Annual Report

INFORMATION RESOURCES & TECHNOLOGY

2022



At the Intersection of Tomorrow

REGROUPING POST PANDEMIC

July 1, 2021 - June 30, 2022



Mark Hendricks

IRT Vice President & CIO,
interim

Another transformational year for IRT! While we were saddened by team departures, we welcomed and promoted many new, experienced, dynamic, and diverse team members. Together, we're energizing our support of campus imperatives, and strengthening our position as the most collaborative division on campus. Our strong bonds with campus partners resulted in the successful completion of hundreds of strategic projects and enhancements during some of the most challenging days Sacramento State has ever faced.

IRT continues to be a trusted leader bridging technology, access, and answering the important question: "what's next?" Digital transformation is ongoing, with more than 150 forms and workflows streamlining the user experience. DEI efforts are evident in updates and added functionality to campus systems to help every Hornet feel welcome. Students arriving for Fall 2022 will discover upgraded learning spaces, and - along with faculty and staff - access to a free equipment checkout to support tech equity. And in development, a more robust virtual lab environment. Wi-Fi 6 expansion is boosting campus connectivity. And our partnership with the Center for Teaching and Learning (CTL) is synergizing pedagogy and technology to help innovate teaching and learning. These efforts are game changing, and have removed many administrative barriers to student success.

Supporting technology teams campus-wide, our indefatigable Service Desk team is also busy maturing the IT service management process to deliver an optimal experience for our campus community to discover, connect, and grow with technology. Behind-the-scenes infrastructure work - in some cases decades in the making - has produced consistent equipment standards and desktop management, patched security vulnerabilities, and welcomed auxiliary systems and domains under @csus.edu. These efforts have more than doubled Sacramento State's cyber security posture.

We are grateful for your partnership and support. Together, we're transforming today's Sacramento State experience, and strategizing tomorrow's possibilities.

Mark Henchricks

IRT Leadership



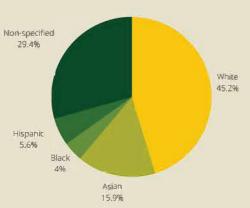
Mark Hendricks
Vice President & Chief Information
Officer, interim

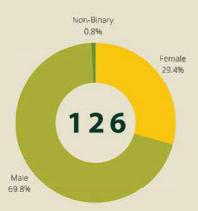


Peggy Kay
Deputy Chief Information Officer, interim
AVP, Academic Technology & Campus
Engagement



Vacant MPP
AVP, Planning and Digital
Transformation







Jenae Cohn, Ph.D. Director, Academic Technology



Marc Fox Interim Information Security Officer & Senior Director Enterprise Systems



DeWayne Holmes Director, University Reporting & Data Services



Ted Koubiar Senior Director, Operations & Network Services



Long Lim Interim Director, Customer Services



Nadya Lucas Interim Director, Project Management Office



Charlene McKoy Budget Analyst



Greg Porter
Director, Campus
Applications



Nick Sladojevic Interim Director, Identity Management & Systems Operations



Jennifer Sonne Director, Digital User Experience



Courtney Zuke Communications & Marketing Program Manager

IMPERATIVES & STRATEGIC GOALS

Aligning every effort to support successful outcomes and enhance the Sacramento State experience.



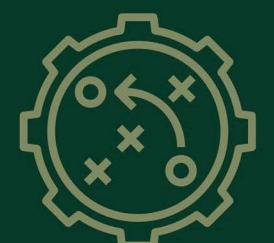


VISION

Sacramento State will be a recognized leader in education, innovation, and engagement.

MISSION

As California's capital university, we transform lives by preparing students for leadership, service, and success.



IRT STRATEGIC GOALS

- Support and innovate within campus imperatives.
- Mature digital transformation strategies to improve student success/experience.
- Unification and standardization of University IT practices and service management.
- Expand internal and cross-functional data-driven decision making.
- Adopt, operationalize, and advance DEI and anti-racism initiatives as individuals and as stewards serving our University community.

SUPPORT AND INNOVATE WITHIN CAMPUS IMPERATIVES



NEW STUDENT SUCCESS PLATFORM





2022 was a transformative year for graduation initiatives and student academic planning and advising. The new <u>Student Planner powered by Civitas Learning</u> will replace the current Smart Planner tool used by students and advisors.

