

UC SANTA BARBARA



**Annual
Report
2024**

Information Technology Services



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A Message from the CIO

The past year has been marked by tremendous growth for Information Technology Services (ITS), both in the number of significant projects we have undertaken and in our development as a unified and effective IT organization.

I was especially proud to collaborate with over 200 leaders from across the campus on the development of a comprehensive IT strategy for UC Santa Barbara. This strategic plan ensures that efforts across all areas of campus IT have direction; it is a framework to help determine what is most critical for us to work on and why. The new strategy provides IT efforts across campus with a clarity of purpose in five key focus areas:

- **The Teaching & Learning Experience**
- **The Research Experience**
- **Modernizing Work**
- **Foundational Infrastructure**
- **The IT Workforce**

Since this strategy will also guide ITS' most critical efforts on behalf of the campus, we've adopted the areas above as the structure for our annual report going forward.

The following pages highlight some key achievements, just a few of the many initiatives ITS has completed and furthered over the past year. We've also continued work with campus leadership to optimize the structure of IT, completing several organizational integrations during this period. ITS is working hard to ensure that we realize the promise of these integrations for improved services and more effective use of campus IT resources.

In the coming year, we are tackling over 40 initiatives under the strategic plan, the majority of which are already launched and on track to be completed. Overall, we aim to bring increased attention and resources to the campus' priorities, to embrace change as an opportunity for growth, and to remain customer-focused and flexible as we move forward together. I am grateful for our many partners across the campus as we collectively work to serve UCSB's mission.



A handwritten signature in dark blue ink, consisting of stylized initials 'JB' followed by a surname.

Josh Bright, Ph.D.

Associate Vice Chancellor for Information
Technology & Chief Information Officer

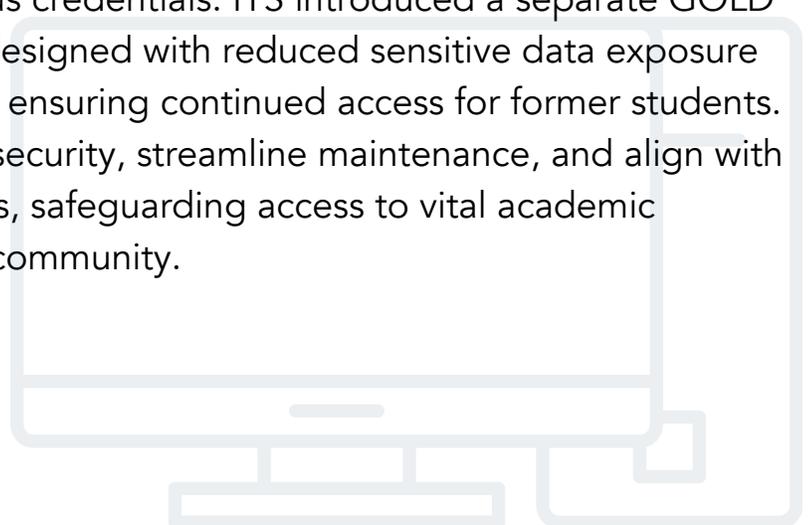


Teaching & Learning Experience

Improve educational outcomes and student, faculty, and staff experiences by providing simplified access to integrated information and services and innovative teaching and learning spaces

