingly involve local components in web or client-server based systems that augment systems resident on the mainframe at the Northwest Regional Data Center. Microsoft SQL Server is the major database platform for UWF’s client/server systems, and Cold Fusion is the main web/database integration tool employed.
## Inventory Summary Table

<table>
<thead>
<tr>
<th>Type:</th>
<th>(A)</th>
<th>(B)</th>
<th>(C)</th>
<th>(D)</th>
<th>(E)</th>
<th>(F)</th>
<th>6-30-01 Total (a-b+f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Electronics (routers, switches, hubs, concentrators, bridges, etc.)</td>
<td>147</td>
<td>11</td>
<td>60</td>
<td>60</td>
<td>16</td>
<td>39</td>
<td>175</td>
</tr>
<tr>
<td>Workstations</td>
<td>4010</td>
<td>743</td>
<td>839</td>
<td>942</td>
<td>1486</td>
<td>637</td>
<td>3904</td>
</tr>
<tr>
<td>Minicomputers &amp; Large Servers*</td>
<td>79</td>
<td>5</td>
<td>5</td>
<td>28</td>
<td>41</td>
<td>46</td>
<td>120</td>
</tr>
<tr>
<td>Mainframes</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

## Mainframe Inventory Detail Table

<table>
<thead>
<tr>
<th>MAKE/MODEL</th>
<th>OPERATING SYSTEM</th>
<th>DATA BASE MGT.SYSTEM</th>
<th>COMMUNICATIONS SOFTWARE</th>
<th>FRONT-END PROCESSOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Campus Networking Table

<table>
<thead>
<tr>
<th>Backbone OSI Layer 2 Technology (ATM, Gigabit Ethernet, etc.)</th>
<th>Primary Backbone Switching/Routing Hardware (Manu., model)</th>
<th>Primary Backbone cabling media (copper-level, fiber-level)</th>
<th>Backbone OSI Layer 3 Protocols Routed (IP, IPX, AppleTalk, etc.)</th>
<th>Status of Voice /Data convergence:</th>
<th>Status of Campus Video network:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gigabit Ethernet</td>
<td>Enterasys SSR 8600 router, Enterasys Matrix E7 enterprise switches</td>
<td>Multimode Fiber and some Singlemode Fiber</td>
<td>IP, IPX, AppleTalk</td>
<td>Reviewing</td>
<td>-NO centralized services</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-H.320 gateway services</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-CATV interactive services</td>
</tr>
</tbody>
</table>

## Wide Area Networking Table

<table>
<thead>
<tr>
<th>Number of Point to Point circuits between your campuses</th>
<th>Number of Other Intrastate Point to Point circuits</th>
<th>Number of Interstate Point to Point circuits</th>
<th>Number of ISP Access Points</th>
<th>Number of Research Network Access Points</th>
<th>Number of Other Off-campus Network Access Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 (including all branch sites and centers)</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

19
B. Human Resource Strategies -

In 2000 and 2001, UWF’s Information Technology Services (ITS) division made significant investments in programs to aid in recruiting, retaining, and developing a talented IT staff.

For professional staff, heavy investments in ongoing skills training and professional development continued. Many staff were equipped with laptop rather than desktop computer workstations, allowing professional salaried staff more flexibility in working from various locations and flexed hours. Alternative compensation and pay-for-performance strategies were employed, such as project-based bonuses for completion of mission-critical and strategic projects.

A major asset of universities remains our students, and ITS also invested in improving student employment. Key student positions were equipped with laptop computers similar to the professional staff. Investment in training and professional development of student employees was increased, although only modestly.

Inadequate salaries make it difficult to fill vacant positions from a highly competitive labor market. In late 2000-2001, UWF’s ITS division made the decision to reduce the size of staff in order to increase compensation levels for mission-critical positions. This has aided recruitment and retention somewhat.

Retraining of staff into more advanced positions is also a key strategy. For example, as the need for computer operators has declined, UWF has retrained one of its operators to become a network technician. Other similar retraining and refocusing efforts are underway.

