2021

Annual Report

INFORMATION RESOURCES & TECHNOLOGY



Embracing Change

STRATEGY, TRUSTED PARTNERSHIPS & DIGITAL TRANSFORMATION

July 1, 2020 - June 30, 2021



Mark Hendricks *IRT Vice President & CIO interim*

In Fall 2020, one of the nation's largest public 4-year universities became one of the nation's largest online universities. Making this transition wasn't easy, especially for faculty and students: new teaching and learning modalities, new tools, technology challenges, "Zoom bombing," privacy concerns, and pervasive issues of technology equity.

Sacramento State is an in-person campus - however, the technology that allowed us to transition to remote operations has changed work and education forever. We will face many new challenges as campus simultaneously supports in-person, hybrid, and remote work, and we will once again need to modify how we communicate and relate to others.

Over the spring and summer, we engaged with campus leadership, faculty, and staff partners to map out Fall 2021 strategy. In addition to the array of activities featured in this report, these highlights touch every member of our Hornet Family:

- Standardizing more than 450 classrooms to support Zoom and audio/visual
- Beginning the implementation of Panopto, an unlimited storage video capture, editing, and media management service
- Partnered with the Center for Teaching & Learning to offer Faculty Learning
 Communities to support innovative online pedagogy using technology
- Greatly expanding outdoor wireless and upgrading campus buildings to Wi-Fi 6
- Ensuring technology equity for students through through long-term laptop checkout and a purchase discount program, and providing laptops to faculty and staff to support continuity on and off-campus
- Digitally transforming the processes that keep Sacramento State moving forward

While I believe that it will take the next year or more to settle out the new normal for remote teaching, learning, and work, one thing remains constant; the IRT family is here to support, collaborate, and partner with you to meet these new challenges and embrace change. We are proud to help power what's possible at Sacramento State!





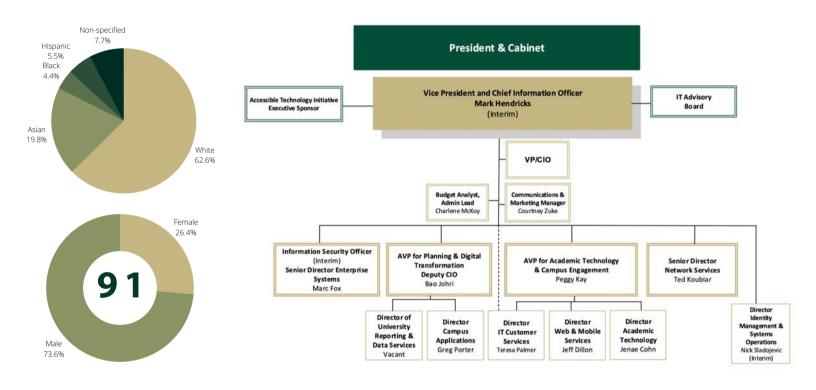
Technology became a bridge between the classroom and the living room. While both planned, and in reaction to unprecedented times, Sacramento State's digital transformation ultimately connects us in ways that was previously reserved for 'in-person.' While no substitute, we're proud to be this essential link for our campus community.



Meet Team IRT

VISION

To serve as a strategic, trusted partner and the source for enterprise technology leadership at Sacramento State.



STRATEGIC GOALS

- Develop and improve IT governance and partnerships
- Support and innovate within campus imperatives
- Mature the project prioritization process to deliver solutions
- Expand internal and cross-functional data-driven decision making
- 5 Demonstrate operational excellence and support
- Adopt and advance diversity, equity, inclusion, and anti-racism to flourish individually, excel professionally, and advance knowledge in IT



IRT Leadership



Mark Hendricks
Interim Vice President
& Chief Information Officer



Bao Johri

AVP, Planning and Digital Transformation

& Deputy Chief Information Officer



Peggy Kay AVP, Academic Technology & Campus Engagement



Jenae Cohn, Ph.D. Director, Academic Technology



Jeff Dillon Director, Web & Mobile Services



Marc Fox
Interim Information Security
Officer & Senior Director
Enterprise Systems



Joy Ira IT Change Manager



Ted Koubiar
Senior Director, Operations
& Network Services



Charlene McKoy Budget Analyst



Teresa Palmer
Director, Customer
Service Center



Greg Porter
Director, Campus
Applications



Nick Sladojevic Interim Director, Identity Management & Systems Operations



Courtney Zuke
Communications &
Marketing Program Manager



Vacant MPP Director, University Reporting & Data Services



Governance & Collaboration

TEAMWORK, GOVERNANCE, STRATEGIC PLANNING





Board

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

In addition to the IT Advisory Board, there are now seven groups committed to guiding Sacramento State technology initiatives forward.