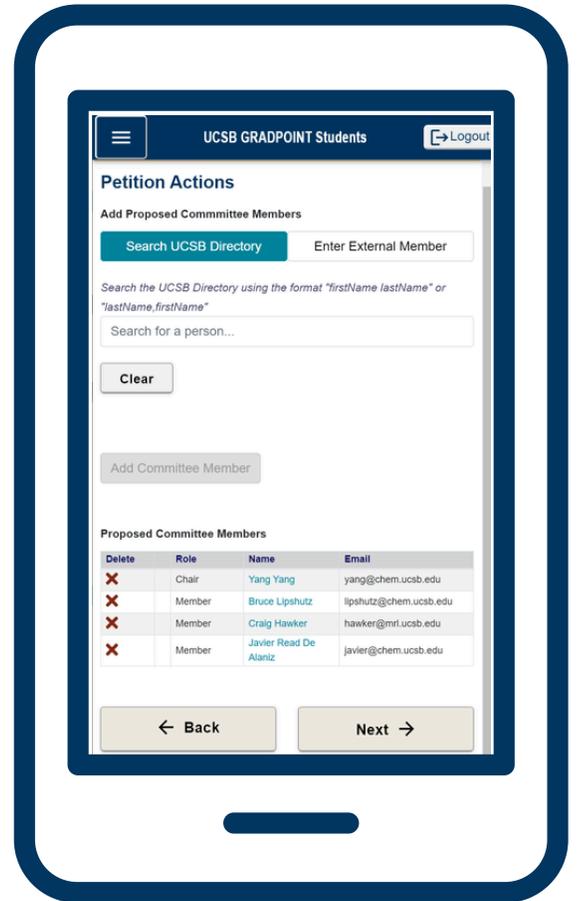
ENHANCEMENTS TO GOLD

The GOLD application provides access to academic records, enrollment management, and document requests, essential for both current students and alumni. When a new campus security mandate required single sign-on (SSO) and multi-factor authentication (MFA) to access this application, ITS had to address unique security needs for alumni without active campus credentials. ITS introduced a separate GOLD Alumni application in October 2023, designed with reduced sensitive data exposure and a simplified user experience while ensuring continued access for former students. These GOLD enhancements improve security, streamline maintenance, and align with evolving campus security requirements, safeguarding access to vital academic services for all members of the UCSB community.



NEW GRADUATE STUDENT PORTAL

GradPoint Students, launched in November 2023, is a new web application designed to meet the unique needs of UCSB's graduate students. It supplements GOLD by providing graduate students with 24/7 self-service access to information such as academic program details, committee memberships, and time-to-degree progress, while also enabling them to initiate and track committee petition workflows. ITS staff led the design, development, and implementation of this customized application, working with members of the Graduate Division to gather requirements, perform several rounds of testing, and produce documentation prior to deployment. This dedicated platform reduces reliance on staff for routine information requests, improving efficiency and transparency for both graduate students and departments.



Undergraduate Resource Reporting Tool

In Fall 2023, ITS launched a **new tool** for the Undergraduate Resource Reporting (UGRR) Program that **simplifies the process for students to access departmental financial aid resources** (e.g. scholarships, stipends, fellowships). While the previous process required manual tracking and reporting of this data, ITS built new functionalities in the My Aid Status (MAS) application to **improve this workflow**, allowing departments to approve, submit and track forms electronically. Upon submission, the Office of Financial Aid and Scholarships uses the MAS app to make notes and export data, improving resource allocation and **ensuring these resources are easily available to our undergraduate population**.





Research Experience

Contribute to excellence in research by providing expanded, discoverable, and readily available IT capabilities and services to meet the shared and discipline-specific needs of our robust research community

