MESSAGE FROM THE INTERIM CIO

It has been nearly two years since the establishment of Enterprise Technology Services (ETS), and we continue to make substantial and measurable progress toward the full implementation of this central IT organization. Over the past year, we have surmounted some major obstacles and achieved critical goals that advance the modernization of campus technology resources. These achievements not only build a base for future progress, but they also validate and reinforce the importance of cross-campus collaboration and partnerships.

In addition to fulfilling our day-to-day responsibilities, some highlights from the past year include:

• The core modules of PeopleSoft Financials were installed, replacing many of our legacy financial applications hosted on the mainframe. This campus-wide effort was a significant milestone in the modernization of UC Santa Barbara’s 45-year-old financial system.

• The newly reconstituted IT Council endorsed an ETS proposal to stabilize the Connect service by migrating Office365 email users to Google Apps, and migrating current Oracle Calendar/CorporateTime users to the Google Apps calendar.

• ETS worked closely with the Institute for Social, Behavioral and Economic Research (ISBER) and the Office of Research to introduce a private, secured, virtual environment called the Secure Compute Research Environment. Researchers may now remotely analyze sensitive data, create research results, and output their results and analysis without the burden of developing their own data security plan.

• To ensure UC Santa Barbara’s compliance with the FCC re-banding mandate, ETS collected, inventoried, and reprogrammed over 600 portable and mobile radios from Public Safety, Facilities Management, Housing & Residential Services and other departments to the new 800 MHz frequencies.

• UCSB’s first enterprise-level IT service desk, called the Enterprise Technology Service Center, was designed and built. The Library will pilot this service in September 2015, after which it will be expanded to support additional divisions and departments.

The purpose of this report is to inform the UC Santa Barbara community of the outcomes and value delivered in the previous year. The dedicated professionals at ETS, along with our many partners across the campus, are responsible for the achievements highlighted here. Thank you for taking the time to review our progress and better understand how our work enables the mission of the campus.

DENISE STEPHENS
Interim Chief Information Officer
Research

ETS hosts research systems, provides researchers secure access to sensitive data, and provides infrastructure for research at the local UC Natural Reserves.
RESEARCH

REDUCING THE DATA SECURITY BURDEN FOR RESEARCHERS
With guidance from ISBER and funding from the Office of Research, ETS developed and delivered the Secure Compute Research Environment (SCRE), a private, secure, virtual environment in which researchers may remotely analyze sensitive data, create research results, and output their research results and analysis. Many restricted data providers require a minimum set of standards in a data security plan, such as a stand-alone computer in a uniquely-keyed physical location, no Internet connection, USB/optical media disabled, printing disabled, and an antivirus installation. This service minimizes the security and implementation burden for researchers who cannot easily construct their own data security plan. It also allows departmental IT units to redirect their limited resources and staff time to specialized local IT needs. The SCRE is currently available to UCSB researchers at no cost. The California Health and Human Services Agency and the UNC Carolina Population Center have already approved of the SCRE standards. In the coming year, we plan to expand the SCRE to satisfy the requirements of the US Bureau for Labor Statistics - National Longitudinal Surveys (Geocode Data), US Department of Education - Institute for Education Sciences (National Center for Education Statistics), and the University of Michigan Population Studies Center - Panel Study of Income Dynamics. More information on the SCRE is available via http://www.ets.ucsb.edu/services.

NORTH HALL DATA CENTER USAGE ON THE RISE
Over 50 departments, institutes, and research centers now host systems at the North Hall Data Center (NHDC). The NHDC is UCSB’s central data center and is a shared resource across the academic, research, and administrative communities. This year, the Earth Research Institute, the California NanoSystems Institute, the Institute for Social, Behavioral and Economic Research and others began hosting systems in the NHDC. When departments utilize the NHDC, they no longer need to maintain their own server room which typically includes coordinating support and paying directly for the infrastructure: heating, ventilation, and air conditioning; an uninterruptable power supply; networking; an alarm system; and video security. There is no direct cost to the researcher or department hosting equipment in the NHDC. “The University Library is a great example of a campus organization that used to maintain their own data center and now runs out of NHDC. Other departments leased off-campus computing space before relocating to NHDC,” said Kirk Grier, Director of ETS Infrastructure.