A continuing problem is the growing void in IT leadership in higher education, as talented staff leave for the private sector. EDUCAUSE and other professional organizations have recognized this trend. More programs for developing fledgling IT leaders, and mentoring opportunities, are needed. UWF has invested heavily in internal development of IT leaders. Of the six workgroup managers currently reporting to the Chief Information Technology Officer, half have been developed in-house from the technical staff.
C. Financial Strategies -

The University of West Florida faces the same information technology financing challenges endemic to the Florida state university system, which are primarily four:

- **Lack of funding for IT infrastructure.** For several years throughout the dawn of the information age, Florida has not provided its public universities with funding for IT infrastructure, yet this infrastructure – the true key infrastructure of the new millennium – requires massive initial investments to build. This failing, which our Acting State CIO Kim Bahrami has called “technology infrastructure investment avoidance syndrome,” requires that all major IT investments occur as “opportunity funding” from one-time sources. At UWF we can see this reflected in the figures in the following table, where planned OCO budgets are minimal or zero, and yet significant OCO expenditures are made. These infrastructure investments are continually forced to come from unplanned, opportunistic savings and funding sources.

- **Restricted use of carry-forward funds.** Lack of infrastructure funding is exacerbated by restrictions on the amount and use of carry-forward funds. Life-cycle funding requires renewal and replacement reserves which are built up over time to provide for periodic large upgrade expenditures. Our only financial mechanism to work on such renewal and replacement funding is to carry over funds from one fiscal year to the next; yet, state restrictions discourage the practice of saving such carry-over funding in order to build replacement and renewal funding reserves.

- **Human resources funding challenges.** Competing with the IT job market for talent, and finding funds to invest in the ongoing professional development and retraining of mission-critical staff, remain significant challenges. Yet, the foundational IT resource of a university remains the talents of its IT technical staff, and competing for this talent in the Florida IT job market remains difficult with current human resources policies.

- **Lack of a student technology services fee.** A wide variety of IT services and resources can be provided to students at extremely low per-student cost. One example is the student option of the Microsoft Campus Agreement for software licensing, which can provide a plethora of software to students for very low per-headcount annual cost. A standard way for financing such services in higher education has become the model of the student technology services fee. However, fee and tuition control barriers in Florida prevent us from enacting such a fee. Ultimately, this harms our students, as – without a mechanism to pass on to students these very reasonable expenses for high value return – we are unable to deliver many of these high-value, low-cost services and benefits to students.

Strategies to confront these barriers remain the same as in previous years. Faced with the inability to create standing renewal and replacement reserve funds, the only recourse is to spread out major equipment costs using leasing or financing strategies, thereby incurring interest charges and other additional expenses. Private sources of funding continue to be used for major infrastructure investments.

These challenges make it difficult or impossible to achieve the two foundational financial strategies for information technology management: full life-cycle funding models for technology infrastructure and components, and delivery-based costing of services where those consuming the services (in this case students) pay proportionally for their consumption of those services.
## Information Technology & Communications Expenditures

<table>
<thead>
<tr>
<th>Appropriation Code - Category</th>
<th>FY 2000-01</th>
<th>FY 2001-02</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>010000 - Salaries and Benefits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approved/Planned IRM Bud</td>
<td>4,543,368</td>
<td>4,825,915</td>
</tr>
<tr>
<td>Est. Expenditures</td>
<td>4,234,617</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>308,751</td>
<td></td>
</tr>
<tr>
<td><strong>030000 - Other Personal Svc.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approved/Planned IRM Bud</td>
<td>347,445</td>
<td>302,997</td>
</tr>
<tr>
<td>Est. Expenditures</td>
<td>381,291</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>-33,846</td>
<td></td>
</tr>
<tr>
<td><strong>040000 – Expenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approved/Planned IRM Bud</td>
<td>1,450,491</td>
<td>1,472,613</td>
</tr>
<tr>
<td>Est. Expenditures</td>
<td>1,393,646</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>56,845</td>
<td></td>
</tr>
<tr>
<td><strong>060000 - Operating Cap. Outlay</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approved/Planned IRM Bud</td>
<td>0</td>
<td>4,313</td>
</tr>
<tr>
<td>Est. Expenditures</td>
<td>879,043</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>-879,043</td>
<td></td>
</tr>
<tr>
<td><strong>210000 - Electronic Data Proc.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approved/Planned IRM Bud</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Est. Expenditures</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approved/Planned IRM Bud</td>
<td>1,778,203</td>
<td>1,410,773</td>
</tr>
<tr>
<td>Est. Expenditures</td>
<td>1,690,610</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>87,593</td>
<td></td>
</tr>
</tbody>
</table>

