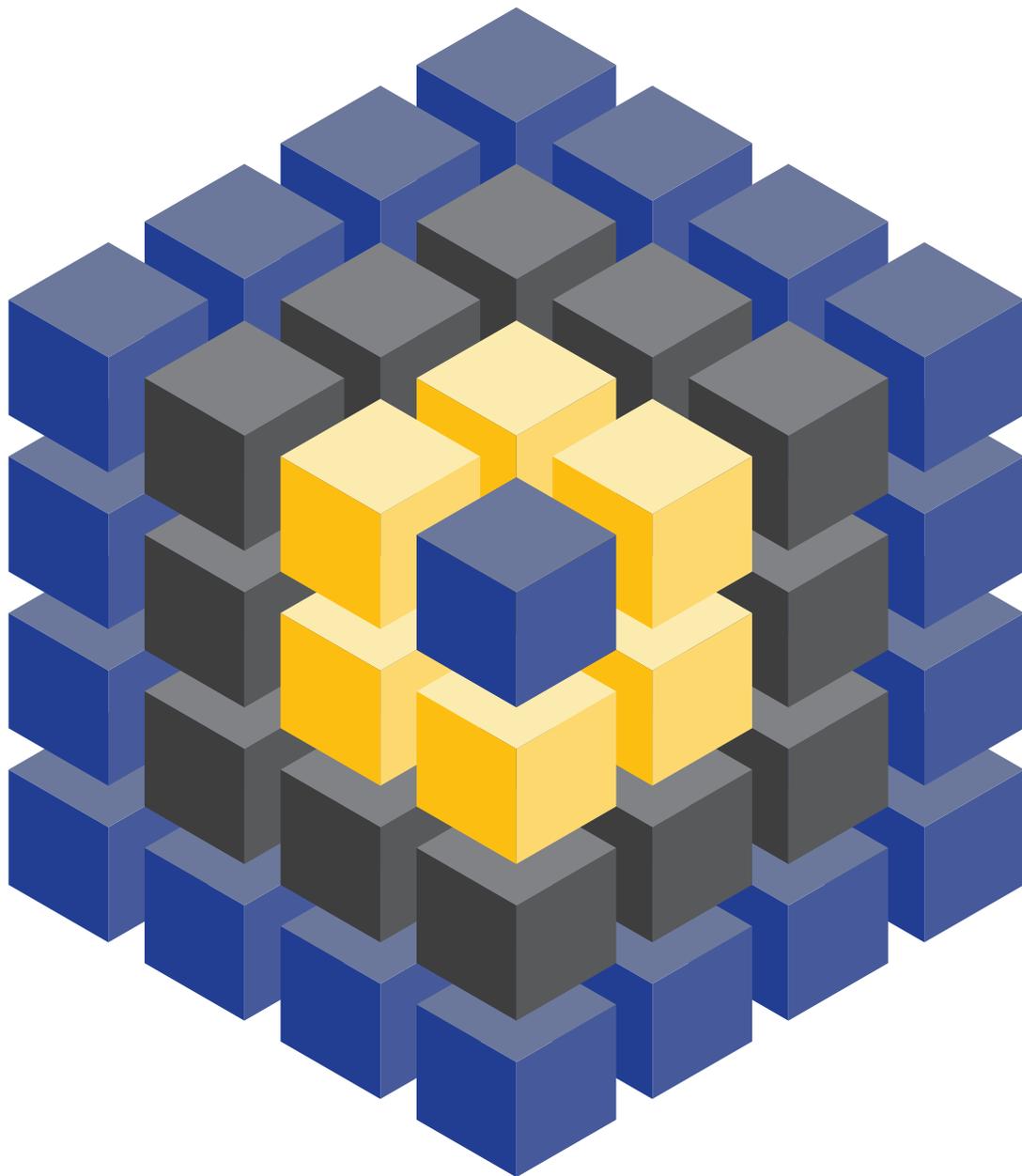


DELIVERING BECOMING



ENTERPRISE TECHNOLOGY SERVICES

UC SANTA BARBARA
ANNUAL REPORT
2014

en·ter·prise IT

How we plan, deliver, and manage IT enables the university to conduct its business and achieve its mission.

Inherently, enterprise IT is broadly utilized, essential across functions, and delivered as increasingly powerful and integrated systems.

MESSAGE FROM THE INTERIM CHIEF INFORMATION OFFICER

In the nine months since the formation of Enterprise Technology Services (ETS) was announced, significant steps have been taken to reorient and reprioritize the role of information technology (IT) on campus. UCSB's transition to a federated IT model represents a major evolution in how we conduct business and deliver the mission of the campus. In a federated IT organization, enterprise-level services are coordinated in partnership with departmental IT units delivering local and distinct services to users.

Most faculty, staff, and students will not feel the impact of this transition for another year or two, but the following accomplishments from the past year are clear evidence of a new approach to enterprise-level IT at UCSB:

- The Coordinating Committee on Budget Strategy approved the Enterprise Technology funding model.
- The Chief Information Officer (CIO) is now authorized to direct and manage information technology and enterprise system strategic plans, policies, programs, and schedules; in order to accomplish the academic, research, and business goals of the campus. The CIO also facilitates campus-wide engagement and information sharing related to IT issues and opportunities.
- ETS was established through the consolidation of six IT organizations in the Academic Affairs and Administrative Services divisions.
- The IT Board approved a charter stating that the IT Council is the single campus mechanism for evaluating, prioritizing, and recommending enterprise-level projects and initiatives for eventual approval and funding.
- The IT Board approved a model for proposing, prioritizing, approving, implementing, and assessing enterprise IT projects. This model ensures systematic participation by stakeholders in campus-wide IT governance.
- ETS conducted a campus-wide IT Needs Survey to identify current and emerging enterprise IT requirements. The results will help frame the discussions around establishing a roadmap for campus IT.
- ETS implemented a Communications & Outreach strategy to promote partnership and transparency, and to support the wider change management initiative surrounding business transformation.

THIS INAUGURAL REPORT

As the official enterprise IT service provider at UCSB, ETS has the responsibility to stakeholders of reporting how shared resources are used to deliver services and projects. This first annual report covers the 12 primary strategies we are undertaking to implement the ETS organization, as well as the services, projects, and outcomes we manage. I hope you find it helpful in understanding the scope and depth of our work, and the cross-campus partnerships we are forming to deliver business transformation.

On behalf of the whole ETS team, thank you for your ongoing partnership.



DENISE STEPHENS
Interim Chief Information Officer



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ets.ucsb.edu/annual-report

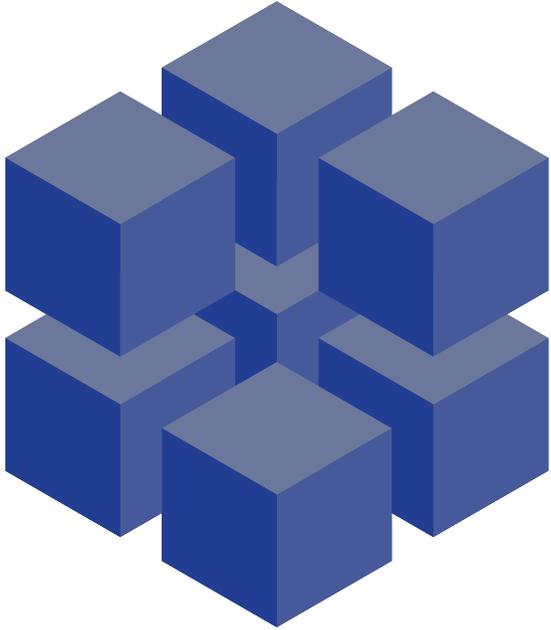
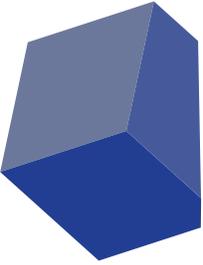
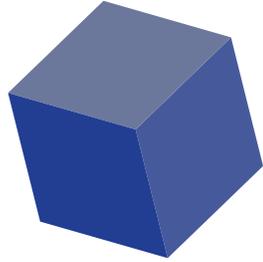
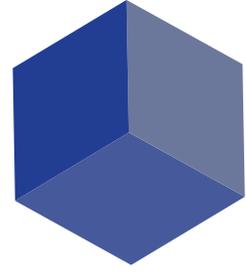
CONTEXT

A BRIEF HISTORY OF INFORMATION TECHNOLOGY AT UC SANTA BARBARA

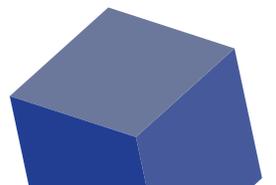
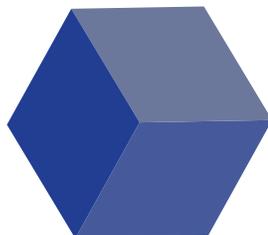
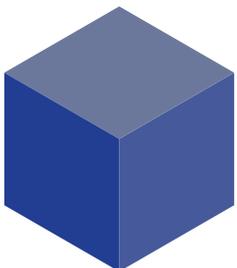
- 1981 The Information Systems & Computer organization (IS&C) in Administrative Services was created through the merger of the Computer Center and the Information Systems Office.
- 1984 The Communications Services department in Administrative Services is created through the merger of Telecommunications Services and Data Communications Services.
- 1994 Executive Vice Chancellor Donald Crawford forms the Campus Network Committee in April as a means of obtaining campus-wide representation on networking issues.
- 1998 The Campus Network Committee recommends the formation of two committees: the Information Technology Planning Group (ITPG) and the Information Technology Board (ITB). The ITPG holds their first meeting on October 6. Chancellor Henry Yang announces the formation of the ITB on November 9, and the board holds its first meeting on December 8.
- 1999 In November, the ITB forwards a recommendation to Executive Vice Chancellor Nagel unanimously recommending that UCSB create an Office of Information Technology (OIT).
- 2000 In March, Chancellor Henry Yang announces the formation of the Office of Information Technology (OIT) under Academic Affairs. The OIT joins the campus network programmers with Communications Services.
- 2005 In May, a new ITB is convened and chaired by the Executive Vice Chancellor.
- 2007 In August, Thomas Putnam is appointed as UCSB's first Chief Information Officer (CIO). The Office of Information Systems and Technology (OIST) is formed under Academic Affairs. The OIST joins the OIT with Information Systems & Computing (IS&C) from Administrative Services.
- 2011 In September, the Operational Effectiveness (OE) Steering Committee charges the IT OE Committee to develop a proposal establishing a campus IT governance structure that promotes transparent, two-way communication between the IT community and the campus.
- 2012 In April, the IT OE Committee recommends the formation of an IT Council that represents the campus academic and administrative units, reports to the IT Board, and is charged with aligning IT actions with campus objectives.
- In July, the Administrative Systems Program Management Office is established.
- 2013 On January 28, the IT Council holds its first meeting.
- In October, Executive Vice Chancellor Gene Lucas announces the formation of Enterprise Technology Services (ETS) through the consolidation of six organizations: Administrative Services IT, Administrative Systems Program Management Office, Communication Services, Information Systems & Computer, Office of Information Technology, and the Office of Information Systems and Technology. ETS is charged with overseeing the implementation and operation of enterprise systems; it is overseen by the CIO.