INFRASTRUCTURE SOLUTIONS ADVANCE RESEARCH AT NATURAL RESERVES
ETS and the local UC Natural Reserve System partner to offer infrastructure solutions that support researchers and students visiting these remote locations. At the Sedgewick Reserve, ETS designed, budgeted, and supported the implementation of a 100 MB Ethernet radio system that provides a more robust network connection between the Reserve’s Field Station, the Las Cumbres Observatory Global Telescope, and the UCSB campus. The new system went into production in 2014. At the Santa Cruz Island Reserve, we worked with UC Reserve staff, contractors and The Nature Conservancy to replace the existing point to point radio link that provides wireless Internet to Santa Cruz Island. This involved ensuring that the Reserve’s radio gear and communications systems could connect to a more stable, solar powered cell site with battery and generator backup. At Coal Oil Point Natural Reserve, we installed a point-to-point radio link to stabilize the network connection which facilitates the integration of cameras that monitor the snowy plovers, augment the whale count, and support other research projects.
Community Service

ETS manages the communications infrastructure that connects the UCSB community and Isla Vista with police, firefighters and emergency medical personnel.
COMMUNITY SERVICE

FCC RE-BANDING EFFORT SUPPORTS EMERGENCY RESPONSE AND SECURITY
In July 2004, the Federal Communications Commission (FCC) adopted a comprehensive plan to reconfigure the 800 MHz band used by police, firefighters and emergency medical technicians due to increasing pressure from high-density commercial wireless systems for more spectrum. The Santa Barbara region implemented these changes in 2014. Over 600 UCSB portable and mobile radios from Public Safety, Facilities Management, Housing & Residential Services, and other campus departments were collected, inventoried, and reprogrammed to the new 800 MHz frequencies by ETS staff over a two-month period. The Campus Police radios were previously configured to support both 800MHz and ultra high frequency (UHF). This upgrade allowed the Campus Police to carry one radio that operates on both the UC and Santa Barbara Sheriff’s frequencies. During the re-banding transition, both radio frequencies had to run concurrently and campus radios had to be able to transmit on both frequencies. Significant planning and coordination were necessary to ensure minimal disruption to public safety services, both on the UCSB campus and in Isla Vista. UCSB was the first southern UC campus to complete this effort. Upon completion, the lessons learned and configurations for concurrent frequencies were passed on to other southern UC campuses.

NEXT GENERATION 911 PROVIDES IMPROVED EMERGENCY RESPONSE TOOL
When someone on or near the campus needs emergency assistance, the campus communications infrastructure ensures that they are routed to the appropriate 911 dispatch center based on their location. This is especially important considering that within a mile of the UCSB campus there is a coastline, a major freeway, an airport, and thousands of students. ETS worked with the Campus Police to install a new, state-mandated 911 system that improves call processing, mapping, and analytics. In the future, the system will have the capability of receiving text messages and supporting multiple languages. In addition to providing space, power, and a climate controlled environment for the equipment, ETS staff coordinated project vendors and ensured that the new system was integrated with the campus communications infrastructure.
Enterprise Tools

ETS delivers and supports tools that enable cross-campus financial management, timekeeping, communication, calendaring, and password management.
The first phase of a multi-year, multi-million dollar project to replace UCSB’s 45-year-old financial system with PeopleSoft Financials went live in summer 2015. Phase 1 of the project focused on replacing the financial applications on the mainframe with the core modules of PeopleSoft Financials. Although the initial users of PeopleSoft Financials are the departments of Business & Financial Services, Budget & Planning, and Facilities Management, this system lays the foundation for ongoing project phases and enhancements that will dramatically improve the quality of our financial data and transform how we manage finances in the future. “Delivering this project is a big deal because we are introducing to the campus a fully-integrated, state-of-the-art, financial system designed to support the business functions and reporting requirements that are expected of a world-class research university,” said Interim CIO Denise Stephens. “This is a phenomenal achievement for this campus given the breadth and complexity of this system. It was a team effort that relied on the energy, resilience, goodwill, and commitment of many people at many levels across the campus.”