### TOTALS

<table>
<thead>
<tr>
<th>Description</th>
<th>FY 2000-01</th>
<th>FY 2001-02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Est. C&amp;G Exp.</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Est. E&amp;G Exp.</td>
<td>8,292,092</td>
<td></td>
</tr>
<tr>
<td>Est. Auxiliary Exp.</td>
<td>287,115</td>
<td></td>
</tr>
<tr>
<td>Est. Other Exp.</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Approved/Planned IRM Budget</td>
<td>8,119,507</td>
<td>8,016,611</td>
</tr>
<tr>
<td>Est. Total Expenditures</td>
<td>8,579,207</td>
<td></td>
</tr>
<tr>
<td>Total Difference</td>
<td>-459,700</td>
<td></td>
</tr>
<tr>
<td>Percentage Difference</td>
<td>-5.66%</td>
<td></td>
</tr>
</tbody>
</table>
Notes on Information Technology and Communications Expenditures Table

The figures for FY 2000-01 Approved/Planned IRM Budget in the previous table have been kept consistent with last year’s report. However, these figures erroneously reported only the planned E&G budget, and did not include planned auxiliary expenditures. This accounts for the 5.66% expenditure/budget discrepancy. The planned IRM budget including auxiliaries should have been reported as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Planned 2000-01 E&amp;G Expenditures</th>
<th>Planned 2000-01 Auxiliary Expenditures</th>
<th>Total Planned 2000-01 Budget</th>
<th>Estimated Actual 2000-01 Expenditures</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>010000 – Salaries and Benefits</td>
<td>4,543,368</td>
<td>268,545</td>
<td>4,811,913</td>
<td>4,234,617</td>
<td>577,296</td>
</tr>
<tr>
<td>030000 – OPS</td>
<td>347,445</td>
<td>0</td>
<td>347,445</td>
<td>381,291</td>
<td>-33,846</td>
</tr>
<tr>
<td>040000 – Expenses</td>
<td>1,450,491</td>
<td>25,300</td>
<td>1,475,791</td>
<td>1,393,646</td>
<td>82,145</td>
</tr>
<tr>
<td>060000 – OCO</td>
<td>0</td>
<td>16,000</td>
<td>16,000</td>
<td>879,043</td>
<td>-863,043</td>
</tr>
<tr>
<td>210000 – EDP</td>
<td>1,778,203</td>
<td>0</td>
<td>1,778,203</td>
<td>1,690,610</td>
<td>87,593</td>
</tr>
<tr>
<td>Other</td>
<td>8,119,507</td>
<td>309,845</td>
<td>8,429,352</td>
<td>8,579,207</td>
<td>-149,855</td>
</tr>
<tr>
<td>TOTALS:</td>
<td>8,119,507</td>
<td>309,845</td>
<td>8,429,352</td>
<td>8,579,207</td>
<td>-149,855</td>
</tr>
</tbody>
</table>

Thus, the actual percentage difference from planned budget vs. estimated expenditures is –1.7%, not –5.66% as reported in the expenditures table.

Information sources:
IV. Collaboration

The University of West Florida continued its involvement in a number of collaborative information technology efforts in 2000-2001, including principally the following:

UWF cooperates with other Florida universities and state agencies in using the mainframe computing services of the Northwest Regional Data Center, located in Tallahassee, where the University’s mission-critical administrative data is stored.