University Librarian Denise Stephens is appointed Interim Chief Information Officer.





BUILDING
ENTERPRISE IT



BUILDING ENTERPRISE IT

The initial ETS implementation roadmap proposed by Gartner in its October 2013 campus assessment included the strategies listed below. Many of these initiatives will take two or three years to fully implement.

1. DELIVER A SET OF ENTERPRISE SERVICES THAT IMPROVES OVERALL SERVICE QUALITY AND CONSISTENCY ACROSS THE INSTITUTION

- 1.1 Expand and enhance enterprise IT services
- 1.2 Create an Enterprise Service Desk
- 1.3 Improve maturity of key processes to support enterprise IT services
- 1.4 Formalize enterprise IT services through a service catalog
- 1.5 Improve the IT funding model
- 1.6 Create a Business Relationship Manager role

2. BUILD OR EXPAND KEY FUNCTIONS THAT ARE FUNDAMENTAL TO SUPPORTING ACHIEVEMENT OF INSTITUTIONAL GOALS

- 2.1 Create an Enterprise Architecture role
- 2.2 Develop an Enterprise-wide IT strategy
- 2.3 Establish an Enterprise IT PMO

3. CREATE A CENTRAL IT ORGANIZATION THAT ENABLES ECONOMIES OF SCALE AND IMPROVES OVERALL IT SERVICE DELIVERY WHILE MAINTAINING LOCAL AGILITY

- 3.1 Move from a highly decentralized IT operating model to a federated operating model
- 3.2 Create a central IT organization under the CIO to deliver enterprise services
- 3.3 Ensure strong governance structures to guide the federated IT organization



BUILDING ENTERPRISE IT

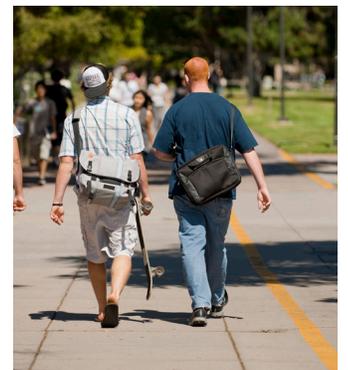
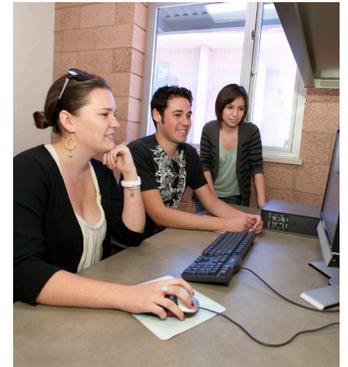
1.1 EXPAND AND ENHANCE ENTERPRISE IT SERVICES

Services that are essential to all divisions, such as maintaining core infrastructure and development/maintenance of enterprise-wide applications, are considered “enterprise” services. These services should be centrally provided in order to ensure that all business unit needs are met.

WHY IT MATTERS

Centrally provided enterprise IT services enable coordinated efficiency, economies of scale, and improve overall IT service delivery.

- Installed over 40 miles of communications cabling in campus buildings.
- Deployed a new radio system to maximize efficiency of inter-jurisdictional communications in emergency situations.
- Enhanced infrastructure of North Hall Data Center (NHDC) to improve business continuity.
- Adopted new access processes to meet the needs of NHDC users.
- Deployed approximately 60 video security cameras across campus.
- Implemented significant changes to the Data Warehouse in support of major software projects and business process changes.
- Implemented enhancements to workstation and server support services.
- Installed 93 wireless access points in 23 buildings.
- Migrated building management systems from unsupported legacy network equipment to standard campus networking.
- Upgraded the Kronos electronic timekeeping system from version 6.3 to version 7.



1.2 CREATE AN ENTERPRISE SERVICE DESK

An Enterprise Service Desk is a single point of contact for technical services; it focuses on customer and internal processes based on Information Technology Infrastructure Library (ITIL) framework. The Enterprise Service Desk organization provides multiple channels of service engagement and a predefined portfolio and catalog of services including: Service Level Agreements (SLA), Operating Level Agreements (OLA), and Underpinning Contracts (UC). Services are categorized, troubleshot, and isolated for further analysis as necessary.

WHY IT MATTERS

Effective IT support services should align with business functions and needs. An Enterprise Service Desk promotes effective end user support by facilitating the identification, submission, and categorization of business requirements, while providing structure to service delivery, automation of service management, and mechanisms for the continuous improvement of services.

- Hired a Director of Technology Support Services in April 2014. He is responsible for the development of the Enterprise Service Desk.
- Established the Library IT Service Desk Committee in May 2014. The committee is tasked with building the foundation of the Enterprise Service Desk.
- Created a project plan in May 2014 with milestones and actionable tasks for the design and implementation of an Enterprise Service Desk.

BUILDING ENTERPRISE IT

1.3 IMPROVE MATURITY OF KEY PROCESSES TO SUPPORT ENTERPRISE IT SERVICES

Mature processes have clearly defined, repeatable steps that are consistent with industry frameworks and widely communicated to staff. Staff enact the processes consistently using the defined steps. Mature processes tend to achieve better outcomes than immature processes.

WHY IT MATTERS

Enterprise services must serve all customers consistently at a mutually agreed upon level of quality. One of the key drivers of consistent, quality service delivery is mature IT service management processes.

- Adopted an Information Technology Infrastructure Library (ITIL) process structure for Infrastructure and Operations. ITIL is a process framework that facilitates repeatable, measurable, and improvable implementation of IT services. The adoption of an ITIL framework enables ETS to provide greater transparency and consistency in service delivery.
- Developed a model for proposing, prioritizing, approving, implementing, and assessing enterprise IT projects. The IT Board approved the model in June 2014.
- Revised the IT Council charter to reflect changes in its membership and function. The IT Board approved the charter in June 2014.



1.4 FORMALIZE ENTERPRISE IT SERVICES THROUGH A SERVICE CATALOG

An IT Service Catalog provides specifics about services available to customers such as offering descriptions, chargeback methods, pricing, and service levels that customers can obtain/buy from IT. The catalog defines what customers receive with each service offering and allows for customers to make choices about what service offerings meet their needs in simple language they understand. The IT Service Catalog is a subset of a Service Portfolio. The Service Portfolio enumerates all the services related to a service organization, including services in developmental stages, active services available to consumers, and retired services.

WHY IT MATTERS

The Service Portfolio facilitates the alignment of IT services with campus goals by providing a platform that both measures and prioritizes the impact of such services to the business. The Service Catalog socializes what, when, and how services are rendered to a customer, thus improving communications and aligning expectations. It also allows for the categorization of services based on break fixes, requests, or problems, to better manage the service process and provide a better customer service experience.

- Developed a draft service portfolio that includes 11 service areas: Application Services, Server Services, Workplace Services, Collaboration Services, Network, Remote Access, Remote Site Connectivity, Telephone and Mobile, Television and Radio, Physical Security, Information Security, Web Hosting, and Accounts and Identity.
- Developed draft Service Catalog elements for Applications Services (Electronic Timekeeping), Server Services (Windows Server Support), Workplace Services (Desktop Support), Workplace Services (Thin Client Computing), Network, Remote Access, Remote Site Connectivity (Campus Core Network and Wide Area Network), Telephone and Mobile (Mobile Phones, Smart Phones and Personal Device Synchronization).

BUILDING ENTERPRISE IT

1.5 IMPROVE THE IT FUNDING MODEL

The funding model for IT services encourages the optimal use of services. Customers are motivated to use what they need to achieve their mission. The funding model does not encourage unwanted outcomes, such as over use or penny-pinching behaviors. Customers do not have the ability to opt out of basic needs, such as security.

WHY IT MATTERS

Over the next two to seven years the campus will need to invest many millions of dollars in enterprise technology. The annual cost for the new projects the campus has committed to is expected to be from \$8 to \$12 million.

- The Coordinating Committee on Budget Strategy approved the Enterprise Technology Services funding model. The funding model includes the implementation of a “Common Good Fee” beginning July 1, 2014.



1.6 CREATE A BUSINESS RELATIONSHIP MANAGER ROLE

The core purpose of Business Relationship Management (BRM) is to help understand demand for enterprise services and to ensure that customer needs are met.

WHY IT MATTERS

The BRM role contributes to understanding service demands, bringing customer expectations and perceptions in line with reality, and ensuring that IT's institutional customers are satisfied with the services and solutions to which they subscribe.