The IT Council asked ETS to research Google Apps for Education as a potential platform for the campus-wide Connect email and calendaring service, as well as the requirements of a multiple platform solution including Google Apps and Microsoft Office365. After conducting a detailed study; ETS presented the findings to the IT Council and the IT Board. In May 2015, the IT Council endorsed an initiative to stabilize the Connect service by migrating current Office365 email users to Google Apps, and migrating current Oracle Calendar/CorporateTime users to the Google Apps calendar by mid-September 2015. ETS and Letters & Science IT (LSIT) also began working jointly on a project proposal for expanding Connect services to new departments. The main goals of this effort are to enable broad, campus-wide adoption of the Connect service and to provide integrated email and calendaring features that address the diverse communication and collaboration needs of the UCSB community.

Expansion of server virtualization and storage infrastructure on VMware beyond the enterprise application hosting role continued in FY2014-15. Virtualization allows diverse applications to run virtually on a single, physical computer, and thus saves server space, lowers power consumption, and reduces server administration costs. In the last year, ETS migrated University Extension servers, .NET servers, and 2.1 million files for the Division of Administrative Services to VMware, a virtualization infrastructure.

ETS upgraded the campus electronic timekeeping system, Kronos, from version 6.3 to version 7. The new version included better handling of employees whose appointments are split-funded or hold multiple appointments, easier employee setup for managers, and less reliance on Java for some employees. Approximately 121 departments representing 5,661 UCSB employees use Kronos.

In an effort to improve campus-wide cyber security, ETS arranged a campus volume license for Password Wallet, a password manager that allows current employees and emeritus faculty to manage passwords and store them securely. It includes features like auto-type and synchronization to the cloud or between multiple devices. 135 people are currently using this service. “Unique and complex passwords for each of your accounts is good security practice,” says UCSB Chief Information Security Officer Sam Horowitz. “Unfortunately, this can result in dozens of passwords that are hard to keep track of securely. Password management tools can help.” More information is available at http://www.ets.ucsb.edu/security.

**STANDARDIZING HOSTED SERVICES ON THE VMWARE PLATFORM**

**STUDY OF EMAIL AND CALENDARING REQUIREMENTS SHAPES CONNECT STRATEGY**

**ENTERPRISE TOOLS**

**PEOPLESOFT FINANCIALS MODERNIZES THE CAMPUS FINANCIAL SYSTEM**

**KRONOS UPGRADE EXPANDS TIMEKEEPING FUNCTIONALITY**

**NEW SERVICE HELPS EMPLOYEES MANAGE PASSWORDS**

**Annual Report 2015  Enterprise Technology Services  9**
Infrastructure

ETS protects the campus network and the infrastructure that supports it.
INFRASTRUCTURE

MOBILE VIRTUAL PRIVATE NETWORK ENABLED
In response to requests from Virtual Private Network (VPN) users who wanted to use tablets to read licensed journal content while traveling, ETS added VPN support for mobile devices like iPhone, iPad, and Android devices. As the use of portable devices increases, users expect a similar level of access and security to what they have with laptops and desktops. We currently support 2,728 VPN accounts representing 163 departments.

ETS SUPPORTS GOLETA SEWER LINE PROJECT
ETS worked with the Goleta Sanitary District and Facilities Management to support the replacement of a 30-year-old sewer line between West Campus and the UCSB Public Safety building, to ensure that minimal impact was felt by campus. We hold the physical infrastructure maps for this area and worked with contractors to identify and mark the power lines, water lines, and duct banks holding fiber optic cables that intersected with the sewer line route. In cases where the new sewer line intersected with UCSB ducts containing fiber optic cables, ETS staff worked with city contractors to shift the ducts while preventing a campus-wide network outage.

