Georgia State University

Information Systems & Technology

FISCAL YEAR 2006 ANNUAL REPORT

EXECUTIVE SUMMARY

The Office of Information Systems and Technology (IS&T) delivers information and instructional technology services to the university community. The unit is committed to capturing the power of technology to transform the university experience and to becoming a national higher education leader in information technology.

NEW DEVELOPMENT AREAS

The fiscal year ending June 30, 2006 was a year of continued progress for the planning, development, and deployment of new information technology initiatives for the university. The following areas received significant focus and resources this year:

- **Academic Support Initiatives**, including the migration to the new WebCT Vista course management system, the development of an eLearning Strategic Plan, improvements in lab and classroom technology, the development of student email lists for colleges and academic departments, enhancements to the Library Management system and extensions to the Electronic Theses and Dissertations system.

- **Research Support Initiatives**, including enhancements to the research computing infrastructure and continued alignment with national and regional high-speed research networks.

- **Administrative Systems Initiatives**, including upgrades to the PeopleSoft Human Resources and Financials systems, enhancements to the Banner Student system, development of the Faculty Information Management System (FIMS), development of the College Data Mart, deployment of the Banner Advancement self-service system, planning and institutional assessment for an enterprise data warehouse, and initiation of the Banner 7 Student system upgrade.

- **Technology Infrastructure Initiatives**, including the planning, testing and initial deployment of the new institutional giga-bit network, initiation of the network-based telephony project, initiation of the university identity management project, enhancements to the security of the university network and systems, and improvements to enterprise-wide automated desktop management, email services, the wireless network and institutional websites.

- **Organizational Improvement Initiatives**, including customer service advancements, staff certifications, project management, re-organization, IT governance, and work effort accountability.

Detailed accomplishments related to these primary focus areas are described beginning on Page 4 of this report with reference given to alignment with either the ***University Strategic Plan*** or the ***University Information Technology Strategic Plan***.

CONTINUING SUPPORT AREAS

In addition to the major new development efforts accomplished during fiscal year 2006, IS&T is also responsible for the maintenance and operation activities related to the following twenty-three core function areas which represent essential IT services provided to the university community.

Administrative Systems - Alumni
Administrative Systems - Financial
Administrative Systems - Human Resources
Administrative Systems - Independent Systems
Administrative Systems - Research
Administrative Systems - Student
Customer Support and Help Center
Desktop Management
Email Systems and Services
GIL, GALILEO and GPLS
Identity Management
Information Security
Initiative Analysis and Development
Institutional Software Licensing
Instructional Support
Library Support
Network - Voice, Video and Data
NOC (Network Operation Center) Services
Performance Metrics
Research Computing
System Hosting
Technology Planning and Futures
Web Strategy and Support

During fiscal year 2006, IS&T received approximately 14,000 support calls related to these areas and expended approximately 60% of its work effort maintaining and operating these services.

IS&T OVERVIEW

The IS&T unit is managed by the Associate Provost for Information Systems and Technology, JL Albert, who also serves as the Chief Information Officer (CIO) of the university. The university CIO is responsible for providing an institution-wide perspective on IT and promoting effective planning, adoption and support of technology initiatives. The activities of the office are guided by the ***University Strategic Plan*** and the ***University Information Technology Strategic Plan***. The CIO and his management team work closely with several advisory committees composed of university faculty, staff and executive leadership. IS&T follows a strong customer service philosophy and promotes a systematic approach to improving business procedures and processes.

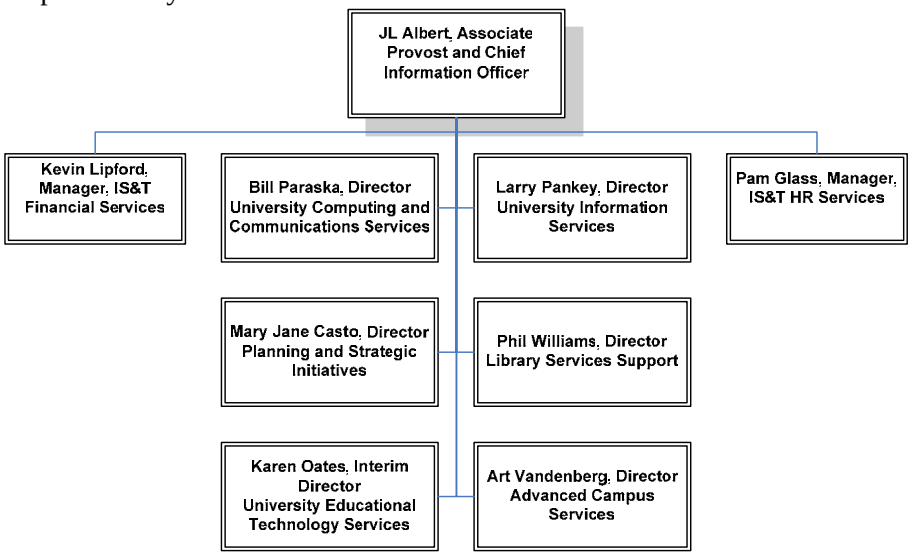
INFORMATION TECHNOLOGY ADVISORY STRUCTURE