UWF participates in the statewide Florida Academic Counseling and Tracking for Students (FACTS) project (see http://facts.org).

UWF has a long-standing collaboration with the Florida Information Research Network (FIRN), and hosts the regional FIRN point-of-presence.

UWF’s Institute for Human and Machine Cognition carries on collaborative research with NASA, the U.S. Navy, IBM World Trade Corporation, and a variety of other educational, government, and private entities. See http://www.coginst.uwf.edu.

UWF-TV partners with area school districts and governmental agencies, and supports the Tate Multimedia Academy of the Escambia School District.

Two major collaborations ended this year, or are coming to an end:

The SUS common purchasing system project, or TOPAS, was discontinued by the SUS purchasing officers following many missed deadlines and the loss of most of the project’s staff to other employment opportunities.

The UWF Payroll/Personnel/Budget System Consortium, hosted by UWF, completed its 25th year of providing human resources records and payroll processing services to five state universities and the former Board of Regents (see http://www.ppb.uwf.org). The Consortium halted its Budget Management System project at the end of 2000-2001 when the ongoing changes in higher education governance in Florida made it clear that the common basis for the system – shared use of the statewide SAMAS accounting system for state agencies – would not be part of the future. It also became clear in 2001 that the future of the Consortium is limited, as the universities begin to implement their own in-house financial and human resources systems. Two universities (Florida International University and Florida Gulf Coast University) have already stated plans to migrate off the PPB system over the next 2-3 years.

The University of West Florida will continue to pursue partnership opportunities in information technology with other Florida public universities, community colleges, and private entities, in collaborations that contribute to the University’s mission, goals, and objectives. To facilitate such ongoing collaborations – particularly within the region and local community – the Information Technology Services division created the new position of Director of Technology Outreach to pursue ongoing outreach and collaboration opportunities involving information technology.
V. University of West Florida and the Internet

The University of West Florida occupies the uwf.edu, uwf.com, and uwf.org address spaces on the Internet.

In addition to publishing general information to the public Internet, UWF uses the Internet to provide information and E-services to prospective and current students, faculty, and staff. UWF’s home page presents customized views of information for different user communities, under the major groupings of prospective students, current students, community members, campus activities, and research. Library services are fully deployed on the Internet, and include electronic journals and full-text search capabilities through WebLUIIS and other services.

The table below describes UWF’s major enterprise web sites, and provides the Gartner Group classification for each.

<table>
<thead>
<tr>
<th>Site</th>
<th>URL</th>
<th>Description</th>
<th>Gartner Group Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>UWF Home Page</td>
<td>uwf.edu or <a href="http://www.uwf.edu">www.uwf.edu</a></td>
<td>Main Internet presence for UWF, hosting the UWF home page as well as divisional and departmental pages. Also available to faculty/staff for personal pages.</td>
<td>Level 2</td>
</tr>
<tr>
<td>NAUTICAL</td>
<td>nautical.uwf.edu</td>
<td>Intranet and campus-wide information system, supporting a range of E-service applications.</td>
<td>Level 4</td>
</tr>
<tr>
<td>COMPASS</td>
<td>compass.uwf.edu</td>
<td>E-service applications for enrolled UWF students.</td>
<td>Level 4</td>
</tr>
<tr>
<td>LIGHTEHOUSE</td>
<td>lighthouse.uwf.edu</td>
<td>E-service applications for prospective UWF students.</td>
<td>Level 3</td>
</tr>
<tr>
<td>FIRSTMATE</td>
<td>firstmate.uwf.edu</td>
<td>E-service applications for UWF employees.</td>
<td>Level 4</td>
</tr>
<tr>
<td>Prometheus</td>
<td>prometheus.uwf.edu</td>
<td>Course management system and instructional support platform.</td>
<td>Level 3</td>
</tr>
<tr>
<td>Student Web Server</td>
<td><a href="http://www.students.uwf.edu">www.students.uwf.edu</a></td>
<td>Student personal pages and student organization web publishing.</td>
<td>Level 2</td>
</tr>
</tbody>
</table>
VI. The Future – Challenges and Directions

Information technology at the University of West Florida will be overshadowed in the short term by environmental conditions. The ongoing transition in higher educational governance in the State of Florida will have significant impact, particularly in the area of the University’s use of state systems and processes (such as SAMAS and the services of the State Controller). Extremely constrained budgets will exacerbate the already severe funding problems. Yet, at the same time, the University is growing and demands for IT resources and services continue to skyrocket.