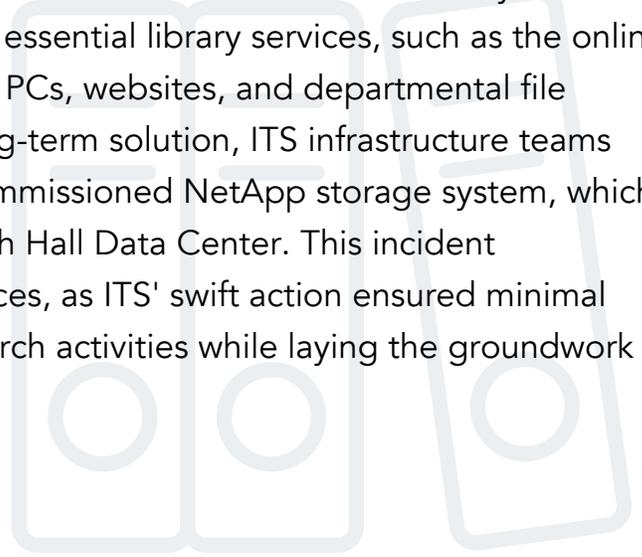
JETSTREAM2 SUPPORT PROGRAM

The Jetstream2 support program, funded by the National Science Foundation, brings powerful and flexible cloud-based supercomputing resources to UCSB researchers and educators at no cost. This initiative enables users to create customized virtual machines, install necessary software, and access computing power on-demand without runtime restrictions. It is particularly valuable for those less familiar with complex tools, offering an intuitive interface that makes high-performance computing more accessible.

Office of Research and ITS staff introduced this program to UCSB researchers at workshops and meetings throughout the year, and aided researchers with obtaining computing providers, creating virtual machines, and assisting with logistics after deployment. By supporting applications ranging from data analysis to advanced simulations, Jetstream2 significantly enhances UCSB's research capabilities. This program empowers researchers with cutting-edge resources to pursue diverse academic and scientific goals, fostering innovation and advancing knowledge.

LIBRARY SERVICES OPTIMIZATION

In April 2024, shortly after Library IT staff integrated with ITS, the UCSB Library's primary data storage appliance failed, jeopardizing 400 terabytes of campus data. ITS staff responded immediately, restoring the appliance, recovering critical data, and initiating a migration to a cloud-based storage solution with Amazon Web Services. Collaboration with Library staff ensured the transfer of data and the restoration of essential library services, such as the online system to borrow research materials, use of public PCs, websites, and departmental file shares. Recognizing the need for a sustainable long-term solution, ITS infrastructure teams began designing a replacement for the now-decommissioned NetApp storage system, which also optimizes space and power usage at the North Hall Data Center. This incident underscores the importance of centralized IT services, as ITS' swift action ensured minimal disruption to UCSB's teaching, learning, and research activities while laying the groundwork for future resilience.





Modernize Work

Modernize the tools and data needed by all faculty, students, and staff to streamline work in support of the university's mission

FINANCIAL MANAGEMENT MODERNIZATION PROGRAM

The Financial Management Modernization (FMM) program is an ongoing partnership between ITS and Finance & Resource Management to improve UCSB'S financial operations by implementing a UC-mandated Common Chart of Accounts (CCOA) and Oracle Financials Cloud (OFC) system. The FMM team completed system configuration at the end of 2023, ensuring that all OFC modules are configured accordingly to meet campus use cases. Since early 2024, we have successfully executed multiple testing cycles to validate OFC's functionality and integration with other campus systems.

ITS continues to actively engage with the campus community about this transition by hosting town halls, divisional meetings, and informational sessions that provide progress updates and prepare departments for the upcoming changes. Additionally, a team comprised of ITS and Budget Office staff began the implementation of a new cloud-based data warehouse tool as part of FMM to support enhanced financial reporting and analytics. FMM will increase efficiency and reduce complexity by introducing streamlined workflows, standardized reporting, and a modernized financial ecosystem during the next fiscal year. By providing the tools necessary for staff to make informed, data-driven decisions, we enable the university to allocate resources effectively in support of its academic and research goals.

SNOWFLAKE DATA PLATFORM IMPLEMENTATION

Snowflake was selected as UCSB's new campus data warehouse tool in August 2023. The ITS Data Services team has focused on implementing Snowflake as a scalable campus data platform, building secure development, test, and production environments to support data collection from numerous campus systems. The team also established robust security boundaries for the platform, ensuring that developers and analysts can work effectively while keeping sensitive data secure. As a first use case, ITS released Snowflake for course and instructor evaluation reporting with Explorance Blue. Centralizing UCSB's data into one platform enables the university to gain valuable insights into teaching, learning, and operational activities. The implementation of Snowflake aligns with the goals of the ongoing Financial Management Modernization program, hosting HR and financial data from various systems to provide comprehensive financial reporting for campus.