Advisory groups are central to the success of IS&T and assist in the ongoing communications with the university community's many constituency groups which results in better alignment of IS&T services and resources with customer needs. One key partner in the advisory structure is the Senate Information Systems and Technology Committee (ISAT). It is composed of the Information Technology Support and Security Subcommittee (ITSSS) and the Student Technology Fee Subcommittee (STFS). The Senate ISAT Committee assists in developing long-range plans for the computing needs of the university, advises the Associate Provost on academic and administrative matters involving technology, reviews annual IS&T programmatic plans, reviews annual budgetary submissions by the Associate Provost and provides a liaison between its subcommittees and IS&T.

A second key partner is the IT Steering Group (ITSG), which is composed of the university provost, vice-presidents, and the chair of the Senate ISAT committee. The ITSG is actively involved in providing strategic guidance and in prioritizing the initiatives that are requested by IS&T customers.

ORGANIZATIONAL OVERVIEW

IS&T is organized into six major units that collectively plan, develop, operate and support technology for the Georgia State community. Approximately 160 filled staff positions, 15 temporary workers, 69 student assistants and 5 GRAs are deployed across the six units. A description of the major functions provided by each unit follows.



- **University Computing and Communications Services (UCCS)** manages and operates the networking, computing and telecommunications resources; offers technical consultation on hardware, operating systems, software, and security; assesses and installs hardware and software.

- **University Educational Technology Services (UETS)** manages institutional instructional technology support, digital media services, and technology training services.

- **Planning and Strategic Initiatives (P&SI)** supports the planning and management of IS&T's projects; supports customer needs through the IS&T Help Center; provides support for lab and classroom technology; maintains staff and faculty workstations; and provides strategy, design and development services for the university website.

- **University Information Services (UIS)** provides application systems implementation services, operational and production support for administrative applications, database administration, decision support and data warehousing services.

- **Advanced Campus Services (ACS)** researches emerging technology issues, provides leadership and direction in new technology adoption, and supports the deployment of enterprise research computing infrastructure.

- **Library Services Support (LSS)** researches and supports technologies for library applications and web-based library services. LSS continues to provide leadership in statewide library technology projects through the University System of Georgia's GALILEO and GALILEO Interconnected Libraries (GIL) projects.

FISCAL YEAR 2006 DETAILED ACCOMPLISHMENTS

IS&T, with assistance and guidance from its customers and advisory committees, established its FY2006 goals and objectives in alignment with the goals and objectives articulated in two university plans, the ***University Strategic Plan*** and the ***University IT Strategic Plan***.

ACCOMPLISHMENTS LINKED TO THE 2005-2010 UNIVERSITY STRATEGIC PLAN

Recruitment

The university's recruitment efforts were supported this year with several activities across various IS&T units. The Experience Design Group (EDG) in Planning and Strategic Initiatives (P&SI) developed an on-line system to allow perspective students to schedule a campus visit. This first-in-Georgia application allows visitors to schedule an appointment for an information session, a tour of "Campus Atlanta", or both. The information gleaned from the scheduling is assisting admissions counselors in targeted follow-ups to perspective students. Similarly, an online request for information provides another source for targeted communications. During the year, EDG also worked with Admissions to develop a redesigned web site for the office and re-vamped the Prospective Students section of the Georgia State Core Web Site.

The Digital Media Group in University Educational Technology Services (UETS) worked closely with the Welcome Center and the Office of Admissions to develop a cohesive visual program for welcoming perspective students and their parents. The program consisted of designing several large-scale printed banners and developing digital presentations. The banners depict the University's diverse student population participating in a wide variety of academic, social, and extracurricular activities and are located in three highly visible locations: the Admissions Presentation Room (325 Sparks Hall), the Admissions Office (200 Sparks Hall), and the Welcome Center (Alumni Hall). The presentations present overviews and highlights of the features and benefits of Georgia State and are designed to engage prospective students and encourage their choosing Georgia State for their college education.