The transition of the academy in the dawning information age is resulting in a new definition of what systems are “mission-critical.” Particularly, the course management system (or Internet-based instructional delivery platform) and related classroom technology facilities have now become foundational infrastructure for the academic enterprise. Likewise, the rest of the IT infrastructure – particularly networks – must now be operated as a robust “24 x 7 x 365” utility.

Security threats are continuing to grow from various sources, particularly viruses and intrusions from the Internet. The exploding appearance of wireless networking on campus compounds this threat. Increasing resources will necessarily be devoted to security, draining other efforts.

This challenging environment demands cost-effective and scalable solutions to infrastructure, systems, and services. Developing alternative sources of funding from state dollars is now an imperative; a student technology services fee, or more tuition flexibility, would be a major step in this direction. Sadly, it is difficult to think and act strategically when one is scrapping for pennies to keep the lights on.

Within the general higher education environment in America, a common strategy pattern is evident. Components of this strategy include faculty and student ownership of laptop computers; wireless networking; directory-based services; Internet-based instruction; embracing E-Commerce, E-Business, and E-Services; student technology fees; significant outsourcing of technology development and services; and increasingly sophisticated networking and security protection environments. Within the current environment of political control and fiscal constraints, UWF and other Florida public universities will pursue these directions as quickly as realities permit.

IT investments and initiatives will continue to focus on the core mission of the University. Objectives include deploying a robust IT infrastructure that will be the operating foundation of the university in the new information age; supporting instruction, research, and the ability to deliver instruction without significant barriers of time and place; providing student services more directly, flexibly, and efficiently; and improving business processes and achieving administrative efficiencies.
**Future Strategic Projects Table**

<table>
<thead>
<tr>
<th>Name of Project:</th>
<th>Description:</th>
<th>Est. Total Budget</th>
<th>Beginning FY (actual or projected)</th>
<th>Ending FY (actual or projected)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UWF has no projects falling within the criteria defined for reporting in this table.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Criteria are projects that will have a budget of $500,000 or more in one year, involve another state agency, or affect another state agency.*
College of Professional Studies
Significant Technology Events and Projects

The College of Professional Studies has taken action to integrate technology strategy into its long-range planning and to define the role it will play in the execution of its mission. The Office of Technology Support Services in the College, as an expression of that action, focuses on four major areas:

- **Infrastructure and Systems**
  - Performing the operation, backup, and maintenance of the server hardware
  - Maintaining network-based services like ColdFusion, ASPs, data sources and Web Services (function, not content)
  - Maintaining central ITS connectivity and service features over which COPS TSS has control or influence.
  - Maintaining COPS LAN network user accounts, user IP database (until DHCP is implemented), user access to web folders, etc.
  - Researching and quotation development for infrastructure components and technologies.

- **Client Services**
  - Lab computer configurations and maintenance
  - Cyclic license maintenance, including server subscriptions and lab software upgrades.
  - Lab operations, scheduling & lab assistant supervision
  - CSP (College Support Provider) supervision
  - User computer configuration, installation and maintenance
  - User/computer service logs
  - Researching and quotation development for user hardware and applications.
  - Plant Operations work order management
  - All COPS TSS purchase requisition generation and tracking
  - Statistical report generation

- **Communications**
  - Defining and documenting divisional web site requirements, time lines and maintenance procedures
  - Creating and organizing web sites from content materials provided by the divisional clients.