Student Planner is a leap forward in degree planning by providing a single platform for students and their advisors to plan, schedule, and register for courses from any device, plus robust analytics to help meet course demand. It better supports the CSU Graduation Initiative 2025 and Sacramento State's Finish in Four/Through in Two programs.



- · In-App Registration in the Scheduler
- Degree Audit Updates



- Student Planner
- Hornet Launch Automation
- Updates to Degree Audit (Academic Requirements Report)

"Civitas is a state-of-the-art planning tool to facilitate student success using the best path to degree completion."

Robin Fisher, DMA - College of Arts & Letters

"The new features and additions will make it easier to find the right classes to fit my schedule, plus the classes I need."

Andrew Aceves, Finance Major

STUDENTS IN TECH SCHOLARSHIPS

For the 2022-2023 academic year, these superstar students each received a \$2,000 KI Earn Empower Scholarship. The scholarships are awarded based on their service as a student employee or intern in the Academic Resource Center (ARC) or in IRT-led programs. Our daily work is enhanced by their skillsets and candor which provides valuable insight into their technology experiences to help the University better meet the needs of students.

IRT Service Desk

Hollie Amaro Kathy Acero

Learning Space Services

Veta "X" Pasha Seyed Toolami



Supporting students working in tech!

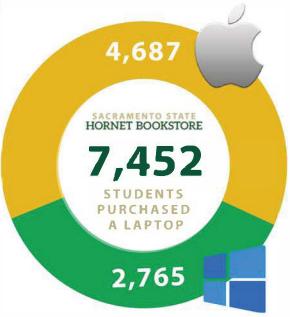


TECHNOLOGY EQUITY SOLUTIONS

Hornet Laptop Discount Program

In its second and final year, this partnership between IRT, the Bursars's Office, and the Hornet Bookstore again provided a more affordable, permanent solution to technology inequity. CARES grants were calibrated based on student need, with levels of support at \$250, \$600, and \$900 off eligible Mac or PC laptops for new and transfer students. Students could again pay in full at time of purchase, or apply any remaining balance through the Bursar's Office Bookstore Loan Program for repayment over time/with financial aid.

The Hornet Laptop Discount Program concluded in March 2022.



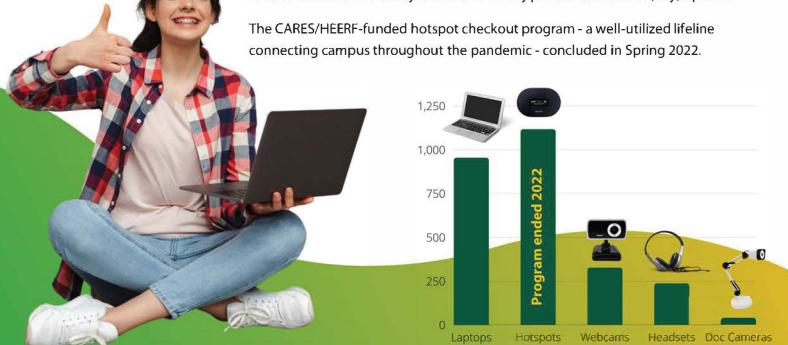
Purchases made between Fall 2021 and Spring 2022.



Apple recognized the Hornet Bookstore as #5 in the nation in college campus sales!

Free Equipment Checkout Program

Through lingering campus closures and hybrid operations, IRT continued to support faculty, staff, and students through our long-term equipment checkout program. The long-term program will continue for the 2022-2023 academic year, with priority for students. The University Union and Library provide short-term (day) options.

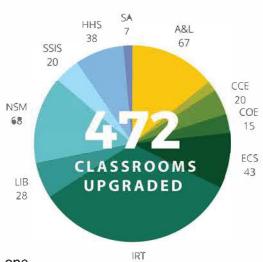




HYFLEX CLASSROOMS

The IRT Learning Space Services (LSS) team continued the rewarding collaboration with Procurement, Facilities and College representatives to put \$8M CARES/HEERF funding to use to upgrade campus learning spaces.

While lingering pandemic supply chain issues impacted some installation plans, equipment was ordered for an additional 36 instructional spaces this past year - including a Matrix switcher for Riverside Hall 4003 - which will allow multiple inputs across different displays.