Undergraduate and Graduate Experience

The on-line experience for undergraduates and graduates was improved this year through several projects that IS&T implemented. To ease the process of applying for financial aid, we now offer students the opportunity to apply for Summer Financial Aid and Federal Plus loans online. Another feature implemented this year provides bookstore credit on a student's PantherCard that allows for book purchases while financial aid awards are pending. To improve communications with students, approximately 250 email lists were established to target affiliated students at the college, departmental and major level. These lists are automatically updated if students change colleges or majors. To facilitate the combined goals of student retention and improving customer service, functionality was implemented in the degree audit system to enable students to assess the impact of potential changes to their course of study. In response to customer service feedback, the Banner Student Self-service application was modified to simplify the process of requesting a transcript. As part of the web re-development initiative focusing on improving the usability and usefulness of Georgia State's web sites, the Admissions, Financial Aid, Registrar, Advisement and International Student and Scholar Services websites were redesigned.

University Educational Technology Services (UETS) is examining the use of iPods as a mobile method of delivering course content. iPods have been successfully used at Georgia College & State University and many other institutions across the country. During FY2006, UETS investigated the possible uses of the iPod, experimented with various content delivery methods (podcasts, games, tests,

etc), looked at workflow practices and worked with faculty interested in using them in their classrooms.

University Computing and Communications Services (UCCS) continues to expand and upgrade the university wireless network, dubbed CatChat. In addition to being available in campus public spaces, this year CatChat was deployed to several classrooms.

In collaboration with the University Library, Library Services Support (LSS) expanded the university's Electronic Theses & Dissertations (ETD) academic repository to include Senior Honor Theses. Additionally, the electronic reserves system (ERes) recorded more than 250,000 document downloads for over 1,000 class sections. During the year, 6,000 plus new documents were added to the existing electronic reserves collection. LSS provides back-office digitizing support for the University Libraries and WebCT Vista.

Faculty – Research and Academic Support

During FY2006, Georgia State University migrated all WebCT Campus Edition (CE) courses to the newest release of WebCT, called Vista. Each of the 2,900 CE courses was reviewed for content and activity. The instructors were emailed a status of their respective courses and many opted to rebuild to take advantage of new tools in Vista. Others requested UETS to move the materials for them. Before the CE server was decommissioned, two backups were made for each section – one as a template which could be imported into Vista and a second to retain student data, according to departmental policies. A total of 2061 sections (classes) were active in Vista for FY2006.

Support for research computing was a significant focus for IS&T's Advanced Campus Services (ACS) group during FY2006. At the end of FY2006 Georgia State acquired a supercomputer to aid research efforts both locally and at other Southeastern Universities Research Association (SURA) institutions via SURAGrid. The IBM P575 pSeries, a tera-flop class high performance computer, boasts 128 processors and 4TB of external storage. It is the most powerful computer ever owned by the university and represents the computing capacity of 1,000 personal computers. To improve user job submission on the BIOCLUSTER, the PBSpro job scheduler was installed and activated. Georgia State continued its involvement with the Southern Light Rail portion of the nation-wide Lambda Rail high-speed research network. During the *3rd Annual SER-CAT Symposium* hosted by Dr. Irene Weber at Georgia State, ACS and UCCS implemented a direct optical network connection from Classroom South 600 to the Advanced Photon System at Argonne National Labs. This point-to-point high bandwidth connection enabled, for the first time, direct real-time robotics manipulation of protein crystal samples with an interactive analysis of results, highlighting the richness of research functionality that is available through a high-speed optical network.

New Academic Programs (and Modes of Delivery)

In FY2006, UETS researched and formalized an "eLearning solution" for the campus. Specifically, the Provost requested that UETS develop a strategic plan for eLearning by assessing the current "landscape" of online delivery, developing institutional guidelines and standards, identifying incentives for faculty to migrate their courses (hybrid and fully online) to an online environment, and formulating an eLearning plan for Georgia State, including a cost analysis. The research portion of this project is complete and institutional engagement and assessment of the proposal will begin in FY2007.