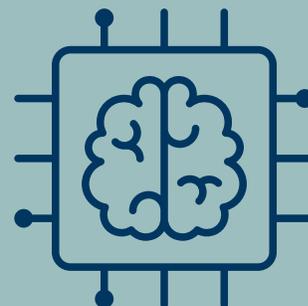
UCPATH UPGRADES

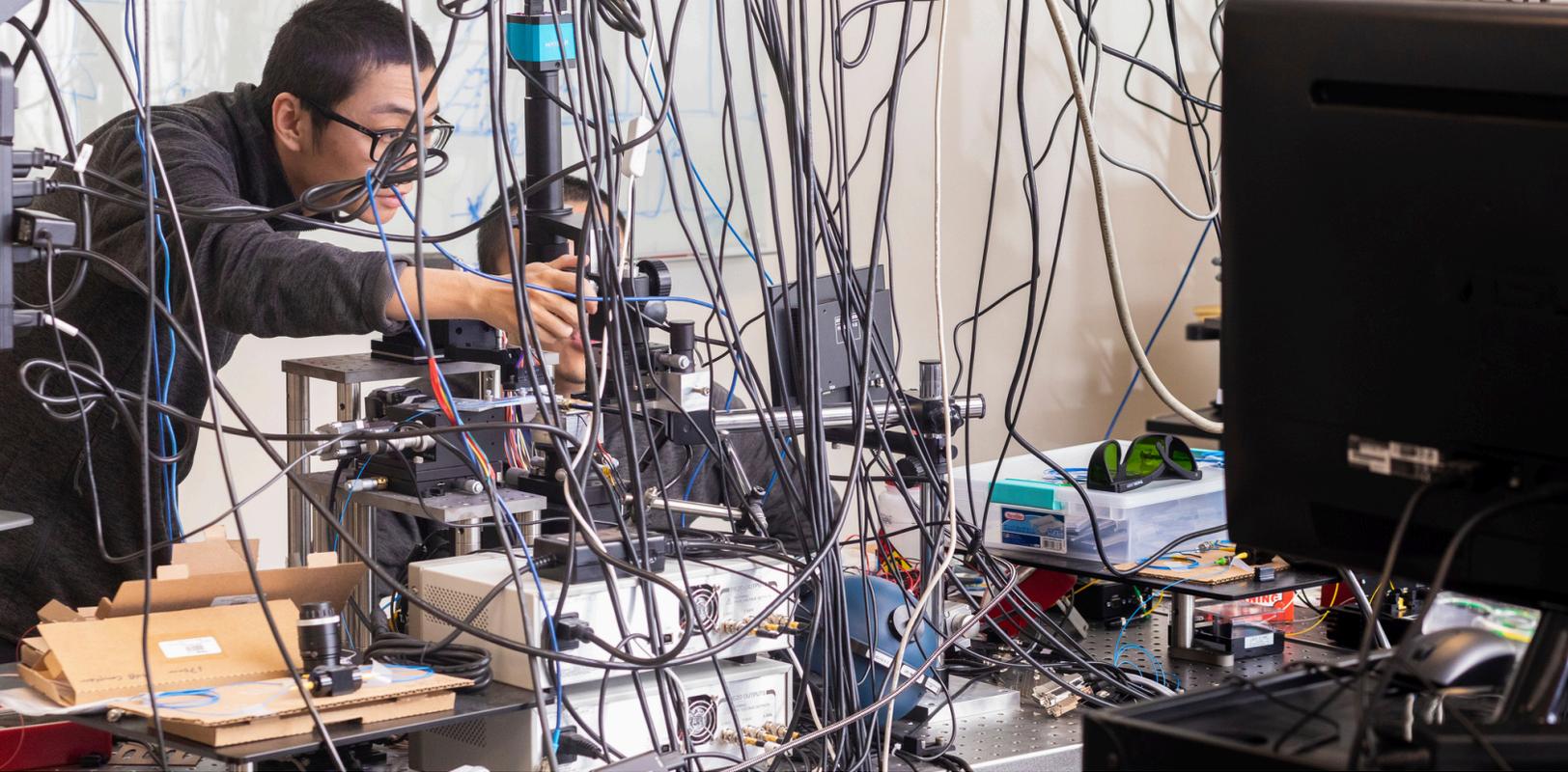
The UCPATH Salary Cost Transfer functionality, launched in November 2023, streamlined the process of moving salary expenses between various department funds with enhanced search features and a simplified interface. It resolved defects, improved General Ledger accuracy, ensured policy compliance, and increased data delivery frequency, providing departments with more accurate and up-to-date financial data. In addition, several ITS units completed updates and releases to numerous campus systems in support of UCOP's Gender Recognition & Lived Name (GRLN) policy, aligning with UCPATH features enabled in summer 2023. The UCSB Identity and Access Management profile editor now allows users to add a first and/or last lived name, and also provides information about how their lived name is reflected in UCPATH. All campus systems now accommodate lived names and only use legal names when required, furthering the university's commitment to recognizing employees' preferred names and gender identities.