158

The LSS Team provides one-on-one classroom training and just-in-time support to help faculty maximize each learning space.

FACULTY LEARNING COMMUNITIES

In Summer 2021, the IRT Academic Technology Center (ATC) team partnered with the Center for Teaching & Learning and led two Faculty Learning Community sessions with special focus on flexible learning modes, using classroom technology, and the evolving needs of today's learners.

"It's all about student learning. My goal is to make my course(s) end-toend 100% easy in terms of accessibility and learning." - Faculty attendee

Flexible Fundamentals Workshop

44 faculty participants, 6 faculty mentors

- Faculty new to hybrid/blended learning
- Hands-on experience using new equipment and building hybrid/blended classroom activities.

Innovators' Institute

23 faculty participants, 6 faculty mentors

 Faculty "early adopters" ready to use upgraded classroom tech to advance flipped learning and instructional media.



Professional development supporting student success initiatives as part of the Accessible Technology Initiative (ATI) and the CSU Graduation Initiative 2025.



REMOTE COMPUTER LAB ACCESS

During the pandemic, we bid farewell to Citrix Virtual Desktop, and instituted Microsoft Remote Desktop when on-campus computer labs were closed for safety.

The Remote Desktop access option allowed faculty, staff, and students to securely connect and tap into the full suite of campus computer lab software from their work or personal device without needing to be on campus.

SIMPLIFIED STUDENT AID MANAGEMENT



Through the addition of the Anticipated Aid Module in the My Sac State Student Center, students can now securely view and manage their anticipated aid each term. Balances are dynamic, displaying either a Remaining Balance or an Anticipated Refund amount.

Students are also able to view by term:

- Itemized charges
- Payments
- Refunds



SUPPORTING PUBLIC SAFETY



CAMPUS ENTRY SAFETY & HEALTH ASSESSMENT

As part of the campus Health and Safety imperative, IRT teams developed workflows, attestation forms, and health tracking tools during the pandemic and for automating and monitoring campus repopulation safely:

- Daily Health Self-Screening questionnaire on csus.edu and the Sac State Mobile app providing the ability to track data for general public safety, contact tracing, and health compliance reporting preparation.
- Implemented the Modolab Workready Mobile Assessment on the Sac State Mobile app.
- Created a Canvas course to manage Mandatory Health & Safety Training.

TECHNOLOGY ENHANCING CAMPUS SAFETY

Technology Tools Innovating Public Safety This past year, IRT partnered with the Sacramento State Po

This past year, IRT partnered with the Sacramento State Police Department to implement new technologies to automate and enhance their ability to respond to incident calls, including:

- A second phase of the RIMS dispatching project for computer-aided dispatch
- Sentry 911 Gatekeeper app providing 911 caller location identification
- · Campus PD officer body cameras

Upgrading Campus Speakers for ENS Alerts



While the majority of the campus community participates in the Emergency Notification System (ENS) by receiving alerts on their work and personal devices, there are still some who may not see these alerts, or guest who do not participate in ENS. As part of expanding campus alerts, the campus speaker system was upgraded to add another method of notification in the event of a campus emergency.





SUPPORTING COMMUNITY ENGAGEMENT

HELPING ENTREPRENEURS CLICK

The Carlsen Center for Innovation & Entrepreneurship is committed to educating, supporting, and building the next generation of impact-driven entrepreneurs, and we partner to help create and support the digital presence and functionality for their community outreach work to ensure students, alumni, and community members can connect and grow online and in-person.









STAYING TUNED

Despite a pending departure from its longtime home on Sacramento State's campus, <u>Capital Public Radio</u> will still remain connected to Sac State, quite literally. Since December 2021, our Network team has been working with CPR station management to order network equipment and telecom circuits, and has liaised with building contractors to develop wired and Wi-Fi connectivity services for a successful move to the new 730 I Street location sometime in 2023. Additionally, IRT will provide remote support for both the new I Street location and the CPR Chico extension, as if they were located on Sacramento State's campus.



CAMPUS PARKING AVAILABILITY

For efficiency, the formerly separate parking and bicycle occupancy databases were merged into a single repository for all space usage. Hornets and visitors can determine accurate space availability on the free Sac State mobile app no matter how they're commuting to campus.