IT ADVISORY BOARD

As the primary governing body for campus technology, the IT Advisory Board provides special consultation to the Information Resources & Technology (IRT) Vice President and Chief Information Officer to help prioritize divisional IT projects based on alignment with campus strategic goals and other needs.

ACCESSIBLE TECHNOLOGY INITIATIVE (ATI)

Reporting to the President's Cabinet through IRT's Vice President & CIO, the ATI Steering Committee serves as a governance group and principal campus advisor regarding accessible technology issues and compliance guidelines.

ACADEMIC INFORMATION & TECHNOLOGY COMMITTEE (AITC)

A Faculty Senate subcommittee comprised of broad campus representation, the AITC develops campus academic information technology strategies, recommends policy to the Faculty Senate, and serves as a consultative body regarding academic technology issues.



'IT' TAKES A CAMPUS

IRT leadership and team members commit to regular meetings and collaborative opportunities with different campus constituency groups, departments and colleges to strengthen partnerships.



Governance & Collaboration

TEAMWORK, GOVERNANCE, STRATEGIC PLANNING

DATA SECURITY & RECORDS RETENTION GOVERNANCE

Six campus groups work collaboratively to ensure the privacy, security, and retention of University data and information assets, per CSU Information Security Policy Sections 8000 and EO-1031.

- Authorizing access
- Data classification
- Defining security controls
- Identifying asset risk
- Security compliance
- Records retention

IT PROJECT GOVERNANCE

Ensures strategic oversight over the campus technology project prioritization process, helping to prioritize strategic and operational campus technology projects to align with campus goals and objectives, identify resource allocation, and budget considerations.

IT COLLABORATION & STANDARDS GROUP

Comprised of appointed technology professionals from across campus committed to improving collaboration and focusing campus support efforts to continuously review and update campus desktop, system, device management, and classroom technology standards.





IT PROCUREMENT GOVERNANCE

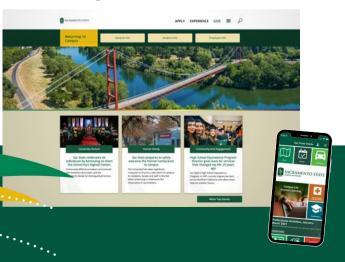
Reporting to the President's Cabinet, the IT Procurement Governance Group develops, coordinates, and matures procurement related practices that meet compliance and budgetary requirements related to the procurement of technology goods and services.

WEB CONTENT ADVISORY GROUP

Established in Fall 2020, the WCAG gathers a campus-wide collaborative team to address design and "look and feel" of campus digital content published on campus systems:

- csus.edu
- Sac State Mobile App
- My Sac State campus portal
- Campus Event Calendar
- Digital signs







COVID-19 Emergency Response

A VIRTUAL CAMPUS, VIRTUALLY OVERNIGHT

Through campus-wide teamwork and quick thinking, a global pandemic never became a 'plan'demic. IRT rallied to help our campus population take teaching, learning, and work home with them, and to connect to campus resources whether in a parking lot - or even other states - during shelter-in-place.

Here are highlights of the rapid technology mobilization that supported Sacramento State's unprecedented virtual campus.