NETWOK OUTAGE PREVENTED DURING COMMUNICATIONS DUCT MOVE
ETS prevented a complete network outage for the UCSB campus while shifting a major communications duct bank away from the planned foundation of the new KITP Visiting Scholar’s Residence building. This particular duct bank included fiber optic cables for ResNet and the CENIC fiber route, a high-speed, high-bandwidth connection running from northern to southern California. The CENIC fiber is UCSB’s Internet connection. It also connects our campus with other major research universities and medical centers throughout the state. We devised a plan to move the existing duct bank, which consisted of communications fibers encased in concrete buried five feet underground, approximately 20 feet to the south towards El Colegio Road without cutting and re-splicing any of the fibers. “This was a very creative effort on the part of the ETS Telecommunication staff and our campus partners that ensured uninterrupted Internet connectivity and allowed the KITP building project to proceed as planned,” said Denise Stephens, Interim Chief Information Officer.
Collaboration

ETS ensures campus-wide representation and engagement on business transformation initiatives.
COLLABORATION

STUDENTS GET FREE ACCESS TO OFFICE 365 PROPLUS
In January, ETS and Letters & Science IT (LSIT) enabled UCSB to begin participating in the Microsoft Student Advantage Program, which allows universities to provide access to Office 365 ProPlus for students at no cost. All actively enrolled UCSB students now have the ability to install Office 365 ProPlus and use the latest versions of Microsoft Word, Excel, PowerPoint, OneNote, Outlook, Access and Publisher on up to five PC or Mac devices. ETS was responsible for activating the program, while LSIT provided in-person, email, and phone support to students at their various Student Support Centers. “Proficiency with Microsoft Office tools, especially Word, PowerPoint, and Excel, is increasingly a de facto standard for students preparing to enter a highly competitive job market after they graduate,” said Denise Stephens, Interim Chief Information Officer and University Librarian. “I was pleased that Enterprise Technology Services was able to partner with LSIT to provide our students free access to these tools.” More information is available at http://www.umail.ucsb.edu/about/student-advantage

TIMEKEEPING PRACTICES AND CONCERNS DOCUMENTED
ETS conducted face-to-face interviews with timekeepers and payroll managers representing 132 campus departments currently using Kronos to gather data on current system usage. Findings revealed an interest in greater automation between Kronos and PPS, interest in additional training on accruals, reports, and queries; concerns about accrual reconciliation between the payroll and personnel system (PPS) and Kronos, interest in written standards/policies for Electronic Timekeeping practices, and frustrations related to Kronos’ reliance on Java. Over the summer, we worked with campus business officers and payroll analysts to test a non-Java version of Kronos for managers who approve employees’ timecards. The results of the tests have been very positive, and this solution is slated to be deployed campus-wide in Fall 2015. We also began testing a remote application solution designed to mitigate Java issues for Timekeepers and Payroll Managers.

ENGAGING DEPARTMENTS ON UCPATH PROCESS DESIGNS
UCPath is a system-wide program mandated by the UC Office of the President (UCOP) to replace UC’s 33-year-old payroll and personnel system (PPS) with PeopleSoft Human Capital Management (HCM). System-wide, there are currently 11 versions of PPS; no two are the same. Each campus maintains its own staff to update its local customized version of PPS rules and code. In addition, each campus maintains unique shadow systems to mitigate deficient functionality. While the central project team continues to focus on the UCPath deployment at UCOP, ETS is working with our local project steering committee and stakeholders to adapt campus human resources, academic personnel, and payroll operations and services to use the new system. UCSB teams comprised of departmental administrators and control points have already analyzed 33 out of 94 business processes and developed initial recommendations for how local processes impacted by UCPath will work once the system is implemented. The finalization of UCSB’s go-live date will trigger additional project activities.
## FINANCIAL DATA