Fiscal year 2006 saw a marked interest and increase in the use of "clickers" or Classroom Performance System (CPS) technology to aid faculty in engaging students during class time. Instant feedback to instructor questions helps gauge the students' understanding of topics being presented. Using technology fee funding for a pilot study, approximately 1,250 students were using the CPS units on a daily basis. Workplace Technology Services (WTS) staff at the Alpharetta Center coordinated a university effort to present a single FY2007 technology fee proposal for expanded use of the CPS technology. At the New Faculty Orientation session in August 2006, many faculty expressed a desire to learn more about the technology for use in the spring.

Staff

IS&T has focused again this year on improving the delivery of service to our customers by engaging IS&T staff in process improvements around service and support. Of significance was the development and signing of Operational Level Agreements (OLA) between the Help Center and each support department within IS&T and some external support departments. An OLA specifies how the Help Center and the support department work together to provide consistent quality and resolution times to customer issues. This component of the Help Center Improvement Project will definitely benefit our customers, and has the added benefit of providing more clarity and understanding across the differing technology levels within IS&T, while serving to generate "team" spirit for a large and diverse staff.

Staff development in FY2006 focused on technology training and certifications in order to attain qualifications and knowledge consistent with best practices and institutional technology. Within the Help Center, four of the six specialists have obtained A+ certification; the remaining two have taken the training and will become certified in FY2007. Several staff members on the Workplace Technology Services (WTS) teams have also become A+ certified and others will be taking the training in FY2007. Technicians in WTS have received Apple certification and certification in programming and maintaining the Crestron touch panels in our classrooms. As IS&T has become more involved in the Information Technology Infrastructure Library (ITIL) framework for service management and support, the Help Center Manager and several staff within the Performance Metrics Group (PMG) have obtained their ITIL certification. Additionally, PMG members obtained training in metrics, data analysis and reporting. A newly hired project manager in the Project Management Office obtained Project Management Profession (PMP) certification. A member of the Information Security staff obtained Systems Security Certified Practitioner (SSCP) designation and received training for Certified Information Systems Security Professional (CISSP) to be obtained in fiscal year 2007. Three staff members in UETS received WebCT Trainer Certification and Administrator Certification. Two staff members in UETS obtained CITI (Collaborative IRB Training Initiative) Certification. Several technicians within the Network Operations Center (NOC) received Extreme Network Analyst training in preparation for managing the new network equipment. Within the University Information Services (UIS), training was taken in Oracle 10g and the Remedy Help Center ticketing system. IS&T staff in general took advantage of the wide variety of training available in the ElementK online training system and completed courses in programming, new technology and soft skills.

To improve the efficiency of service provision, an internal reorganization was completed that combined the workstation support staff within the Help Center with the staff supporting the technology in the labs and classrooms. This combined group, known as Workplace Technology Services (WTS), now reports through a single manager within Planning and Strategic Initiatives and is working as a team to provide cross-trained support skills and standard methodologies for supporting personal technologies such as PCs, laptops, PDAs and projectors.

Facilities

During FY2006, IS&T Workplace Technology Services (WTS) installed new computer and audio/visual technology to 24 classrooms in the Classroom South building. Improved technology in each classroom included a new computer workstation, a DVD/VCR combo playback unit, audio amplifier, ceiling speakers and the new technology equipment rack to deter theft and vandalism. This project also included new component wiring to support multiple audio/video input for laptop computers. In total, 250 new workstations were installed in Classroom South classrooms, and 122 instructor and student workstations were installed in Sparks Hall classrooms. Other classroom technology upgrades included two classrooms in General Classroom Building and two classrooms in Arts and Humanities. Each of these rooms received a new instructor's technology podium with a Crestron Touch Panel display unit which allows instructors to have total control over all audio/visual

equipment and the ability to notate on PowerPoint slide shows using a stylus. A DVD/VCR player, audio amplifier, computer, and wired and wireless microphone technology were also installed in the instructor's podium.

During FY2006, WTS and UCCS staff assisted in the planning and deployment for the technology at the Brookhaven Center, a new off-campus classroom facility for the Robinson College of Business (RCB). Planning included assessing the classroom and lab needs for the Center, including the technology required, equipment and room layout, networking needs, staffing needs, service hours and phones. IS&T signed a support agreement with RCB to provide staffing and support for the facility on an on-going basis.

Technology improvements were completed at the Alpharetta Center, including the installation of equipment to enhance video-taping functionality and quality; installation of printers in the lab; and enhancements to the Creston touch panel interface.

Technology

The PeopleSoft HR System was upgraded during a 5-month project involving developers and data base administrators from the University Information Services (UIS) staff, as well as the functional experts in the HR office. The upgrade was required to remain current with the vendor's software releases and to correct errors in the system that HR was experiencing. To support the benefits open enrollment process, an extensive Benefits Summary report was developed to aid employees in assessing their benefit options.