- Appointed a BRM Director in January 2014.



BUILDING ENTERPRISE IT

2.1 CREATE AN ENTERPRISE ARCHITECTURE ROLE

The enterprise architect leads the institution in developing an overall picture of how key technology elements fit together and the standard by which those elements operate.

WHY IT MATTERS

In UCSB's decentralized environment, the enterprise architecture role promotes the overall synergy and effectiveness of technical activities and planning.

- Recruitment in progress for the Director of Enterprise System Integration.
- Recruitment in progress for the Enterprise Architect.



2.2 DEVELOP AN ENTERPRISE-WIDE IT STRATEGY

An IT strategy lays out a plan for providing efficient and effective enterprise IT services, focuses on how the institution achieves its goals, and outlines the capabilities needed to achieve those goals.

WHY IT MATTERS

Development of an enterprise-wide IT strategic roadmap that is advanced with the participation of our diverse stakeholder community will promote alignment of campus-wide applications, services, and costs to provide greater value.

- Conducted a campus-wide IT needs survey to identify current and emerging enterprise IT requirements in April 2014. The survey results serve as the basis for planning an enterprise IT roadmap.

2.3 ESTABLISH AN ENTERPRISE IT PMO

By design, the Project Management Office (PMO) is responsible for developing and providing a consistent project management methodology and standardized project management tools. It also institutionalizes a project governance process to ensure uniform oversight of project initiatives during the implementation phase.

WHY IT MATTERS

Projects utilizing a proven project management methodology carry less risk and a greater chance of success than unstructured projects. An organization needs a formal project management methodology to have consistent, predictable results, and improvable ways of implementing complex enterprise projects.

- Developed and implemented a PMO Communications initiative that includes a website, monthly project newsletters, monthly "Systems Speak" information sessions, social media engagement, and a campus-wide Systems Communication Network of over 200 members.
- Conducted a survey of the Systems Communication Network to evaluate the impact of PMO communications efforts between August 2012 and August 2013.
- Filled critical positions including a Change Management & Business Analyst, a Portfolio Scheduler, and Kronos Customer Support/Quality Assurance Analysts.
- Managed the upgrade of the electronic time-keeping (Kronos) system from version 6.3 to version 7 in June 2014.

BUILDING ENTERPRISE IT

3.1 MOVE FROM A DECENTRALIZED IT OPERATING MODEL TO A FEDERATED OPERATING MODEL

In a federated IT model, enterprise-level services are coordinated centrally in partnership with IT units delivering divisional and departmental services to their users.

WHY IT MATTERS

UCSB's former decentralized IT operating model allowed for similar IT functions to be supported across different IT organizations. A federated model allows us to better utilize campus IT resources through synergies and economies of scale so that we can more efficiently deliver the mission of the University.

- Created Enterprise Technology Services (ETS) through the consolidation of six IT organizations in the Academic Affairs and Administrative Services divisions in October 2013.
- Developed a charter for the IT Council (ITC) that was approved by the IT Board in June 2014. Residing in a larger campus IT ecosystem, ITC is the single campus mechanism for evaluating, prioritizing, and recommending enterprise-level projects and initiatives for eventual approval and funding (if required).
- Developed a model for proposing, prioritizing, approving, implementing, and assessing enterprise IT projects that was approved by the IT Board in June 2014.



3.2 CREATE A CENTRAL IT ORGANIZATION UNDER THE CIO TO DELIVER ENTERPRISE SERVICES

Specific Administrative Services IT functions are combined with OIST to create a new central IT organization that reports to the CIO.

WHY IT MATTERS

Effective enterprise-level service management and service delivery processes require a central IT organization that has sufficient resources, structural continuity, and is accountable to the community it serves.

- Announced that six OIST and Administrative Services units engaged in enterprise systems merged into a single entity called Enterprise Technology Services (ETS) and are overseen by the CIO.
- Charged ETS with overseeing the implementation and operation of enterprise IT systems.
- Appointed an Interim CIO responsible for overseeing the ETS implementation and directing information technology and enterprise system strategic plans, policies, programs and schedules, to accomplish the goals of the campus. The CIO facilitates campus-wide engagement and information sharing related to IT issues and opportunities.
- Appointed directors for Information Security, Infrastructure, Planning & Architecture, Technology Support Services, and Business Relationship Management.
- Implemented an ETS Communications & Outreach strategy that includes a website, newsletters, a Systems Communication Network for major enterprise projects, a quarterly IT Forum, a biannual Business IT Forum, monthly project information sessions, and social media engagement.
- Developed an Organizational Change Management Plan for ETS.



BUILDING ENTERPRISE IT

3.3 ENSURE STRONG GOVERNANCE STRUCTURES TO GUIDE THE FEDERATED IT ORGANIZATION

With ETS providing a wider set of enterprise services, the role, processes, and decision-making authority of the IT Council and divisional governance bodies are carefully examined and modified.

WHY IT MATTERS

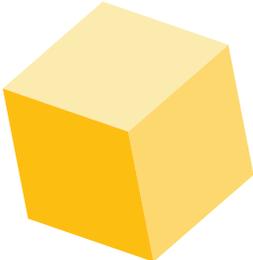
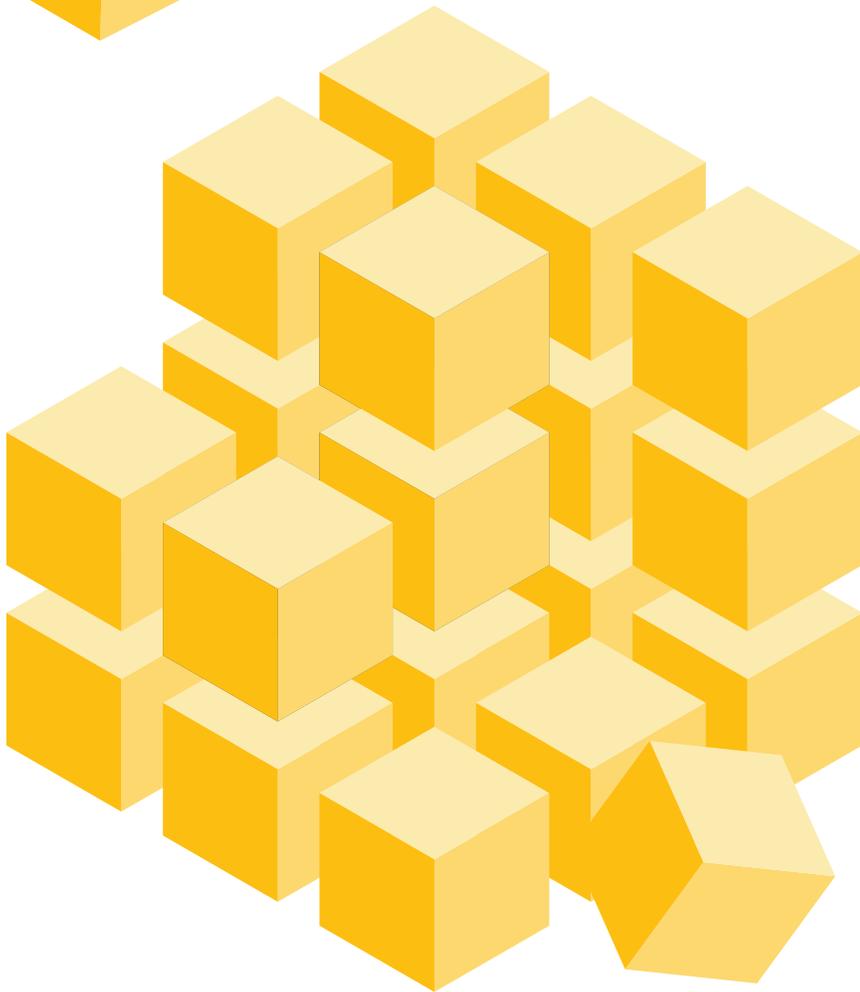
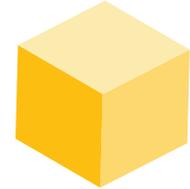
A credible and strong governance structure brings stakeholders together to prioritize enterprise IT projects and initiatives, and to ensure that implementations are understandable and thoughtful.

- Developed a charter for the IT Council (ITC) that was approved by the IT Board in June 2014. The charter includes the IT Council's scope, responsibilities, authority, guiding principles, and composition.
- Developed a model for proposing, prioritizing, approving, implementing, and assessing enterprise IT projects that was approved by the IT Board in June 2014. This model includes the creation of seven advisory groups representing broad functional areas: academic, administrative, information security and management, IT infrastructure, research, and student support. ■





BUSINESS TRANSFORMATION



BUSINESS TRANSFORMATION DRIVES CHANGE

UCSB is on the cusp of the most significant business transformation in its history. Many of the mainframe-based systems and related business processes that form the foundation of our campus's operational infrastructure are being replaced by more integrated and powerful enterprise resource planning systems.

UCPATH

UCPath is a UC system-wide project to replace UC's 35-year-old Payroll & Personnel System (PPS) and standardize payroll, academic personnel, and human resources processes across all locations. When fully delivered, UCPath will support an active payroll of approximately 190,000 UC employees (60,000 faculty and 130,000 staff), yielding 250,000 W-2s annually.

- PeopleSoft Human Capital Management is replacing PPS and changing the way the University does business.
- Payroll, human resources, and academic personnel business processes are being re-engineered.
- A shared UCPath Center is being staffed to provide payroll and benefits services to all UC employees.

FINANCIAL SYSTEM

The Financial System Implementation Project is a phased implementation of PeopleSoft Financials to modernize UCSB's 43-year-old financial system, move systems off of the mainframe, and improve the stability and functionality of the financial system.

- PeopleSoft Financials is replacing UCSB's 43-year-old mainframe-based financial system.
- The General Ledger, Accounts Payable, Budget Ledger, Asset Management, and Project Costing (for Facilities Management only) PeopleSoft Financials modules are being installed in Phase 1.