SUPPORTING PHILANTHROPY

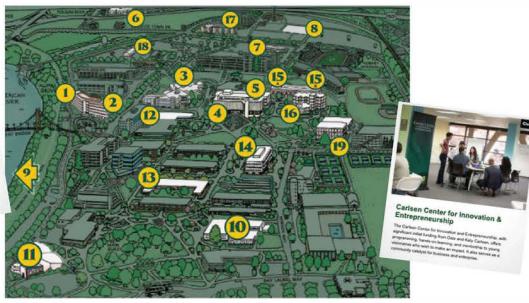


IMMERSIVE FUNDRAISING EXPERIENCE

Demonstrating impact is a key element for successful fundraising and community outreach. Our Web & Mobile Services team partnered with University Advancement to create an optimized digital experience for the On the Rise campaign at csus.edu/campaign, showcasing fundraising goals and priorities, progress and impacts, and inspiring recipient testimonials.

This custom-designed and programmed map uses accessible, native web standards to provide an interactive multimedia experience that lets visitors "see the campaign in action" when clicking the numbered items on the map.





SHARED DATA TO ENHANCE OUTREACH



The first phase of the Scholarship Entity Upload Data project bridged campus CMS data records and University audience groups to help Advancement identify and track scholarship recipients within their data model, improve targeted solicitations, and increase community outreach to support fundraising goals.

The project gathers together records for current and future students, accompanying parental records, and faculty/staff employee data including current employment and address information.



MATURE DIGITAL TRANSFORMATION STRATEGIES TO IMPROVE STUDENT SUCCESS/EXPERIENCE



MATURE DIGITAL TRANSFORMATION STRATEGIES TO IMPROVE STUDENT SUCCESS/EXPERIENCE

Power tools such as OnBase and Adobe Sign continue to support on-campus and remote operations seamlessly.

These tools, processes, and digital workflows expand an ongoing strategy supporting accessible and sustainable campus information management standards.

AUTOMATIONS

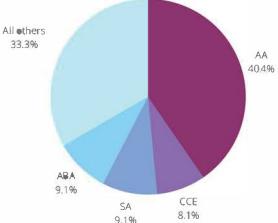
- Credential Module marks another leap ahead for reducing manual data entry, increasing accuracy and transparency, and making communications with students more efficient. Also fulfills CTC accreditation.
- Automating transcript processing via the implementation of Brainware OCR system to reduce manually entering transfer courses into CMS.
- Built a solution to automate the tracking, reporting, and communication process for Associate Degree for Transfer (ADT) students.

DIGITAL WORKFLOWS

Transformed student and employee paper forms into OnBase and Adobe Sign forms and workflows.

- Automated common student forms including:
 - Change of Information Request (SSN, DOB, Gender change)
 - WU Deletion Petition, Excess Units Petition, and Academic Standard Petition.
- Converted 7 paper forms submitted by graduates to the Office of Graduate Studies.
- Converted HR forms into OnBase and AdobeSign including the Voluntary Resignation form, and Leave of Absence without Pay.
- · Telecommuting Agreement Fall 2021.
- Performance evaluation signatures.





37 New Adobe Sign forms

Updates to existing forms 4

40

OnBase byHyland

PAPER FORMS DIGITALLY TRANSFORMED OR UPDATED TO DATE

20%

Increase in academic student forms submitted via OnBase

SYSTEM PROGRAMMING

- Developed a bolt-on to allow HR staff to review and approve COVID exception request in CMS HR.
 - Modified the Personal Info Summary page to include COVID attestation status.







UNIFICATION AND STANDARDIZATION OF UNIVERSITY IT PRACTICES AND SERVICE MANAGEMENT



TECHNOLOGY GOVERNANCE

Smart strategy is built through collaboration, and campus technology decisions and innovations are cultivated through representational, cross-divisional engagement and teamwork.

Finalized this past year, the members of these comprehensive campus oversight groups support transparency across University technology processes, services, and personnel, and are a guiding force helping to streamline and unify technology management and decision-making.





STREAMLINED UNIVERSITY POLICY MANAGEMENT

Implemented cloud-based Policy Stat software to host a single solution for creating, updating, approving, searching, and storing University policies.

SECURING UNIVERSITY INFRASTRUCTURE



(AD) domains were eliminated.