The Budget system that was developed in FY2005 to replace the mainframe budgeting system was used during FY2006 to complete the new budget process for FY2007. Components that were enhanced in FY2006 included the "new budget" reports, budget spreadsheets for departmental use, the interfaces to the financial system and the fiscal roll over process.

Preliminary design and programming was begun to support of two new Senate policies - Plus/Minus Grading and Limit Withdrawals. These policies require changes to the Banner Student system and are scheduled for completion during fall 2006. Changes in state policy required modifications to the Immunization Compliance program.

The Banner Advancement Self-service system was implemented to facilitate business process efficiency and improve fundraising capabilities within the Development Office. The imaging capability within the Banner Student system was improved through the development and deployment of an automated business process to capture, image and index electronic admissions applications.

Initial planning and development began on a 12-month project to upgrade the Banner student system to version 7, scheduled for production in February 2007. This project has involved the sizing, acquisition and deployment of new hardware for the system, the installation of the new software in test environments and the initiation of software development to update existing system modifications so they will function correctly with the new system. Staff within the functional offices are working collaboratively with IS&T staff to ensure successful and timely completion of this major project.

The UIS Decision Support Systems (DSS) team partnered with the Office of Institutional Research and a consulting firm to engage staff and administrators across campus to begin planning for an Enterprise Data Warehouse. This analysis resulted in a current state assessment, as well as a roadmap and plan for developing the new warehouse. Among some of the university's needs articulated in the business intelligence arena were: need for an overarching business intelligence (BI) strategy, a process and methodology for improving data quality and data standards in core transactional systems, development of a common business language across the university, a formal process for resolving data issues, a formal data governance structure, needs for data integration from multiple sources, current data dictionaries for all systems, and detailed analysis of business processes such as Human Resources. The project team's vision is to provide an integrated information environment across the enterprise, with easy access to well defined and timely data to allow business stakeholders to easily build flexible and effective reporting and analytical solutions. Significant progress was made on

the College Data Mart, which combines information from PeopleSoft Financials, PeopleSoft HR and Banner Student systems to provide college-specific views of faculty, students, courses, enrollment and financial information. Of importance will be the continued efforts to ensure the quality and accuracy of data from these various source systems.

Another major project for DSS and the Experience Design Group (EDG) has been the planning and development of the Faculty Information Management System (FIMS). FIMS is a web-based application that consolidates faculty-related data from the PeopleSoft HR system and the Banner student system provides a vehicle for faculty to record service, research and scholarly activities for annual reporting purposes. FIMS is expected to be in production in mid-fall 2006 and will form the basis for providing faculty roster information for the SACS re-affirmation of accreditation process in 2007.

Major technology infrastructure projects received significant resources during fiscal year 2006. The "Extreme Makeover – Network Edition" project to completely overhaul and upgrade the university's network to giga-bit technology completed the planning and testing phases and began the deployment phase in June 2006. This upgrade provides every campus desktop with a 10-fold increase in network bandwidth (up from 10 mega-bits to 100 mega-bits) and connects each campus building to the network core with redundant 1 giga-bit connections. Kell Hall, the Natural Science Center and Urban Life will have 10 giga-bit building connections to support connectivity to the Southern Light Rail high-speed research network.

This network overhaul positions Georgia State to deploy telephone services over the network by providing the ability to give priority to voice traffic. As the network upgrade project entered its final phases, an RFP was issued to obtain the IP telephony services needed to replace the current CENTREX leased telephone service with a University owned and operated network-based telephone switch. The IP telephony project will benefit the university by providing reduced service initiation time, improved call center services for the IS&T Help Center and the Enrollment Services offices, increased voice mail capabilities, migratory phone services for remote work sites, and reduced payments to external telephone providers. An award is expected to be made to the winning vendor in fall 2006 with installation and cutover estimated for July 2007.

The CREATOR (CREdentials for Access To Online Resources) project was initiated during FY2006 with the goal of implementing an Enterprise Identity Management System (IdMS) for Georgia State University to provide a managed and auditable environment for positive identification of individuals and the granting of individual access to university systems. The CREATOR system benefits the university by capturing the electronic identity of university affiliates in an accurate and timely manner, and simplifies the management of userids and passwords by utilizing LDAP authentication technology. In the long term, CREATOR will provide for more efficient use of human resources by enabling the automation of userid creation and removal. Also, CREATOR provides the base infrastructure for single/reduced sign on into Georgia State's multiple on-line systems.