ELECTRONIC TIMEKEEPING

Electronic Timekeeping is a project to implement Kronos as the official campus timekeeping system.

- An electronic timekeeping system (Kronos) is replacing paper timecards.
- Employees' time and attendance data will be gathered electronically and exported to the payroll system.

CONNECT

Connect is UCSB's new communication and collaboration service. The core components include e-mail and calendaring, with extended features planned for the future.

- An email and calendaring service that is reliable in our diverse campus IT environment will be deployed campus-wide.

BUSINESS TRANSFORMATION IS ESSENTIAL

The demands for valid, accurate, reliable and timely information and reporting have grown exponentially with technology advancements and the achievements of our campus.

Consistent, quality data enables everyone to make better decisions, produce better reports, and improve compliance.

Our current administrative operations rely heavily on the institutional knowledge of our experienced staff; as these individuals retire, managers are finding it difficult to backfill vacant positions with people who have comparable knowledge and experience with our systems.

Using widely adopted and recognized industry standard tools provides better support and allows trained staff to deliver more stable and predictable administrative support.

At risk is our ability to comply with managing, tracking, and accounting requirements for research funding, the university's reputation, our responsibilities to our students and their families, and the morale and productivity of our employees.

Efficient, accurate payroll and finance processes lead to less time spent identifying and correcting errors and greater confidence among faculty and staff in the accuracy of pay, benefits, and departmental finances.



PARTNERING TO DELIVER UNIVERSITY BUSINESS SOLUTIONS

Cross-campus collaboration and engagement is a core principle that guides all ETS initiatives and projects. Over the last year, the Project Management Office (PMO) increased campus involvement in the design, testing, and planning of systems. The PMO also improved training and communication delivery in response to campus input.

SYSTEM DESIGN & DOCUMENTATION

- Subject matter experts from departments throughout UCSB and across the UC system analyzed and provided input on over 99 future state business processes and 80 systems interfaces for the UCPATH project.
- Over 130 current payroll, human resources, and academic personnel business processes have been documented by a team of UCSB central office staff, business officers and payroll/benefits analysts from across campus in preparation for the redesign of local business processes.

TRAINING

- Held 13 Kronos version 7 training sessions attended by 99 Payroll Managers.
- Held 17 Kronos version 7 training sessions attended by 270 Managers/Supervisors.
- Coordinated training sessions on PeopleSoft Financials modules attended by 25 central office and departmental business users.
- Held 6 connect training sessions targeting staff who support connect mail users and calendar only users.

TESTING

- Involved 9 central office and departmental business users in unit testing PeopleSoft Financials modules.
- Involved 12 central office and departmental business users in testing the Middleware (SHIM) for the Financial System Implementation Project.
- Facilitated a Kronos version 7 test drive focused on setting up new employees and updating accrual balances; 29 staff from academic and research departments attended.
- Facilitated a Kronos version 7 test drive focused on access control numbers and approving overtime and time off requests; 30 staff from academic and research departments attended.
- Facilitated a Kronos version 7 test drive focused on multiple funded employees; 32 staff from academic and research departments and 15 staff from the Division of Student Affairs attended.

PLANNING

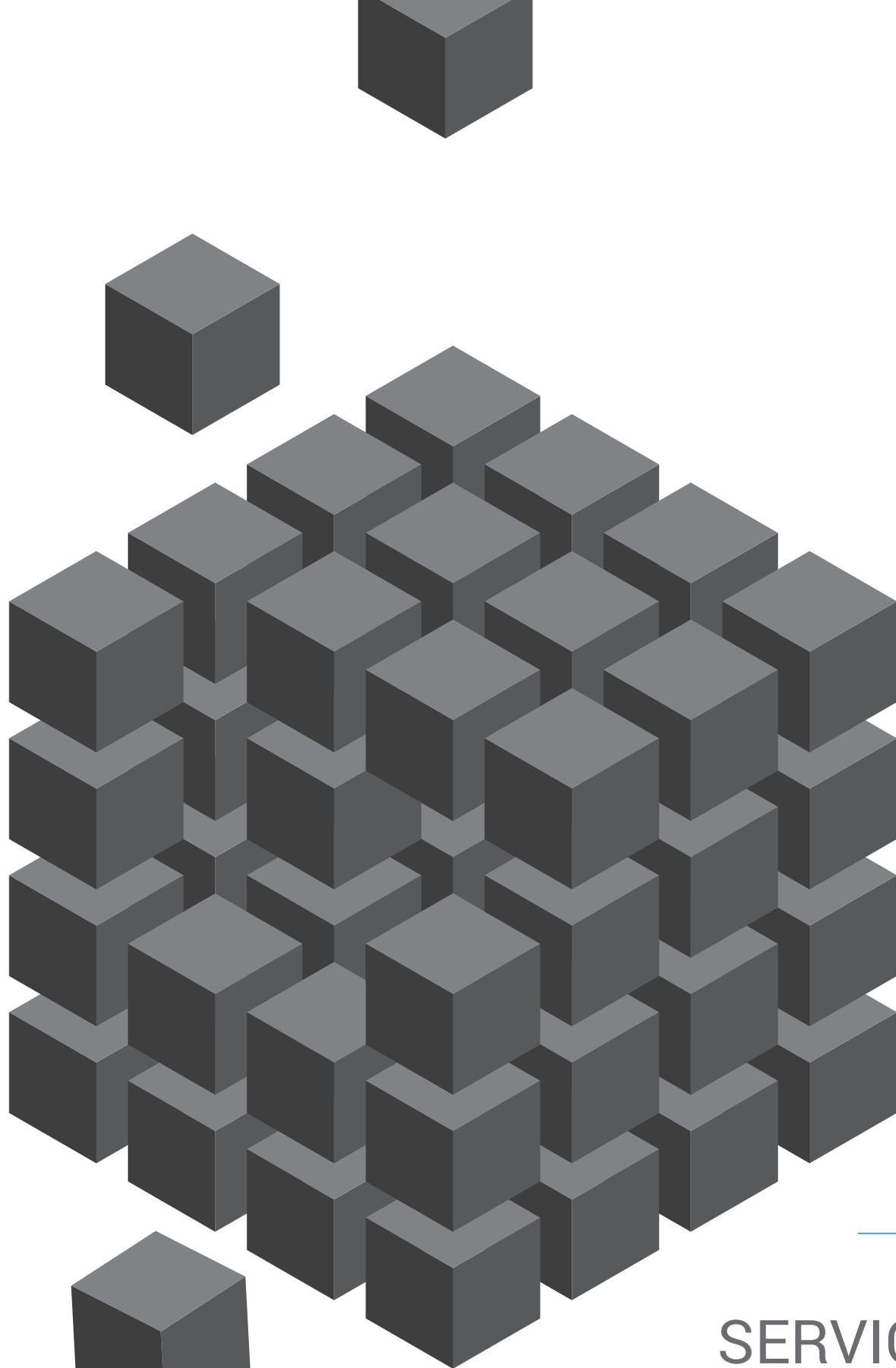
- Facilitated biweekly meetings of the Kronos Academic/Research Advisory Committee (11 Assistant Deans and Business Officers) to address reporting structure, data collection, and training and support aspects of the Electronic Timekeeping project.
- Provided support to the UCPATH Strategic Advisory Committee (18 Assistant Deans and Directors), which is charged with promoting communication, change management, and implementation support strategies for departments.
- Facilitated meetings of the Connect Governance Group (13 IT managers and control points from multiple divisions).
- Facilitated meetings of the Connect Platform Task Force (10 IT managers and technicians from multiple divisions).

COMMUNICATIONS

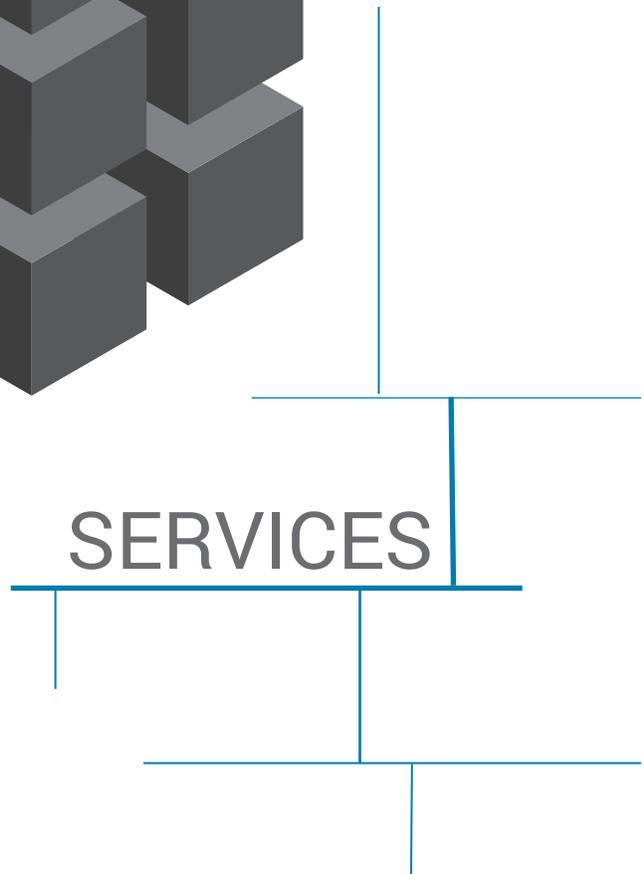
- Hosted 10 Systems Speak Information Sessions; average attendance was 45 people.
- Delivered 13 customized project status presentations at divisional town halls, departmental forums, and business officer meetings.
- Produced 23 project newsletters for the campus.
- Partnered with the UCPATH Strategic Advisory Committee to establish a Systems Communications Network with 203 members responsible for ensuring the dissemination and escalation of project related communication.
- Conducted a PMO Communications Survey of the 141 member Systems Communications Network.