To address the "20-82 Information Security Audit" findings and support a secure campus infrastructure, IRT collaborated with ECS, CCE, and UEI to migrate them into thei@csus.edu campus domain, infrastructure, and standards.

Through a unified domain - as well as onboarding them into ServiceNow for collaborative support and systems management - secure authentication, consistent software, hardware, patching and vulnerability management is now possible.

EXPANDING MODERN AUTHENTICATION

To protect campus systems and users, modern authentication methods including Single Sign-On (SSO) and Duo multi-factor authentication were launched for critical campus applications.

- Bomgar
- CMS/PSA
- DellBoomi

Go Anywhere

- EMLS
- •
- Moodle
- OnBase
- Raptor
- TimelyiMD









UNIFIED IT SERVICE MANAGEMENT

To support consistent and transparent IT service management for campus departments and affiliated entities, IRT has been building out an ITSM strategy, and transitioning campus units under a single service management software, ServiceNow. Onboarded campus units include:



- Capital Public Radio IT (CPR)
- College of Continuing Education (CCE)
- University Enterprises, Inc. (UEI)
- Sacramento State Downtown location



IT Service Management - or ITSM - is how IT teams manage the end-to-end delivery of IT services to customers. It includes all the processess and activities to design, create, deliver, and support IT services.

SUSTAINABLE CAMPUS PRINTING



With a 2022 expiration of the University's Xerox contract, IRT led the transition project to determine a more economical and sustainable campus standard. The new Konica Minolta 5-year lease program supports campus division and department needs, and provides affordable and predictable pricing, including:





 Flat-rate monthly costs across all devices, including all services, maintenance and supplies (minus paper).

Replacing over 200 machines campus-wide

Despite of supply chain issues, more than 200 campus Xerox machines have been replaced, including devices supporting PrintSmart, the student print/copy/scan option.

Additionally, the Print Services team merged with the IRT Service Desk and Desktop teams to streamline campus print management and support.

SECURE, EFFICIENT WORKSTATION STANDARDS

Spurred by audit findings, security best practices, and sustainability, IRT collaborated with campus units to transform formerly decentralized functions under single processes and standards, including:







Partnered to create a standard desktop image (SCCM/Jamf) and common and high-risk/critical workstation standard to streamline management, improve reliability, and increase security.



New patching standard dramatically reduces workstation vulnerability.



Always-on VPN to ensure secure connections.







DATA-DRIVEN DECISION MAKING

Tapping into the data storytelling power of tools such as Cognos Analytics reports, Tableau dashboards, third-party application data integrations, and the University Data Warehouse, the University Reporting and Data Services team delivers information that empowers campus users to view and understand programatic successes and areas for growth.







ANALYTICS SUPPORTING GRADUATION OUTCOMES







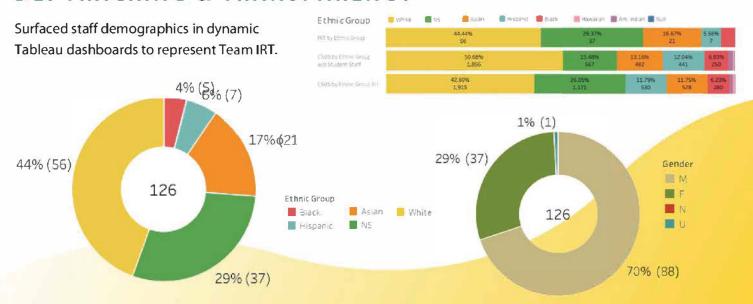
Ad Astra Platinum Analytics

Meeting course demand, creating equitable course access, and improving overall student retention and graduation rates - that's the goal of launching Ad Astra's Platinum Analytics tool, which analyzes university data to predict course demand and strategically plan sections and seat capacity to ensure students are able to enroll in the courses they need when they need them.

Illume by Civitas Learning

To open advisor access to reporting from this in-use tool, we implemented Single Sign-On security and created a data feed to the University Data Warehouse to improve course success, student retention, and progression to degree.