ACCOMPLISHMENTS LINKED TO THE UNIVERSITY IT STRATEGIC PLAN

Information Accessibility

Network Security

The security of Georgia State's network and electronic resources was strengthened with the adoption of the institutional Security Risk Assessment policy. This policy allows IS&T Information Security personnel to conduct risk assessments of technologies/processes that are being evaluated and/or used at Georgia State. The purpose of these assessments is to quantify the impact and probability of potential threats and vulnerabilities. Information Security personnel may recommend which security controls, if any, are commensurate with the risks to which the University would be exposed.

The Information Security department has developed a distributed management strategy that has proven very successful in achieving security incident reductions of over 98%. The department provides customized training for college and departmental administrators on effective use of information security monitoring tools, such as the Intrushield appliance. They learn to apply policies and Access Control Lists (ACL's) to mitigate threats and vulnerabilities on the university systems for which they are responsible.

The university's information security plan was developed under the guidance offered by ISO 17799, which applies a risk based approach that seeks to manage and control threats and vulnerabilities, rather than simply react to them. Action plans further delineate specific goals and objectives that are referenced in the plan, and support IS&T's intent to achieve accreditation under the ISO 17799 by an external auditing agency.

Off-campus access to university electronic resources was made more secure with the adoption of the pcAnywhere system as the standard for remote access to desktop systems in conjunction with the requirement for use of the Virtual Private Network (VPN) technology for authenticated, encrypted off-campus access to the network.

Enhance and Extend the University Network Infrastructure

In addition to the network improvements mentioned previously, a significant improvement in email processing occurred with the implementation of the MailFrontier SPAM filtering system. Georgia State is currently receiving approximately 10-12 million pieces of email per month – unfortunately about 80% of these messages are unsolicited junk email. Previously, a significant portion of this SPAM ended up traversing the network and entering email in-boxes causing unnecessary load on our systems and frustration on the part of email users. Use of the SPAM filtering system on both the student email system and GroupWise has significantly decreased both the load and frustration level.

Planning and testing for the new version of the GroupWise email system was completed during FY2006. The new system will be deployed in FY2007 to provide greater compatibility with other email clients, a new web client and a new PC client.

Evaluate Services and Customer Satisfaction

As mentioned previously, the Help Center Improvement Process (HCIP) continued during FY2006 to focus on improving the delivery of IT services. A component of this project was a survey of university faculty, staff and students designed to obtain a baseline for customer satisfaction and use of help services. The survey revealed that of the respondents, 37% use the IS&T Help Center as the primary source of technical help; they rated their experiences on the following attributes: Speed to Answer the Call: 41% Excellent, 35% Good; Agent Knowledge: 45% Excellent, 34% Good; Agent Friendliness: 63% Excellent, 26% Good. Of the calls that were taken by the Help Center, 90% were solved to the satisfaction of the customer. When asked about their overall impression of the Help Center, the respondents indicated: 44% Very Satisfied; 43% Satisfied; 7% Dissatisfied; and 6% Very Dissatisfied. This survey will be repeated bi-annually to observe and react to trends and requests for new services.

IS&T's Planning and Strategic Initiatives (P&SI) unit underwent the administrative and support unit review (ASUR) process during fiscal year 2006. The self-study followed the standard format by detailing the unit's mission, structure and functional responsibilities; services provided; outcomes and accomplishments; organization and climate; resources; peer comparisons; and summary and strategic directions. The review committee praised the quality of the report and the unit's effectiveness and agreed with the suggested strategic directions. Several action recommendations were outlined by the review committee for inclusion in the unit's Action Plan, to be developed in fiscal year 2007.

An on-going satisfaction survey was initiated in May 2006 to obtain customer feedback regarding the effectiveness of the university's website. Initial results indicate 75% to 80% satisfaction on various measures. The data collected from the survey continues to inform focus areas and development efforts.

Effectively Manage and Distribute Servers

During FY2006, eight separate disk storage arrays and four storage area networks (SANS) holding 6.5 terabytes (TB) of data were eliminated and consolidated onto one enterprise class and one mid-tier class storage array. The devices that were decommissioned are all older equipment and the new devices represent current technology with better redundancy, reliability and performance. The benefits of this consolidation were many: disk storage speed doubled from 1 gigabit per second to 2 gigabits per second; the GroupWise backup time decreased 40%; disk cache tripled from 8 gigabytes to 24 gigabytes. The applications benefiting were GoSOLAR, Spectrum, Remedy, Statware, Person Registry, Easyview, Student Email and Locker box, Xtender and network fileservers.