END USERS

- Approximately 5,600 employees from around 190 units/departments are currently using Kronos.
- Conducted a Connect Satisfaction Survey; 252 Connect users responded. ■



SERVICES



SYSTEM INTEGRATION

APPLICATION SUPPORT & MAINTENANCE

Application Development uses system implementation processes and approaches to develop and/or integrate third-party solutions to solve UCSB's needs for process automation. The results of application development are sustainable, supportable products that address UCSB needs and requirements.

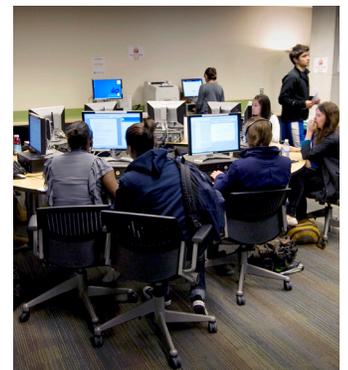
MAINFRAME LEGACY SYSTEM SUPPORT

ETS supports the three major systems that comprise the operational financial system: General Ledger, Accounts Payable, and Procurement (recently retired). In addition, ETS supports 44 mainframe based interface and middle-ware components and four mainframe-based reporting components which enable campus departments to accomplish their day to day work.

NON-MAINFRAME LEGACY SYSTEM SUPPORT

ETS supports the eight major systems that provide the campus with tools to accomplish financial work (Transfer of Funds, Transfer of Expense, FlexCard, Gateway eProcurement, Online General Ledger, Purchase Order Repository, Travel Reimbursement, and General Reimbursement).

- 4 system changes were completed to enhance or ensure security.
- 22 code enhancements were completed to ensure continued operation of systems.
- 15 code enhancements were completed to address new or changed requirements.
- 59 code or configuration actions were completed to address data or system recovery due to the rapid loss of institutional knowledge.
- Revised system documentation (design, as-built, and process documents; user manuals) in 20 instances to reflect the way business processes currently work.



INFRASTRUCTURE

DATA NETWORK

The Data Network group is responsible for provision of a reliable campus backbone, wireless, utility, and wide-area networking services. In addition, this group addresses network security and provision of secure networking environments. The Data Network group provides wireless service to 29,857 accounts across 84,159 devices, and it maintains 549 wireless access points in 74 buildings. Campus core routers provide routing for 389 subnets with 222 access control lists, and transport for an additional 60 networks. The Data Network group also manages a total of 427 active Secure Sockets Layer (SSL) certificates.

- Border routers transported a median average of 493 terabytes per month of Internet traffic, for a total of 5.42 petabytes.
- Virtual Private Network (VPN) service was used by 2,432 accounts representing 155 departments.
- Domain Name System (DNS) servers responded to an average of 64 million queries per business day.
- Installed 93 wireless access points in 23 buildings.
- Facilitated design and provisioning of network connectivity for at least 34 video security cameras.
- Expanded North Hall Data Center networking to row 6 and provided connectivity for new equipment installations for six departments.
- Issued 260 SSL certificates.
- Blocked over 90,000 instances of apparently malicious traffic from external sites.
- Conducted 17,838 vulnerability scans, resulting in 1,823 notifications.
- Serviced 65 VPN support request tickets.



DATA WAREHOUSE & BUSINESS INTELLIGENCE

Data Warehouse and Business Intelligence provides data access and reporting capabilities to support UCSB's needs to access and combine diverse business data to meet reporting obligations as well as inform the business decision making process.

- Retooled the General Ledger, Accounts Payable, Permanent Budget, and Asset Management data & reports in progress for the Financial System Implementation Project.
- Enhanced the security scheme for ColdFusion resulting in no intrusion events.
- Provided ongoing customer support for changing business requirements (e.g., biweekly payroll, National Science Foundation audits, and Gateway feeds).
- Achieved a 50 percent reduction in the average number of EZ Access errors per day.
- Added EZ Access error notification and logging code to provide enhanced monitoring.
- Optimized query report start and time logging to provide better analysis for slow performing EZ Access reports and load times.
- Began supporting the online General Ledger system that allows departments to reconcile their accounts.

INFRASTRUCTURE

COMPUTER CENTER & VIRTUALIZATION INFRASTRUCTURE SERVICES

The Computer Center & Virtualization Infrastructure Services group manages UCSB's central data center, the North Hall Data Center (NHDC), providing colocation services for UCSB IT systems. The NHDC currently includes 170 servers of 46 racks. This group also provides Enterprise Application Hosting (e.g., Data Warehouse, Kronos, etc), On-Demand managed Server Support, and physical or virtual Server Administration.

DISTRIBUTED SYSTEMS

- Replaced end-of-life enterprise virtualization infrastructure with new servers and storage architected specifically to meet the goal of adding new enterprise applications (e.g., Kronos, FSIP, and UCPath local components) in addition to current workloads.
- Deployed Kronos version 7 to existing campus users on new enterprise virtual infrastructure, replacing Kronos version 6.3 hosted by the Administrative & Residential IT (ARIT) group.
- Ongoing migration of the financial systems initially deployed in ARIT onto enterprise virtual infrastructure.
- Ongoing migration of pseudo-enterprise departmental systems providing critical functions to, or interactions with, line-of-business systems onto enterprise virtual infrastructure.
- Established Video Security as a Service (VSaaS) hosting 80 cameras in 15 locations.

MAINFRAME

- Migrated mainframe-based authorization for financial applications into web-based PeopleSoft Financials (i.e, transition from ALLN01 to ALLN02).
- Migrated to UCOP printing services and removed PPS users' dependency on our mainframe for printing.
- Conducted a successful annual Disaster Recovery test with UCOP and UCSD.
- Disabled unused accounts to better secure the mainframe.

NORTH HALL DATA CENTER

- Continued the intake of new and repeat customer IT systems, including systems previously located in leased spaces off campus. More than 40 campus departments now host equipment at the NHDC, ranging from single server deployments to 5 rack allocations.
- Refined the heating, ventilation, and air conditioning controls and capability to allow automated response to power and cooling interruptions.
- Established an after-hours access agreement to facilitate customer self-service for break-fixes.
- Established a customer comment and review process.
- Established a special request review process.
- Added additional temperature alerting to the alarm system.
- Expanded the video security system to additional locations to better protect the facility.

WINDOWS SERVER SUPPORT

- Built and migrated the IA-DFS (Divisional File Server) to a new platform.
- Built and migrated the ETS-FS (Divisional File Server) from AS-DFS to a new platform.
- Migrated BARC Test and Production servers from end-of-life departmental Hyper-V servers to a VMware enterprise stack.
- Built and migrated the Police server to a new platform, rack, and switch; upgraded campus network link.
- Eliminated redundant data storage compression for the backup system.
- Deployed SolarWinds Patch Manager for third party application updates to improve performance and reduce outages.
- Performed major upgrades to Destiny One for UCSB Extension.

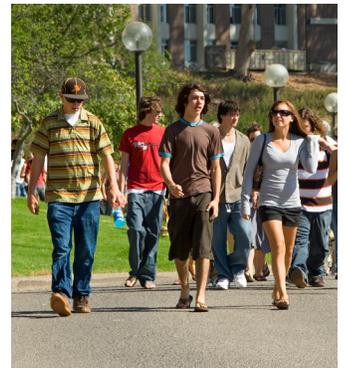


INFRASTRUCTURE

TELECOMMUNICATIONS

Telecommunications is responsible for the campus-wide voice network, campus-wide cable television networks, inter-building communications physical infrastructure, and campus two-way/ Public Safety radio systems. They implement network connections between UCSB and commercial Wide Area Networks (WANs) as well as commercial service providers on campus. Telecommunications maintains approximately 4,200 telephone lines, and 10 miles of underground conduit with over 300 access (manholes) holes and pull boxes. Cable TV service is provided to 3,747 student residences and 1,500 outlets in 14 departments. Telecommunications has over 650 radio customers.

- Processed approximately 2.2 million outgoing calls.
- Processed approximately 1.4 million radio transmissions.
- Processed approximately 2,250 customer service requests.
- Resolved 145 repairs.
- Installed 40 miles of communications cabling in campus buildings.
- Collected approximately \$300,000 in late/defaulted utility charges from non-University entities prior to sending them to Collections.
- Installed an alternative Televideo/Direct TV service saving the University Center, Intercollegiate Athletics, Exercise & Sports Studies, and Film & Media Studies for approximately \$50,000 annually.
- Transitioned the Sedgwick Reserve from a commercial low speed (1.5 Mb) data service to a point-to-point wireless radio (100Mb) data service, reducing the Reserve's annual network costs.



STUDENT E-MAIL SERVICE

The U-Mail Student E-Mail Service provides e-mail and other affiliated collaboration services for UCSB's student population. There are 35,000 active accounts.

- Improved service automation, reducing the amount of support/engineering engagement.
- Oversaw upgrade of Office365 tenant to the "Wave 15" version.

MAILING LISTS

Connect Mailing Lists is a new service developed this year to meet business needs for departmental mailing lists unmet by the Office365 platform. 23 organizations use Connect Mailing Lists; 353 mailing lists are currently in service.

Listserv Mailing Lists is our legacy mailing list service platform. Over the next year we plan on moving these lists to the new Connect Mailing Lists platform. Approximately 300 Listserv mailing lists are currently in service.

- Developed the Connect Mailing Lists service from open-source software components.
- Pruned approximately 200 dead mailing lists from Listserv Mailing Lists.

INFRASTRUCTURE

IDENTITY & DIRECTORY SERVICES

Identity & Directory Services is responsible for the planning, development, and operation of enterprise directory, authentication, and authorization services for use by campus service providers and partners. Hundreds of applications across campus use UCSBnetID authentication services. Over 20 new applications were integrated this year.