### OPERATIONS EXPENDITURES

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virtual Systems &amp; Mainframe</td>
<td>$1.4M</td>
</tr>
<tr>
<td>CIO, Administration &amp; Initiatives</td>
<td>$936K</td>
</tr>
<tr>
<td>Applications Support</td>
<td>$807K</td>
</tr>
<tr>
<td>Data Network</td>
<td>$798K</td>
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<tr>
<td>Information Security</td>
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<tr>
<td>North Hall Data Center</td>
<td>$466K</td>
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<tr>
<td>Identity Management</td>
<td>$441K</td>
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<tr>
<td>Collaboration Services</td>
<td>$415K</td>
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<tr>
<td>Service Center &amp; Training</td>
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</tr>
<tr>
<td>Data Warehouse</td>
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<tr>
<td>Business Relationship Management</td>
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<tr>
<td>Project Management Operations</td>
<td>$158K</td>
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<tr>
<td>Supercomputing</td>
<td>$35K</td>
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### PROJECT EXPENDITURES

<table>
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<th>Project</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial System Project</td>
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</tr>
<tr>
<td>UCPath Project</td>
<td>$1.3M</td>
</tr>
<tr>
<td>Electronic Timekeeping Project</td>
<td>$1.2M</td>
</tr>
</tbody>
</table>

### RECHARGE SERVICE EXPENDITURES

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Telecommunications</td>
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</tr>
<tr>
<td>Desktop &amp; Server Support</td>
<td>$815K</td>
</tr>
<tr>
<td>Residential Telecommunications</td>
<td>$450K</td>
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<tr>
<td>Network Expansion</td>
<td>$196K</td>
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<tr>
<td>Sites Hosting</td>
<td>$28K</td>
</tr>
<tr>
<td>Video Camera Service</td>
<td>$25K</td>
</tr>
</tbody>
</table>

### TOTAL CENTRAL IT SPENDING PER INSTITUTIONAL FTE (STUDENTS, FACULTY, AND STAFF)

- **UCSB / ETS**: $677
- **Other Doctoral Institutions Average**: $941

### TOTAL CENTRAL IT SPENDING PER INSTITUTIONAL EMPLOYEE (FACULTY AND STAFF)

- **UCSB / ETS**: $3,124
- **Other Doctoral Institutions Average**: $4,807

### TOTAL CENTRAL IT SPENDING AS PERCENTAGE OF INSTITUTIONAL EXPENSES

- **UCSB / ETS**: 2.4%
- **Other Doctoral Institutions Average**: 3%

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**SOURCE: EDUCAUSE CORE DATA SERVICE (FEBRUARY 2015)
LOOKING AHEAD

PILOTING THE ENTERPRISE TECHNOLOGY SERVICE CENTER
ETS will begin piloting UCSB’s first enterprise-level service desk, called the Enterprise Technology Service Center (ETSC), in September 2015 in the Library. Library employees contact the ETSC via the web, phone, or web chat for all technical support services, including support for desktops & laptops, email, login/passwords, software, remote access, network connectivity, printing, scanning, and A/V equipment. A cloud-based application called ServiceNow is utilized to standardize how the ETSC delivers IT services and communicates with customers. Once the ETSC is successfully piloted in the Library, ETS will begin collaborating with other customers to deploy the service center in their divisions and departments.

PLANNING FUTURE PHASES OF THE FINANCIAL SYSTEM PROJECT
Once stabilization of Phase 1 of the PeopleSoft implementation is completed, ETS will work with Business & Financial Services to explore options for future projects and upgrades. Future project options include enhancements to the modules and reports implemented in Phase 1, adopting a UCOP-mandated chart of accounts structure, upgrading to PeopleSoft Financials 9.2, and the implementation of the PeopleSoft modules of Accounts Receivable, Billing, Contracts, Grants, and Project Costing. ETS will conduct initial discovery planning on one or more options, which includes determining high-level business requirements, conducting a preliminary fit-gap analysis, identifying impacts, performing a high-level solution design, and developing detailed project plans and estimates. This planning will culminate in proposals that will go to campus IT governance for discussion and priority setting.