Enhance Support of Library Initiatives

Library Services Support (LSS) performed a major GIL (GALILEO Interconnected Libraries) upgrade for the 20 libraries supported by the Georgia State Service Site during fiscal year 2006. The change migrated the Voyager software to Version 5 to support Unicode as the default character set for the Inter-library Loan System; to provide the acquisitions staff with a Complex Prediction Pattern for Serials; to offer the circulation module additional security plus a patron purge option; and to correct several problems concerning Universal Borrowing. Along with the library oriented enhancements, this upgrade required that 42 databases be upgraded from Oracle 8 to Oracle 9i.

Another enhancement for library services was the installation of SFX software and servers for the GALILEO system. SFX is an application server that provides a framework for providing context-sensitive linking between Web resources, seamless interconnects between heterogeneous resources and consistent navigation of heterogeneous resources.

Enhance External Collaborations

Library Services Support (LSS) continued its involvement with the GALILEO Interconnected Libraries project by providing support for twenty University System of Georgia (USG) academic libraries - including the Georgia State University Libraries and the private Atlanta History Center special library - for the Voyager Integrated Library System. This support included personalized assistance with the use of the Voyager modules for Acquisitions, Cataloging and Circulation, and Media Scheduling where requested; scheduled site visits for face-to-face meetings and to review topics of current interest; and assistance to the Libraries and their appointed vendors with the batch retrieval and loading of bibliographic records. Staff worked with various USG Libraries as they began their migration toward the use of a Student-ID in lieu of the SSN as the primary identifier. The unit released and made available two successive versions of the Voyager Reporting System (VRS), a Windows based application with point-and-click selection that simplifies Microsoft Access report generation for Voyager. At least four non-USG libraries including the Congressional Research Services at the Library of Congress are now VRS users.

Georgia State's involvement with the Southeastern Universities Research Association (SURA) continued with the participation of Advanced Campus Services (ACS) staff in development of the program for the *SURA Cyberinfrastructure Workshop – Life Sciences and the Grid* at the Virginia Commonwealth University. ACS was also the recipient of a $25,000 SURA grant as sub-award to "Developing Regional Grid Technology Support for Army Telemedicine and Advanced

Technologies Research Center Programs". The Associate Provost for IS&T continued his participation with SURA as a member of the SURA IT Steering Group.

Staff from University Educational Technology Services (UETS) worked with a team of 14 trainers and consultants from seven University System of Georgia (USG) institutions and the USG Office of Instructional and Information Technology to assist Georgia Southwestern College (GSW) in recovering from a complete loss of data from its WebCT system. Over a 2-week period, the team worked with GSW faculty, staff and students to implement an instance of WebCT Vista, provide training, load 60 fully online courses, and develop a new GSW Vista website.

Technology-enabled Faculty, Staff and Students

Ensure Faculty and Staff Development in Technology

University Educational Technology Services (UETS) conducted 16 WebCT Vista training workshops for faculty and instructional developers and held over 200 personal training sessions. Ten "First-Fridays" were held during which faculty can bring their WebCT materials and questions and obtain one-on-one assistance. A one day event held in August 2005, called JumpStart Learning, was co-sponsored by the Center for Teaching and Learning (CTL) and UETS for returning faculty. UETS also coordinated two WebCT Vista Forums for Faculty with participation from WebCT corporate staff and USG staff to facilitate conversations between the faculty and WebCT development staff. An online training module on the WebCT Gradebook was developed and deployed.

The university's online eTraining system, hosted by ElementK saw a 28% increase in user accounts. Additionally, the Project Management training module was added to the ElementK collection for use by Georgia State constituents.

Provide Appropriate Workstation Support for Faculty and Staff

The development of the institutional automated desktop management system continued with the installation and deployment of iCommand servers for college and departmental use. Collaboration with the distributed technology support personnel continued as the inventory client software was deployed almost university-wide, application package development began and common desktop management practices were documented.

Provide Effective IT Services for Students

The Student Help Desk, funded by the student technology fee, moved its operation to the main library in order to be more accessible for students. This service, staffed by students, offers support on getting connected to the wireless network and answers questions about anti-virus software. In-person support for students needing WebCT help was offered throughout the school year in various computer labs across campus at varying times during the week.