AI@UCSB

The **Artificial Intelligence (AI) Community of Practice**, jointly sponsored by ITS and the Office of Teaching & Learning, was established to provide the campus with opportunities to come together and explore how AI can support our community. In May 2024 we convened the inaugural **AI Community of Practice Symposium**, a weeklong campus event featuring workshops, panels, and roundtables. This event brought together **272 faculty, staff, and students** to discuss innovations, ethical considerations, and the role of AI tools in teaching, research, and campus operations.

With ten ITS staff members involved in the symposium and many more in attendance, this successful event showcased our campus' commitment to promoting education, innovation, collaboration and inclusivity for emerging technologies like AI.





Foundational Infrastructure

Support academic and operational excellence by providing ubiquitous and secure access to infrastructure

SECURE UCSB SCOPING

In February 2024, UC President Michael Drake issued a systemwide mandate requiring campuses to prepare a comprehensive information security investment plan to mitigate key cybersecurity risks by May 2025. In response, ITS launched the Secure UCSB program, focusing on critical technology updates and improvements to the campus' security landscape. We promptly initiated scoping efforts, assessing current compliance and work required, planning implementation milestones, and securing three FTE contractors to lead major program components. While the mandate's timeline required swift action, these improvements align with UCSB's long-term strategic needs, positioning the campus to better safeguard sensitive information and remain a trusted and resilient academic institution.

GOOGLE WORKSPACE STORAGE LIMITS

In 2023, ITS launched an initiative to address new vendor-mandated storage limits for Google Workspace services, requiring a transition from unlimited to defined storage allocations for UCSB Connect accounts by June 2024. The Connect team worked with campus leadership to define storage limits, invest in additional storage and implement account lifecycle changes. These key decisions, along with other measures, minimized the impact of the storage limits on the campus community. UCSB achieved its new storage allocation by May 2024 with fewer than 1% of users needing to take manual action to reduce their usage. ITS continuously adapts to meet evolving requirements, ensuring uninterrupted access to essential campus tools.

NAVIGATOR BUILDING PROJECT

In December 2023, the ITS Network & Communication Services team completed the Navigator Building Project, delivering essential network infrastructure for three newly acquired campus buildings for Design & Construction Services, Transportation & Parking Services, and Facilities Management. The project involved installing over 143,000 feet of Ethernet cabling, life-safety communication devices, 31 security cameras, and fiber optic and copper cabling to provide fast, reliable internet and phone connectivity. This project supports the university's growth and infrastructure needs, allowing UCSB to relocate administrative departments to new buildings and repurpose the vacated spaces to develop student housing. ITS network services remain a vital component in enabling campus innovation, operational excellence, and long-term university planning.