DEPLOYING THE TIMEKEEPING SYSTEM CAMPUS-WIDE
Once the Java issues with the Electronic Timekeeping service have been reasonably resolved, ETS will deploy Kronos to the remaining 17 departments that are using it on a limited basis and to the 60 departments in the Academic Affairs, Athletics, and Research Divisions that are not yet using it. ETS will also support the Timekeeping Steering Committee, the Kronos Academic/Research Advisory Committee, and Audit & Advisory Services in their efforts to research options for timekeeping policies and procedures.

PREPARING FOR UCPATH
ETS will continue to support our local project sponsors and steering committee in preparing for UCSB’s UCPath implementation. In the coming year, UCSB will need to continue considering options for adapting campus human resources/academic personnel/payroll operations and services to use the new system and associated business processes. ETS is also recruiting key positions to support project activities.

WORKING TOGETHER IN FEDERATION
In the coming year, ETS will establish agreements with divisional/departmental IT units as needed, and where capacity exists, to provide enterprise-level services. These agreements enable ETS to reduce costs and deliver services to the whole campus by leveraging existing IT capabilities found in divisional/departmental IT units. This approach ensures that the campus fully utilizes its existing IT resources toward common objectives.

DEPLOYING HYBRID CLOUD SERVICES
The use of hybrid cloud solutions will grow in the coming year. The hybrid cloud allows the campus to utilize the computing resources of public cloud infrastructure providers in addition to on-campus computing resources, ideally in a seamless fashion. ETS will deploy hybrid cloud file services using StorSimple, hosted at the North Hall Data Center. Like a traditional storage array, StorSimple provides on-premises storage while acting as a gateway to cloud storage providers like Azure, Amazon Web Services, OpenStack, and RackSpace. We will gain overflow capacity, replication, snapshots, file versioning, encryption at rest and the ability to run virtual machines directly out of the Azure cloud. ETS is currently running a pilot with Azure RemoteApp, a cloud application publishing offering, to provide campus users with consistent access to business applications such as Kronos, BARC and Hyperion. We are also exploring moving selected Microsoft SQL Server workloads to Azure SQL to enable predictable, scalable database services while minimizing hosting platform scalability and lifecycle support issues.
WHAT WE DO

ENTERPRISE TECHNOLOGY SERVICES
Enterprise Technology Services (ETS) contributes to UC Santa Barbara’s mission of research, teaching, and community service by serving as a resource and catalyst in partnering with the campus community to efficiently deliver IT infrastructure, project management, and enterprise application services to faculty, students, staff, and affiliates; and increasing the value and effectiveness of campus IT investments and implementations.

CHIEF INFORMATION OFFICER
• Directs IT strategic plans, policies, programs and schedules to accomplish campus goals.
• Facilitates campus-wide engagement related to IT issues and opportunities.

BUSINESS OPERATIONS & PLANNING
• Oversees financial analysis and management.
• Manages personnel, procurement, and space.
• Provides organizational support.

BUSINESS RELATIONSHIP & SERVICE MANAGEMENT
• Manages relationships with our service customers.
• Ensures that our services fulfill campus needs.
• Shares customer needs with service providers.

COMMUNICATIONS & OUTREACH
• Plans communications strategy for ETS and the CIO.
• Manages ETS website and social media content.
• Produces forums, information sessions, and events.
• Writes memos, newsletters, and reports.
• Develops communication strategy for major projects.