- Developed Group Tagger application for creation of ad-hoc groups, which simplifies authorization for UCSBnetID-based services.
- Developed Identity Annex application to provide for self-service creation and management of affiliates, which reduced support desk calls and provided for better end-user service.
- Developed "VCard Download" improvement to People Finder directory service, to facilitate integration with desktop address books.
- Retired legacy NetPoint service, reducing business risk for applications that relied on this end-of-life authentication platform.
- Participated in and developed the first system-wide UC Trust Audit, meant to ensure system-wide compliance of Identity Providers with the UC Trust Federation framework.
- Ongoing planning and development of our systems for UCPath, including data hygiene projects to ensure our source data is compatible with what is expected by PeopleSoft.
- Built out internal quality assurance system to ensure better service quality.
- Developing architecture for next-generation Identity Management platform.



WEBSITE HOSTING & ANALYTICS

ETS provides free and recharge website hosting and analytics services. ETS Sites a recharge service that provides hosting for the Drupal content management system for 23 campus sites. The ETS static web hosting service provides free hosting of 18 static campus web sites. ETS Web Analytics is a free service offering in-depth page-view analytics for 65 campus web sites.

- Added 7 new ETS Sites customers.
- Added 10 new ETS Web Analytics customers.

LIBRARY PROXY SERVICE

The Library Proxy Service provides off-campus access to content available in academic journals that would otherwise be restricted to on-campus access. 868 subscription databases and e-book, video, audio, and e-journal collections are accessible via the Library Proxy Service.

- Adopted this legacy service from the IS&C Office Systems Group.
- Automated security scanning to detect compromised UCSBnetIDs.

INFORMATION SECURITY

Information Security is responsible for ensuring that the campus meets its obligations to customers, constituents, colleagues, and oversight agencies to provide appropriate access to and protection of information assets and IT resources.

- Hired a new Chief Information Security Officer (CISO).
- Assessed the campus ability to respond to an information security incident.
- Assessed conformance to standards for systems accepting credit cards.
- Assessed the campus security program.
- Reviewed the audit and investigatory findings of the former CISO.
- Established relationships with campus leaders.
- Led or consulted on four breach incident responses.
- Developed a streamlined process to support research needs to secure sensitive datasets.



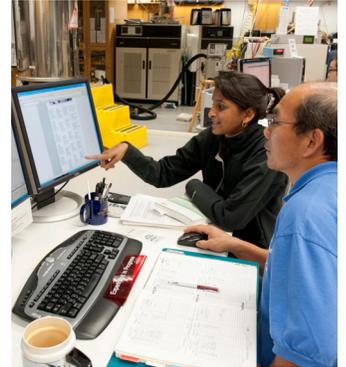
TECHNOLOGY SUPPORT SERVICES

Technology Support Services is responsible for providing enterprise system end users with the rapid support, training, and environments needed to effectively utilize services.

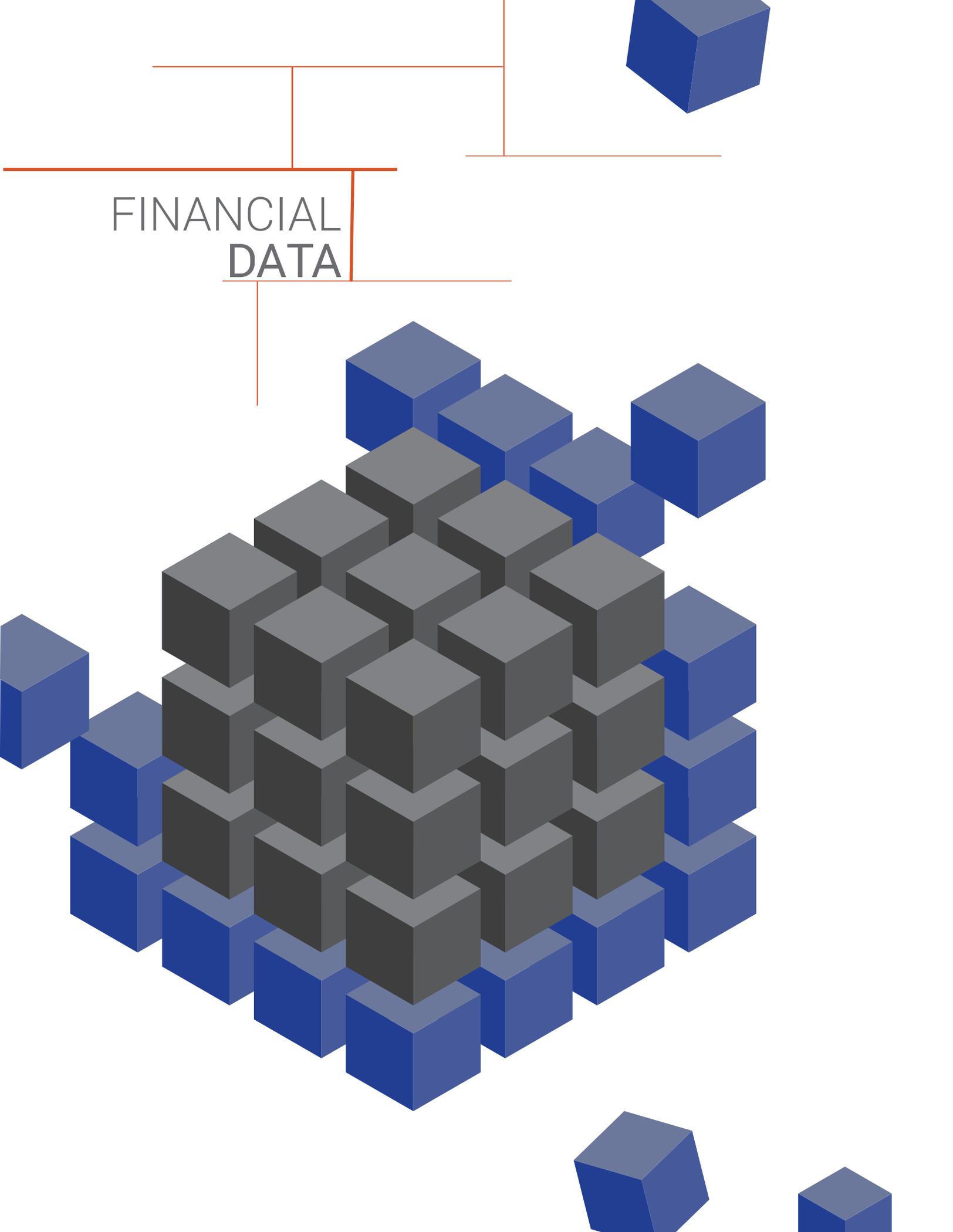
The development of effective Service Desk services relies heavily on a well-structured service catalog and properly configured Service Management tools to facilitate the generation of metrics that will assist in ensuring continuous service improvement.

Some of the metrics we will be generating once the organization is fully integrated in ServiceNow include:

- First line resolution
- Average time to resolve an incident
- Average time to escalate an incident
- Average cost of handling an incident
- Number of calls and tickets received
- Number of calls missed
- Average duration of a call
- Number of calls or tickets escalated
- Mean time to repair/service level agreements/survey scores ■