- **Strategic Planning**
  - Identifying and evaluating the technology practices of local users and the industry in general that influence the direction of evolution for the College’s technology infrastructure.
  - Evaluating technology innovation and its implications for the requirements and resource distribution plans of the College.
  - Fostering the development or adoption of work-flow and knowledge-base decision-making tools to enhance the productivity of College faculty, staff, and administration.

The general goals of the Office of Technology Support Services are to facilitate technology integration into the College’s core functions, enable informed decision-making in the development of technology strategy, and coordinate the College’s technology planning with the University’s Division of Information Technology Services.

The Division of Technology Research and Development has implemented a new technology-oriented interdisciplinary B.S. degree program. The e-Learning Systems Support track is an intensive professional development program for higher order skills in the design, implementation and maintenance of network and telecommunications systems for training and education organizations. It provides an alternative path to the short term, time-sensitive, narrowly focused, application-specific skills training provided by commercial training concerns or community colleges in the form of a lengthier, more generalized, broad-
ranging course of study. The program is highly technical without being too narrowly focused, and provides additional emphasis on developing strategies for the application of the technologies in innovative ways. Special attention is also devoted to development of planning and organizational skills required to implement and evolve complex systems as well as maintain them.

A related innovation is the Division of Technology Research and Development’s introduction of a professional development certificate program consisting of a 16 credit selection of the core technology courses from the e-Learning Systems Support degree program. Courses in the certificate program count toward the degree program, but the certificate provides learners with recognition for the development of technology skills currently in high demand in industry.

The IBINDER.UWF.EDU website is an effort by faculty and staff of the Office of Educator Performance (OEP) at the College of Professional Studies to create a learning performance portal for teachers, parents, and mentors. The website provides access to the state educational standards for every state in the nation, information about standards, standards-aligned instructional activities, and useful information for parents and mentors. Additionally, IBINDER.UWF.EDU provides access to the family of online tools created by the OEP staff. These tools are STEPS, an standards-based instructional design training tool; PLANright, a standards-based activity documentation tool; and in the spring of 2002, SOPALS, a Supportive Online Performance Assessment and Learning System for pre-service teachers and second-career professionals seeking teacher certification.

The College of Professional Studies, through a Federal grant administered through the Division of Technology Research and Development designed, developed and implemented a pilot web-delivered data-base driven reusable learning object-based instructional design tool, called Sci-Binder, for the development of Florida middle school science instruction.

Sci-binder is a free web-based tool designed to help teachers, students and parents “do” Science! With all resources aligned to the National Science Standards [and in Phase 2, to all tested Science standards in Florida], teachers can use the site to present new Science concepts, to practice and reinforce, to explore and discover, to assess student progress, and to make home-school connections with parents, teachers and students. Teachers using this site can select one of two options: (1) My Sci-binder or (2) Sci-binder Today.

My Sci-binder includes a Make and Take Wizard to walk teachers through the process of previewing, selecting, and dynamically creating classroom websites using resources including Web Lessons, Online Field Trips, Interactivities, and In the News. The Wizard will filter information provided by the teacher, make recommendations, provide a suggested scope and sequence, and dynamically generate the website. Teachers can store Science websites in My Teacher Folder. Students will view great online lessons, participate in online field trips and be able to Ask an Expert about science!

Sci-binder Today serves as a web portal to the same resources. In this site, the scope and sequence is set. Teachers can access Sci-binder Today to receive hundreds of ideas, web-based lessons, interactivities, online field trips and news stories about Science and Technology.

The Division also integrated the core technology of this tool into an online professional development program for teachers interested in integrating technology into their classrooms and curricula.

The College of Professional Studies spearheaded the introduction and implementation of H.323 interactive digital video in the University’s existing H.320 network, and is completing preparations to extend the network exclusively via H.323 to Chipola Junior College to support several College degree initiatives, including a doctoral program.

The Division of Technology Research and Development has developed a suite of for-credit graduate and undergraduate seminars teaching advanced instructional application production and design skills using an intensive, applied approach. The seminars are based on current generation development tools such as Macromedia Ultradev, Flash, Fireworks and ColdFusion, as well as project management tools such as Microsoft Project and Visio.