ENTERPRISE END USER COMPUTING
• Provides support for devices and applications.
• Architects local, hosted, and cloud solutions.
• Manages the Enterprise Technology Service Center.
• Manages Email, Calendar, and Collaboration services
• Provides training for enterprise tools

ENTERPRISE IT PROJECT MANAGEMENT OFFICE
• Plans, manages, and delivers enterprise projects.
• Protects IT investments through risk management.
• Promotes project management practices and tools.
• Ensures campus-wide input and engagement throughout the project lifecycle.
• Supports organizational readiness for change.

ENTERPRISE SYSTEM INTEGRATION
• Builds, integrates and supports enterprise systems.
• Develops and supports the governance of enterprise architecture.
• Manages the Data Warehouse.
• Engineers identity and access management solutions.
• Develops solutions for PeopleSoft systems.

INFORMATION SECURITY
• Protects the confidentiality, integrity, and availability of data and the IT infrastructure.
• Develops policy and standards.
• Delivers consultative services, awareness campaigns, and risk assessments.
• Reviews regulatory and contractual requirements.
• Represents data security on governance bodies.
• Coordinates incident response.

INFRASTRUCTURE
• Manages the North Hall Data Center.
• Hosts applications like the Data Warehouse, Kronos, PeopleSoft Financials.
• Manages the core campus network.
• Provides Windows Server Support.
• Provides mainframe hosting services.
• Manages the voice and cable television networks.
• Manages the two-way/Public Safety radio systems.
• Manages the inter-building communications physical infrastructure.
• Provides network host vulnerability scanning.
• Provides the Secure Compute Research Environment.
• Provides the Video Security as a Service offering.
BY THE NUMBERS

ACCOUNTS AND IDENTITY
20 New applications integrated with Identity Management
938 Subscription databases and e-book, video, audio, and e-journal collections accessible via the Library Proxy Services

COLLABORATION SERVICES
135 Listserv mailing lists currently supported
842 Connect mailing lists managed
2,979 Connect accounts hosted
35,641 Active U-Mail Student email accounts supported

INFORMATION SECURITY
1,165 Employees participated in the info security awareness program
17,817 Vulnerability scans conducted
18,504 Instances of apparently malicious traffic from external sites blocked

NETWORK, REMOTE ACCESS CONNECTIVITY
81 Wireless access points installed in 21 buildings
93 VPN support request tickets serviced
110 Building switches maintained
250 Subnets with access control lists supported on core routers
394 Secure Socket Layer certificates issued
624 Wireless access points in 75 buildings maintained
765 Active Secure Socket Layer certificates managed
2,728 VPN accounts supported representing 163 departments
33,415 Wireless service accounts supported across 96,403 devices
7.6 Petabytes transported on border routers annually
99.992% Campus network uptime at the building switch

OUTREACH
10 Info sessions and forums hosted
200 Staff on the Systems Communication Network
30,703 Visits to the ETS website
62,093 ETS website unique pageviews
83,424 ETS website pageviews

PHYSICAL SECURITY
13 New video security cameras deployed
93 Security cameras hosted in 17 locations

PROJECT MANAGEMENT
33 Local UCPath business processes documented & reviewed
94 Local UCPath business processes identified
132 Departments interviewed regarding Kronos usage

SERVER SERVICES
50 Departments host equipment at the North Hall Data Center
220 Physical servers on 56 racks managed in the North Hall Data Center; where server virtualization is used, a physical service can host up to 50 virtual servers

TELECOMMUNICATIONS
25 Miles of communications cabling installed
648 Customers use the radio service
2,338 Telecommunications customer service requests processed
3,750 Student residences utilize Cable TV service
4,300 Telephone lines maintained
1.7M Radio transmissions processed annually
1.9M Outgoing calls processed annually
$104K Late/defaulted utility charges from non-University entities collected

WEB HOSTING
22 Drupal websites hosted
75 Campus web sites utilize ETS Web Analytics

WORKPLACE SERVICES
144 Library computers installed with Cybrarian
144 Library circulation desktops managed
154 New Library work stations supported
694 Total users supported
1,010 Total work stations supported
5,661 Employees use Kronos for timekeeping