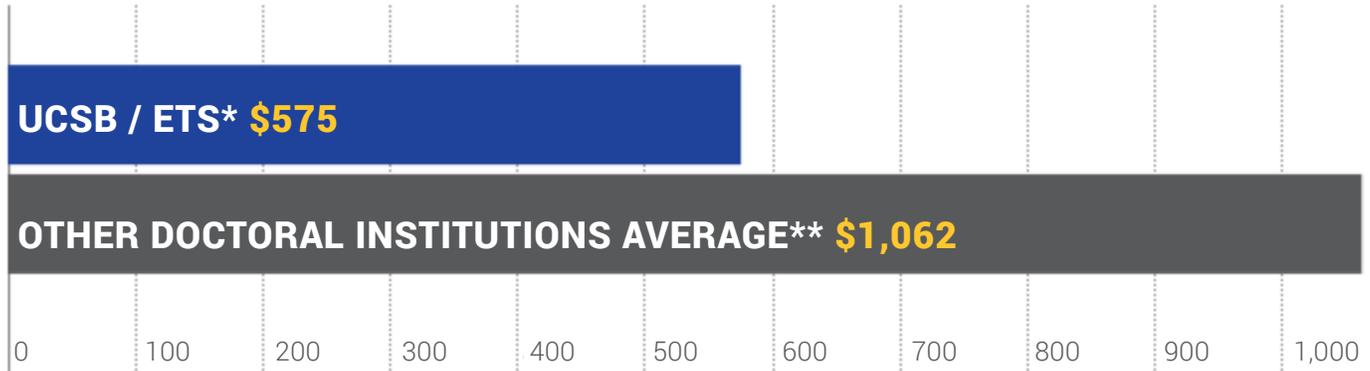


FINANCIAL
DATA

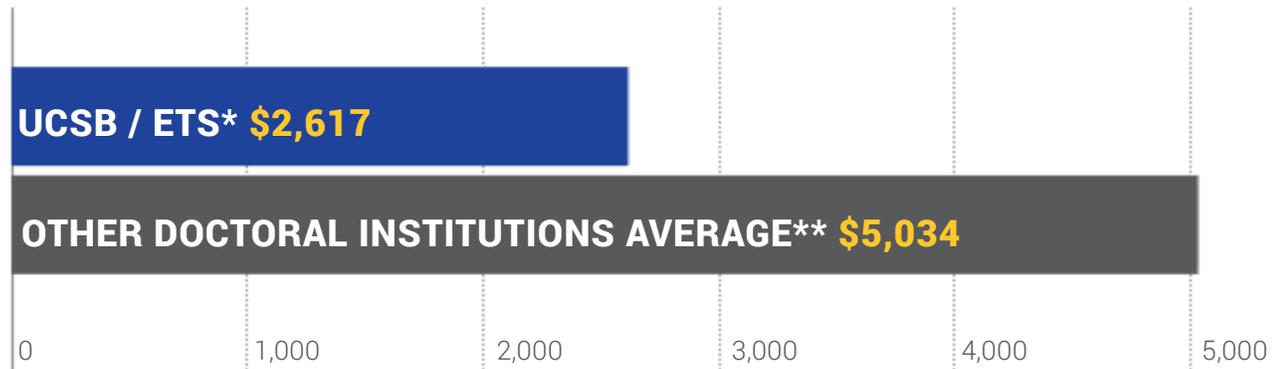


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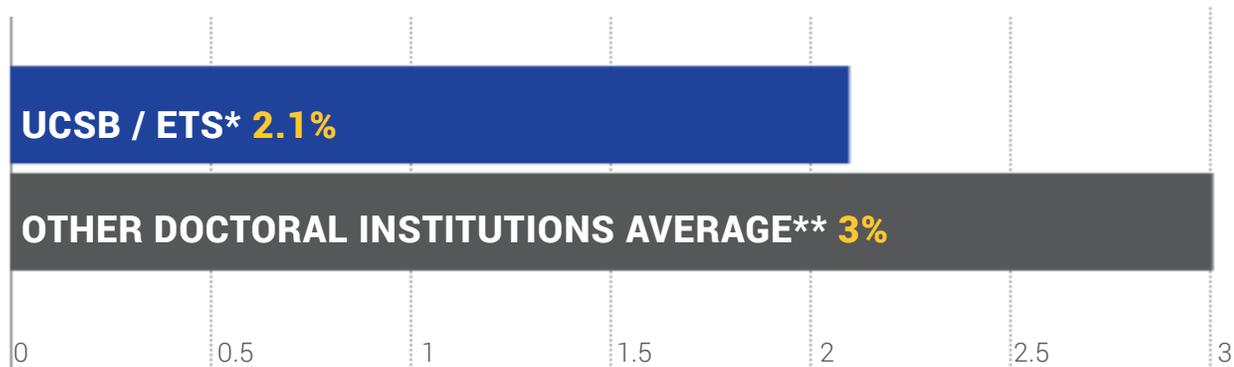
TOTAL CENTRAL IT SPENDING PER INSTITUTIONAL FTE (STUDENTS, FACULTY, AND STAFF)



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



TOTAL CENTRAL IT SPENDING AS PERCENTAGE OF INSTITUTIONAL EXPENSES



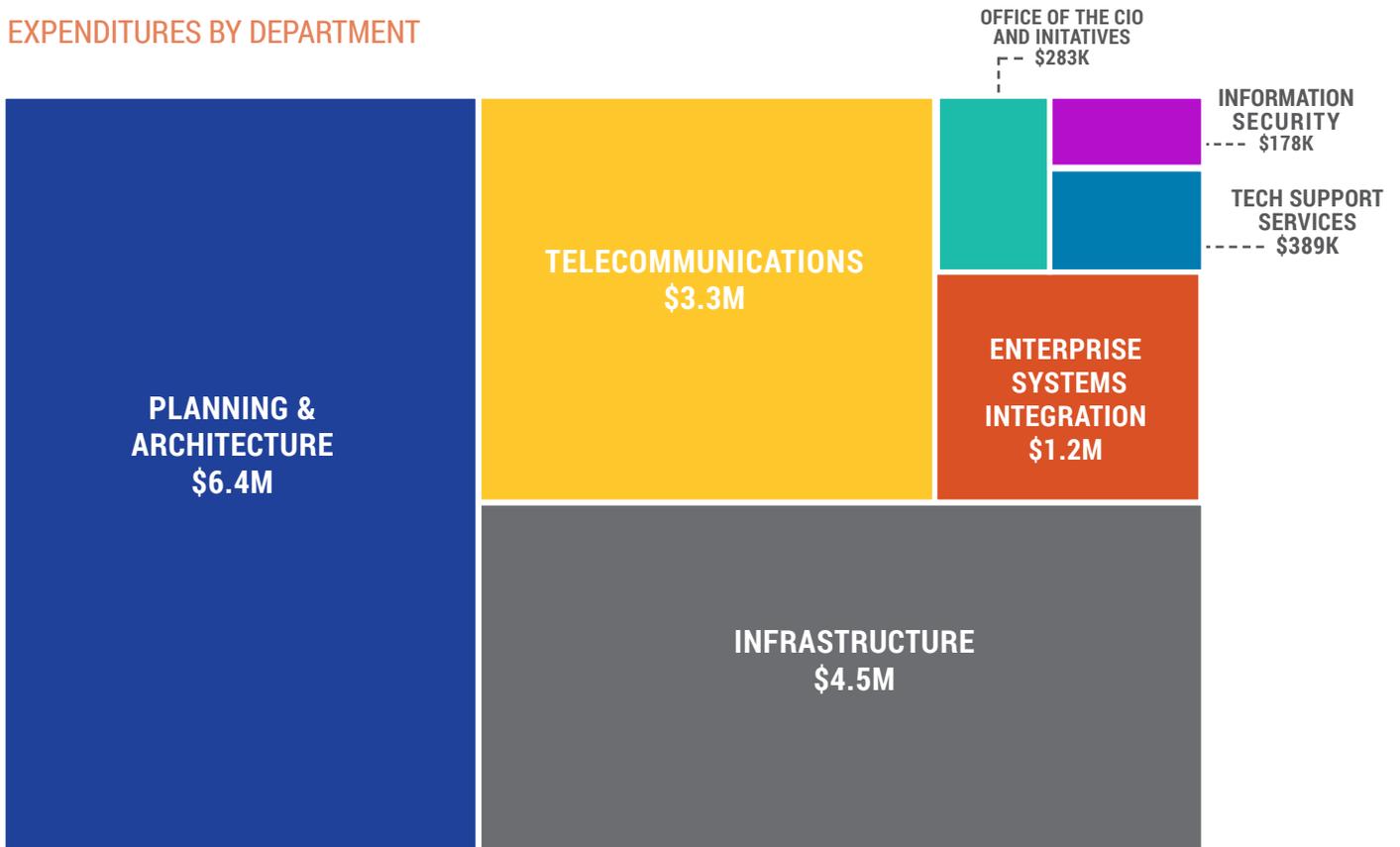
*ETS Expenses in FY2013-14: \$16,174,221. UCSB FTE and expenditure data source: 2013 - 2014 UCSB Campus Profile http://bap.ucsb.edu/IR/campusprofile/Campus_Profile_2013.pdf

**Source: EDUCAUSE Core Data Service (March 2014)

FINANCIAL DATA

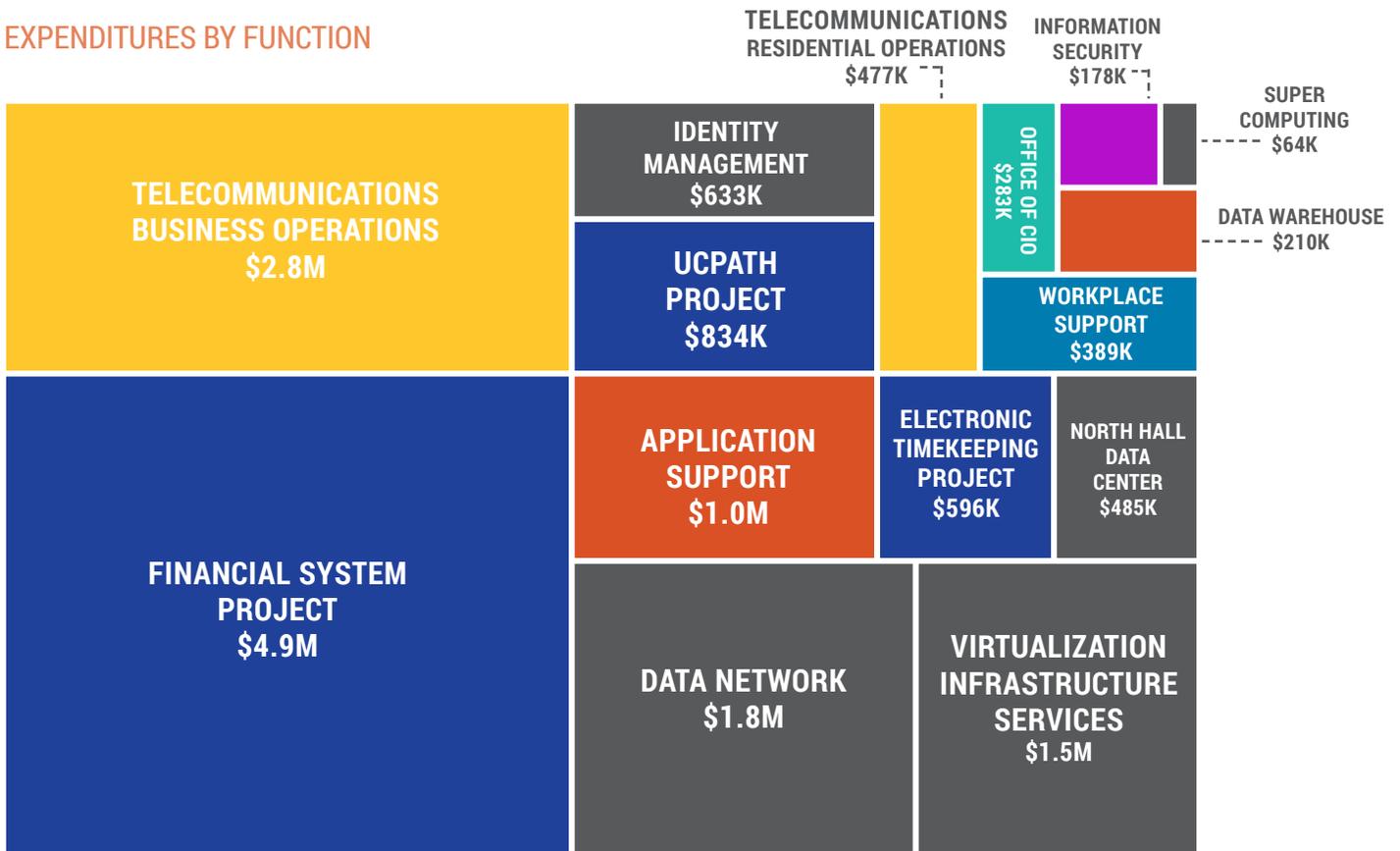
ETS is becoming a new financial entity as it also becomes a new operating entity. In FY 2014, funding was provided by the funding sources (core, recharge, loan, and UCOP reimbursement) of the legacy units that now comprise ETS. In FY 2015, a fee will be instituted to replace the existing core and loan sources, and to fully fund ETS operations and projects. The financial data below reflects how expenditures in FY 2014 were distributed across ETS departments and functions.