SECRET SERVER MIGRATION

The Secret Server project is a multi-phase initiative to enhance the security and management of sensitive data (i.e. any data that, if compromised, could lead to harm, loss, or unauthorized access) for UCSB systems by consolidating it into a single, secure cloud-based system. Phase one, completed in June 2024, successfully migrated data from four separate departmental vaults into a unified access management platform. This effort included account cleanup, permissions restructuring, user transitions, and the implementation of MFA/Duo for enhanced security. By centralizing this data, this project reduces administrative overhead, ensures regular monitoring of access permissions, and simplifies system maintenance. This initiative is critical to safeguarding UCSB's sensitive data and securing access to key systems, maintaining a safe and reliable digital environment for our campus.

CAMPUS CLOUD RELEASES

ITS released several updates to the Amazon Web Services (AWS) and Microsoft Azure cloud platforms during FY 2023-24. The September 2023 release improved automation tools for managing cloud resources, updated system environments for better performance, and enhanced security policies for AWS and Azure to meet compliance standards. In April 2024, ITS launched new tools and services in the cloud to streamline operations, improve compliance with security standards, and make it easier for teams to use shared resources effectively. Regular updates and maintenance for our campus cloud platforms ensure that we continue to provide scalable, cutting-edge cloud tools.

UNIFIED SECURITY POSTURE MANAGEMENT PROJECT

The Unified Security Posture Management project, now incorporated with the Secure UCSB program, strengthens campuswide cybersecurity by consolidating tools like Tenable.io, Nessus, runZero, and Mandiant into a single system, providing a comprehensive overview of university-owned digital devices that may be vulnerable to cyber threats. To support this effort, ITS integrated the various tools used across devices, established clear roles for vulnerability management processes, and provided training for campus IT staff. A centralized security management system will allow IT teams to monitor, detect, and address vulnerabilities more effectively, reducing cyber risk across campus and creating safeguards for UCSB's intellectual property, research data, and personal information.



IT Workforce

Support academic and operational excellence by enhancing the effectiveness of the university's IT workforce

IT PROFESSIONALS MENTORSHIP PROGRAM

The IT Professionals Mentorship Program, launched in August 2023, pairs mentors and mentees within the UCSB IT community to foster professional development through individualized and group learning opportunities. The inaugural cohort, which concluded in May 2024, engaged 42 participants, including 28 from ITS, and provided valuable feedback that shaped enhancements for the 2024-25 cohort, now comprising 32 participants. This program strengthens leadership skills, promotes knowledge-sharing, and fosters a sense of belonging, supporting staff growth and community engagement across IT.

CAMPUS IT INTEGRATIONS

In 2024, ITS integrated with Administrative & Residential IT (ARIT), Library IT, and the Letters & Science IT (LSIT) Salesforce team to streamline IT support and resource allocation at UCSB. Key milestones included finalizing partnership agreements, aligning roles, and establishing new staffing and project structures to enhance teamwork. Personnel transitions from Library IT and LSIT into ITS consolidate administrative efforts and expand staff access to resources. Ongoing evaluations and collaborations lead to more efficient IT support by consolidating parallel service models and technologies, ultimately enhancing high-value services across campus. These integrations position UCSB to tackle upcoming technology projects and initiatives that will benefit from the strengths of combined technical expertise.

IT INTERNSHIP PROGRAM ASSESSMENT

In November 2023, the ITS Program Management Office completed an assessment of the IT Internship Program, which employs a cohort of students across various IT units annually. The assessment confirmed the program's success in equipping students with valuable technology skills and professional development opportunities while also identifying areas for improvement, including enhanced collaboration within the intern cohort and opportunities to retain students in UCSB IT's workforce after graduation.



Based on these findings, the program introduced significant changes for the 2024-25 cohort, including expanding IT unit participation, increasing the cohort size, and transitioning to a model where units host multiple interns instead of one. These improvements reflect the program's commitment to its guiding principles of meaningful experiences, career readiness, and student success.