DEI TRACKING & TRANSPARENCY





ADOPT, OPERATIONALIZE, AND ADVANCE DEI AND ANTI-RACISM INITIATIVES AS INDIVIDUALS AND AS STEWARDS SERVING OUR UNIVERSITY COMMUNITY



IRT Vice President & CIO, interim

CHAMPION FOR EQUAL ACCESS

Technology is a powerful tool in the conversations, actions, and ways forward to eliminate equity barriers and deliver welcoming digital experiences. We support and provide leadership for anti-racism and Diversity, Equity, and Inclusion (DEI) initiatives, and it's a division strategic goal to weave DEI into our processes.

From championing accessible technology practices and equity, to changing the face of today's IT workforce, DEI strategies help us to better advocate for the technology, tools, and support that helps our campus community tap into and power their unique possibilities.

"As a CIO, I resolve to promote diversity, equity, and inclusion (DEI) for the benefit of the technology profession in my institution, and in the profession." Thank Henchicks EDUCAUSE CIO Pledge

DIGITAL DEI EXPERIENCE

In addition to implementing actionable strategies focused on adopting, operationalizing and advancing DEI and anti-racism initiatives, IRT supported the expansion of DEI digital resources and analytics:

- IRT DEI strategic goals, roadmap, hosting/participating in campus listening and learning activities.
- Support Inclusive Excellence to reorganize and develop a robust DEI website experience.
- Ethnic Graup
 - Launched IRT DEI website, and building new IT DEI Council open to all campus IT professionals.
 - Develop/maintain DEI dashboards through the University Data Warehouse.

TOMORROW'S IT WORKFORCE

Our IRT Manager's Manual includes new instructions for successful recruitments that focus on strategies to reach women, people of color, members of the LGBTQ community, and individuals with disabilities to take on IT professional and leadership roles.

We continue to expand DEI-focused hiring strategies and processes to recruit and retain diverse and high-performing staff reflective of demographic trends.

- MPN Diversity Jobs
- WITI
- Military Jobs
- National Society of Black Engineers
- Women in Technology
- Ability Jobs













INCLUSIVE LEARNING AND ACCESSIBLE EXPERIENCES

Tools, processes, training, and friendly competition supporting student success through the creation and remediation of accessible, inclusive instructional materials and documents.

- · Utilizing live captioning and note-taking transcription tools and resources through audio/video tools like Zoom.
- Using Canvas Ally to improve accessible instructional materials and participating in industry competitions to foster awareness and remediation.
- Website accessibility training certification program open to campus digital content editors and publishers.
- Transitioning campus from Mediasite to Panopto, which supports enhanced captioning and other accessibility features.
- Partner with Services for Students with Disabilities (SSWD) to ensure campus technologies are aligned with equity-focused practices.





Sacramento State Faculty & Staff tapped into Blackboard Ally to identify and correct 182 instructional materials and documents during this week-long CSU-wide competition.













CAMPUS SYSTEMS SUPPORTING BELONGING

Similar to the Gender Pronoun Project which allows staff and students to enter and manage their gender preferences within campus systems, we continue to expand inclusive system functionality, including the campus class schedule page to support special characters in names.

What are special characters?

Symbols, accent marks, and punctuation marks including hyphen/dash, accent, and tilde.

INCLUSIVE SYLLABUS INITIATIVE

A syllabus is often the first document a student encounters in a new class. In Spring and Summer 2022, the IRT Academic Technology Center (ATC) shared practices and techniques with nearly 80 instructors for "Creating an Inclusive Syllabus" to enhance a welcoming classroom environment.

From inclusive language, accessible design and/or alternative formats such as a "liquid" or an online syllabus, the goal is to thoughtfully present course expectations, assignments, and participation requirements to make all students feel a sense of belonging in the class.



Operational Highlights



SERVICE. SUPPORT. SOLUTIONS.

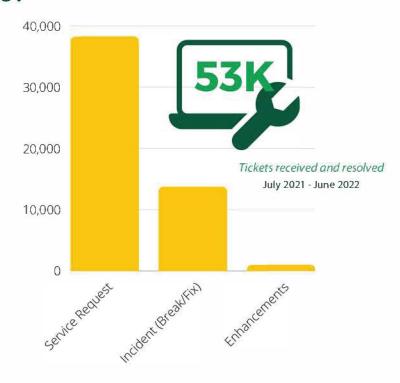
Remotely, hybrid, and in-person, the IRT Service Desk Team continued to be the core point of contact for campus technology services.