Business Process Effectiveness

Improve Efficiency of Operations

Improvements were made to managing faculty contracts with the development of a contract management application and a mass re-appointment process for the Manage Faculty Events (MFE) component of PeopleSoft HR. The online campus visit application provides enhanced administrative functionality for staff by providing daily visitor and parking reports, the ability to change tour capacities and times, and other management functions.

Within IS&T, increased focus on project management and work effort reporting using the vPMO system has provided better tracking and documentation of project work and increased visibility of on-going efforts.

Develop Operational Data Stores for Reporting

The DSS/Reporting and Analytics staff contributed significantly to the reporting needs of the university by developing some 200 reports this year and participating in the upgrade and test of the most current version of Business Objects, previously known as Crystal Enterprise. Additionally, the Statware reporting system received its first redesign since it was released six years ago. Several new features were added to provide users with more functionality and improved site navigation including a search engine to locate reports based on keywords in the report's title or contents; documentation for each report with a summary description that includes the report's layout and parameter; a glossary to define report column headings and other terms related to Statware; and revamped navigational controls to simplify maneuvering between menu structures. DSS staff also developed a prototype for a decision support portal and will be pursuing development and production of this environment during the upcoming fiscal year.

PROGRESS IN ASSESSING INSTITUTIONAL EFFECTIVENESS

In May 2004, IS&T developed an Institutional Effectiveness Plan centered on four division-wide outcomes:

Outcome 1: The university community has access to reliable, up-to-date technology resources.

Outcome 2: The university community participates in the development and review of strategic and tactical technology goals of the university's missions.

Outcome 3: Effective communications exist between the university community and IS&T regarding technology support of academic, research and administrative activities.

Outcome 4: Electronic mail can be used as a reliable method of delivering official university communications to all staff and enrolled students.

For fiscal year 2006, each IS&T unit worked with the new WEAVEonline system to report on its respective measures, findings and action plans. Approximately 50 measures were evaluated using appropriate findings from FY2006; approximately 35 action items resulted from the assessment.

Most of the units reported a need to continue to refine some subset of the measures to ensure they accurately reflect the dimension being measured. Additionally, in some cases there is a need to pursue gathering higher quality and more measurable data. In some cases, the needed data is not being appropriately gathered and actions are underway to ensure better collection for next fiscal year.

The analysis indicates that target levels for most measures were either completely met or partially met. Common themes for all units stress the need to continue refining the use of the Help Center ticketing system to obtain better reports and more accurate measures of work effort and time to resolve tickets. Another focus area for all units is the continued gathering of customer satisfaction data. This will be facilitated by the implementation of an after call survey mechanism that will engage customers who contact the Help Center to assess satisfaction with the interaction with IS&T for trouble resolution or requests for standard services. Additional surveys will focus on obtaining more widespread feedback and input, not just from customers who contact the Help Center.

SUMMARY OF SUPPORT CALLS FOR FISCAL YEAR 2006

During Fiscal Year 2006, the Help Center received 36,600 calls to the 404-651-4507 help number. Of these, 24,385 were actually answered by a Help Desk Specialist – resulting in an annual call abandonment rate (callers hanging up before reaching a specialist) of 17%. The Help Center's

goal is to obtain less than 10% call abandonment on a monthly basis. As seen in the chart below, continual and steady improvements in this area are occurring and the trend is expected to continue into FY2007.

	Calls Offered	Calls Answered	Total Calls Abandoned	Call Abandonment Rate
July 05	3080	2030	584	19%
Aug 05	5455	2916	1050	19%
Sept 05	4096	2453	858	21%
Oct 05	3063	1882	652	21%
Nov 05	2669	1676	611	23%
Dec 05	2050	1329	335	16%
Jan 06	3958	2535	710	18%
Feb 06	3047	2206	482	16%
Mar 06	2501	2009	300	12%
Apr 06	2130	1727	206	10%
May 06	2466	1966	298	12%
June 06	2085	1656	174	8%
TOTALS:	36600	24385	6260	17%

A total of 27,275 Help Desk tickets were generated during the fiscal year. The chart below shows the percentage of tickets resolved by IS&T departments, showing only the top 12 resolvers.

Resolved By Department	Percentage
Help Center	48.6%
File Server	10.1%
Labs & Classroom Support	7.8%
Telecommunications	6.9%
General PC Support	4.8%
CHHS PC Support	4.5%
DOS PC Support	2.1%
AYSPS PC Support	1.7%
Systems	1.7%
Networks	1.5%
UIS - Independent Systems	1.2%
Spectrum	0.9%