ITS Mission & Culture

Last year, CIO Josh Bright launched the **Campus IT Strategy Development & Alignment** initiative, which included a focus on unifying ITS as an effective central IT organization through the ITS Mission & Culture workstream. This effort, guided by a collaborative Mission & Culture Working Group, resulted in a **new mission, vision, core values, and cultural development framework by the end of 2023**. In early 2024, the EPIIC group, representing the five ITS core values, was established to advance mission and culture alignment across areas like recruitment, onboarding, branded assets, staff recognition, performance development, and meeting management. The group also played a key role in organizing the first ITS all staff on-site event in October 2024 to foster organizational effectiveness. These efforts align ITS' organizational practices with the updated IT strategy, **enhancing collaboration, efficiency, and workforce optimization** to deliver on the promise of recent IT integrations and better serve the campus community.

By the Numbers

Understanding IT through data

Accounts and Identity

Active campus identities	54,507
Applications integrated with single sign-on	504

Collaboration Services

Total email messages delivered	162,876,677
Active Connect accounts	124,872
Websites hosted	636
Sites migrated to UCSB web theme	12

Information Security

Avg. monthly malware alerts detected by Trellix	976
Investigations by Mandiant Managed Defense	63
Total incidents	39

Application Support

Service calls addressed	24,943
Kronos users	12,733
UC Learning Center users	12,517
Kronos service requests	5,523
UC Learning Center service requests	3,602
Total workstations supported	3,050
Connect service requests	1,144

Virtual Application & Server Hosting

Gigabytes of RAM	17,341
Gigahertz of CPU	2,927
Terabytes of SAN storage	1,293
CPU cores	1,128
Virtual servers hosted (virtual machines)	825
Virtual host servers	39

Network, Remote Access Connectivity

VPN accounts supported	6,968
Wireless access points maintained	5,088
Active Secure Socket Layer certificates issued	600
Subnets with access control lists supported	308
New wireless access points installed	270
Building switches maintained	225
Percent network uptime at building switch	99.92%
Petabytes transported on border routers	49.52

Training

LinkedIn Learning hours (campus)	1,716
Pluralsight learning hours (campus)	718
Total Lean Six Sigma Yellow Belts on campus	404
UC Managing Implicit Bias series completions (campus)	93
Total Lean Six Sigma Green Belts on campus	63

Admissions Support

Peak web users at freshman decision release	33,500
Peak web users at financial aid award letter release	5,200
Peak web users at transfer decision release	5,000

Data Center Operations

Physical servers hosted at the NHDC	782
Total racks at North Hall Data Center (NHDC)	69
Departments hosted in the NHDC	49

Telecommunications

Station-to-station calls attempted	354,519
Outgoing calls processed annually	319,385
Station-to-station calls completed	303,685
Zoom Phone VoIP lines maintained	3,749
Legacy telephone lines maintained	2,132
Radio service customers	458
Miles of outside plant fiber optic cabling maintained	72.1
Miles of outside fiber optic cable installed	2.63

Palo Alto Unified Threat Management Blocks

Total threats blocked	1,286,119,786
Total vulnerabilities blocked	786,770,676
Total URLs blocked (PAN-DB)	482,016,635
CVSS high vulnerabilities (since July 2018)	345,273,010
Total spyware blocked	292,210,541
CVSS critical vulnerabilities (since July 2018)	225,647,571
Total scans blocked	9,036,361
Total files blocked (virus)	819,487

Zoom Adoption and Usage

Total Zoom meeting minutes	23,552,810
Number of participants	1,965,424
Number of meetings	433,671
Total Zoom accounts provided	64,953

Google Drive & Gmail Storage

Total megabytes used	1,472,416,018
Megabytes of Drive used	1,124,925,369
Megabytes of Gmail used	235,706,238