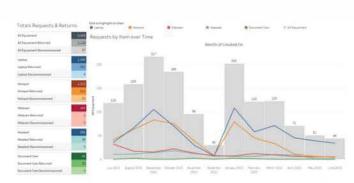


Student employees resolve 49.9% of tickets - largely through Online Chat.

KEEPING HORNETS CONNECTED

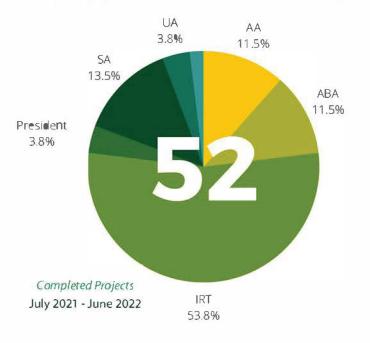
To ensure we met campus needs and managed equipment inventory, we utilized a Tableau dashboard to monitor checkouts.

We also helped the College of Arts & Letters streamline their equipment checkout program through launching the Connect2 Asset Management tool.





TECHNOLOGY PROJECT MANAGEMENT





University technology project management and prioritization continued to mature through:

- Strategic Cabinet prioritization
- Alignment with the Annual Budget Call
- New Total Cost of Ownership (TCO) model
- · Cross-divisional resource and capacity planning

Together we worked smarter to support campus technology maintenance, enhancements, and purchases.

To forecast expenses, the TCO combines current actual spending, and projected costs five years out.

- 1 Identify capital expenditures (particularly large ones) that are required, but which are not budgeted for.
- 2 Map operational expenditures to existing AUE & operational budgets.
- Outlineathe operational, CapEx, and staffing costs for our major services.
- 4 Determine operational, CapEx, and staffing costs to better document costs for Cost Allocation billing.
- 5 Capture operational, CapEx, and staffing costs for projections and various budget realities.



TECHNOLOGY PROCUREMENT (ICT)

Built-in to every project, the Information & Communication Technology (ICT) process ensures campus system compatibility, security, accessibility, and compliance with federal and state laws. It also provides transparency and an evaluation opportunity to reduce duplication of efforts.

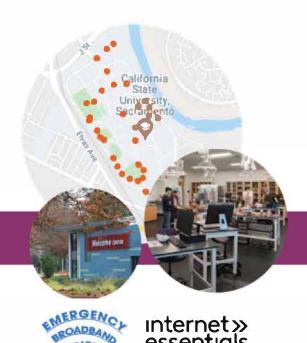


515

Changes, upgrades + enhancements FY 2021-2022



Average technology change projects per month



EXPANDING CAMPUS HOTSPOTS

The Operations & Network Services team continued to leverage CARES funding to boost Wireless Access Points (WAPs), upgrade campus networks, and expand hotspots to accommodate remote gathering.

Currently, campus has 2,021 WAPs connecting Hornets in and out of University spaces, and promoted off-campus alternatives from industry providers for faculty, staff, and students working and learning remotely.

1,621 + 400 >>> 2,021

Concluded in March 2022, the Outdoor Expansion project updated over 65 existing outdoor Wi-Fi locations, and added over 400 WAPs to parking, gathering, and sporting areas:

- 55+ new added to campus buildings
- 23+ parking structures (PS3 + PS5)
- 46+ stadium
- 25+ UTAPS Pergola Project

UPGRADE TO WI-FI 6

In addition to more access points, we're actively advancing the CSU-wide commitment of moving generally-funded campus buildings to the Wi-Fi 6 standard by February 2023.

Wi-Fi 6 is optimal for multi-device environments such as classrooms and labs, and expands network capacity, range, streaming ability, and download speed.



Existing locations upgraded to Wi-Fi 6





UNIFIED COMMUNICATIONS

As campus emerged from a full-remote reality to hybrid operations, new functionalities continue to help bridge campus, including:

- Deployed Avaya OneX Communicator softphones, which mimic campus desk phones
- Forwarding desk phones to mobile phones, and voicemail to@csus.edu email
- Voice response system for advanced call-tree features











Pilot testing of Avaya integrations is ongoing with the goal of creating a single interface for campus users to communicate and collaborate on any device.

- Integration of desk phones with Microsoft Teams
- Avaya IX Workplace downloadable app