EXPENDITURES BY DEPARTMENT



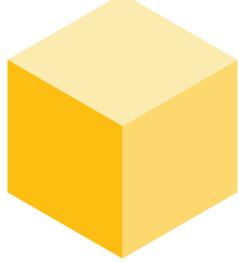
FINANCIAL DATA

EXPENDITURES BY FUNCTION

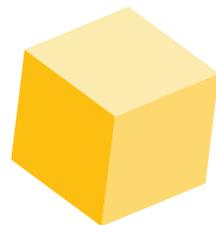


Notes:

1. All numbers are actuals, except for some estimated expenses between Telecommunications and the Data Network for May and June 2014.
2. In FY 2014, ETS administrative costs are included in the Infrastructure and Planning & Architecture departments, as well as in the Data Network, Virtual Infrastructure Systems, Telecommunications, Financial System, UCPATH and Electronic Timekeeping functions.
3. The Identity Management function includes expenditures for Identity Management, the Connect project, and the UMail and ETS Sites services.
4. FY 2014 expenditures does not include \$1,353,355 in benefits that were funded by the campus benefits pool for core-funded staff. That will be an additional expense next year.



LOOKING
AHEAD



LOOKING AHEAD

PROJECTS

UCSB is on the cusp of the most significant business transformation in its history. Enterprise-level projects like the Financial System and UCPATH will form the foundation of our campus's new operational infrastructure and will require significant changes in how campus departments do their work. In the coming year, ETS will continue partnering with campus stakeholders to deliver these objectives:

- Finalize Phase 1 of the Financial System Implementation Project.
- Deploy the Kronos electronic timekeeping system to the remaining departments in Academic Affairs, Athletics, and Research divisions.
- Prepare for the implementation of UCPATH on system-wide and local levels.
- Implement an email and calendaring solution.
- Implement the Enterprise Service Desk to support the Library's IT helpdesk and workstation support needs.



INFORMATION SECURITY

In the coming year, the ETS Information Security unit will expand to provide both leadership and service to the campus using the following strategies:

- Develop policy and process to support system-wide and industry standard security requirements.
- Conduct detailed vulnerability assessments and penetration tests.
- Improve our ability to respond to incidents through better processes and new tools and capabilities.
- Create a non-governance advisory group to enhance two-way communication with campus IT leaders regarding information security.
- Build a broad consultancy capability providing expert knowledge in all aspects of information security.



IMPLEMENTING ENTERPRISE IT

Lastly, establishing a cohesive enterprise IT organization from six separate departments is a highly complex, multi-year initiative. Building this organization while also implementing four major systems involves significant risks. Therefore, the focus of the ETS implementation over the coming year will include:

- Developing a campus IT roadmap.
- Creating an Enterprise Service Desk.
- Implementing the Organizational Change Management Plan for ETS.
- Recruiting directors for Business Planning & Operations and Enterprise System Integration.
- Adopting a standard methodology for managing enterprise-level projects.
- Finalizing and implementing a Business Relationship Management plan.
- Supporting and strengthening enterprise IT governance processes and structures.

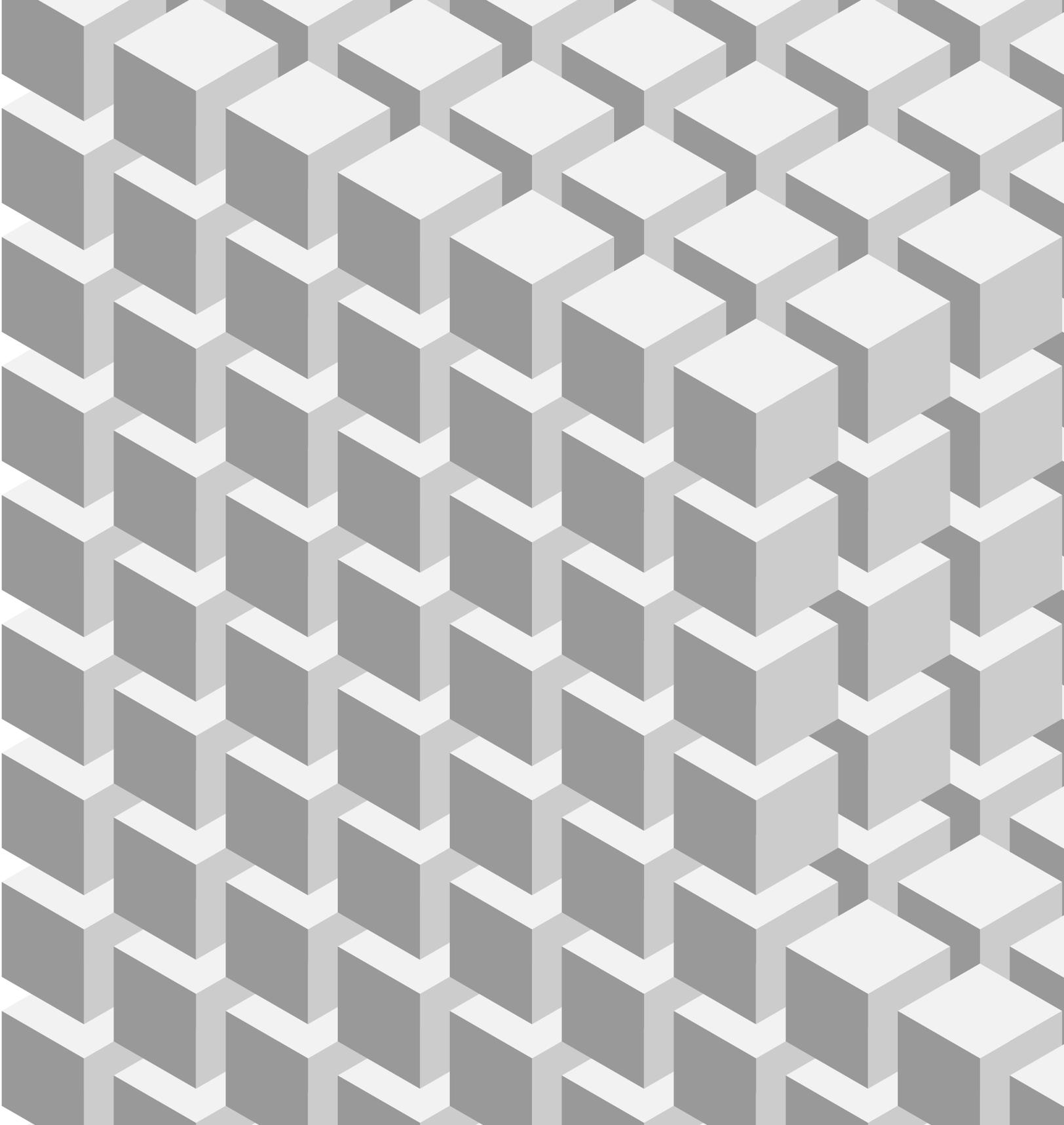
BY THE NUMBERS

SCOPE OF WORK

23	Drupal websites hosted
40	Departments host equipment at the North Hall Data Center
65	Campus web sites utilize ETS Web Analytics
80	Security cameras hosted in 15 locations
170	Servers on 46 racks managed in the North Hall Data Center
203	Staff serve on the Systems Communication Network
300	Listserv mailing lists currently supported
353	Connect mailing lists managed
389	Subnets with 222 access control lists supported on core routers
427	Active Secure Socket Layer (SSL) certificates managed
549	Wireless access points in 74 buildings maintained
650	Customers use the radio service
868	Subscription databases and e-book, video, audio, and e-journal collections accessible via the Library Proxy Service.
2,432	VPN accounts supported representing 155 departments
2,550	Connect accounts hosted
3,747	Student residences utilize Cable TV service
4,200	Telephone lines maintained
5,600	Employees use Kronos for timekeeping
29,857	Wireless service accounts supported across 84,159 devices
35,000	Active U-Mail Student email supported
1.4 million	Radio transmissions processed annually
2.2 million	Outgoing calls processed annually
5.42 petabytes	Transported on border routers annually

ACCOMPLISHMENTS

7	ETS web hosting customer units added
10	ETS Web Analytics customer sites added
20	New applications integrated with Identity Management
23	Project newsletters sent to campus
23	Presentations delivered at info sessions and forums
30	Kronos training sessions offered; 369 staff received training
40	Miles of communications cabling installed
60	Video security cameras deployed across campus
65	VPN support request tickets serviced
93	Wireless access points installed in 23 buildings
99	UCPath future state business processes analyzed
113	Interfaces between PeopleSoft Financials and legacy systems identified and tested
260	Secure Socket Layer (SSL) certificates issued
2,250	Telecommunications customer service requests processed
17,838	Vulnerability scans conducted
90,000	Instances of apparently malicious traffic from external sites blocked
\$300,000	Late/defaulted utility charges from non-University entities collected
3,500,000	Records converted from the legacy financial system to PeopleSoft



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ENTERPRISE
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