Portfolio, Program & Project Management

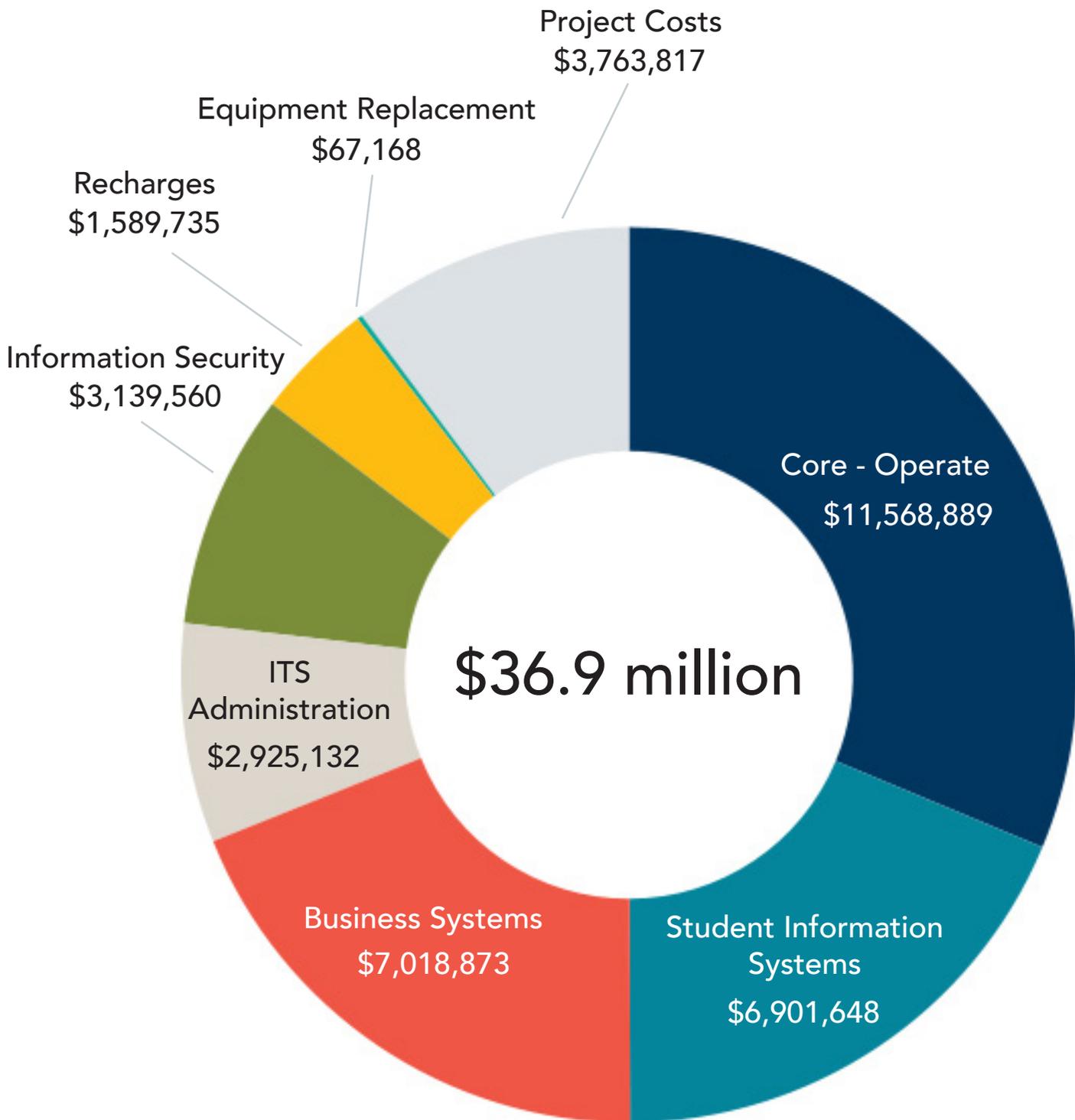
Total projects completed	97
Town halls hosted for campus users	13
Financial system projects completed	10
Security projects completed	7
UCPath projects completed	3

Physical Security

Security cameras hosted in VSaaS	334
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Expenditures

FY 2023-2024



UC SANTA BARBARA

Information Technology Services

To all of our
campus partners:
Thank you.