TECHNOLOGY EQUITY SUPPORT

Pivoting the usual 4-hour checkout window to long-term use was essential for remote teaching, learning, and working during the campus closures. Faculty and staff without portable options, and students unable to use the checkout program or campus computer labs, viewed this program as a lifesaver. Additional equipment was purchased using budget and supplemental CARES/HEERF funding to meet campus needs:

Laptops: 1,735 Webcams: 419 Document cameras: 119

Hotspots: 1,642 Headsets: 246



SACRAMENTO STATE HORNET BOOKSTORE

HORNET LAPTOP DISCOUNT PROGRAM

To provide a more affordable, permanent solution to technology inequity, IRT, the Bursar's Office, and the Sacramento State Hornet Bookstore partnered to launch the Hornet Laptop Discount program.

Approximately 650 eligible undergraduate and graduate students applied a \$250 CARES grant towards the purchase of an eligible Mac or PC laptop. Students were able to opt to pay in full at time of purchase, or apply the balance through the Bursar's Office Bookstore Loan Program for repayment over time/with financial aid.

INTERNET ALTERNATIVES



Drive-in Wi-Fi in Parking Structure 5

Campus closures - and inability for faculty, staff, and students to tap into the eduroam campus Wi-Fi - called for creative thinking and support from industry providers.

- Drive-in Wi-Fi in Parking Structure 5 (IRT, UTAPS, and Campus Police)
- Wi-Fi Hotspots available for long-term checkout from IRT
- Low-income home internet programs including Comcast Internet Essentials and the FCC Emergency Broadband Program







COVID-19 Emergency Response

A VIRTUAL CAMPUS, VIRTUALLY OVERNIGHT

TELECOM CONTINUITY

- 500+ forwarded desk phones to mobile phones.
 - 350 voicemail forwarding to email requests.
 - Coordinated with the Desktop Support team to deploy Avaya softphone clients to mimic campus desk phones while working remotely.

REMOTE COMPUTER LAB ACCESS

While on-campus computer labs were closed for safety, IRT offered a remote access option allowing faculty, staff, and students working remotely to securely connect with a campus lab computer, and tap into the full suite of campus computer lab software from their work or personal device



TECHNOLOGY LIFELINES

Creating a virtual campus was supported through audio/video and cloud-based academic and collaboration tools - some already in place, some rapidly launched and optimized. Terms like Zoom fatigue became part of the daily vocabulary, as the Hornet Family collectively "attended" classes, "taught" via web camera, and "worked" with colleagues.

Traditional paper and in-person courses were transformed to Canvas. Definitions have been forever changed, and the tools powering them are here to stay as part of the new normal for Sacramento State.



Course sections moved to Canvas in under a week's time.



on Teams audio/video each month



COVID-19 Emergency Response

CONNECTING THROUGH TECHNOLOGY

REMOTE TECHNOLOGY RESOURCES

During the early days of campus depopulation, IRT curated three new sections on the IRT website dedicated to one-stop resources essential for remote teaching, learning, and working. The resources were specifically geared to help faculty, staff, and students through the abrupt "virtual University" transition, and to be successful working remotely. Resources included:

- Remote teaching/learning/working checklists
- · Personal device security tip sheets
- Cross-links to essentials such as internet access, Laptop & Equipment Checkout, and how to's for commonly used software such as Microsoft 365 tools, Canvas, and Zoom
- How to safely connect to campus resources, including Global Protect Virtual Private Network (VPN) for secure access
- Direct links to technology support





The IRT Web & Mobile team assisted University Communications to pull together COVID-19 resources along the masthead at csus.edu - providing deep links and frequently updated safety information for faculty, staff, students, and visitors.

With Fall 2021 campus repopulation plans underway, the COVID-19 Response will begin to transition to "return to campus" resources.

CAMPUS ENTRY SAFETY + HEALTH ASSESSMENT



As part of the campus Health and Safety imperative, IRT teams developed workflows and health tracking tools for anyone needing to come to campus during the pandemic:

- OnBase electronic form and approval workflow for employees to safely return to campus to work or do research.
- Daily Health Self-Screening questionnaire available at csus.edu and on the My Sac State app for campus visitors to self-screen for COVID-19 symptoms, and track data for general public safety, contact tracing, and health compliance reporting preparation.



Communications + Collaboration

CONNECTING THROUGH TECHNOLOGY

SACSEND BROADCAST MESSAGING

To assist with the higher-volume communications, and introduce a mobile device-optimized experience, IRT launched new SacSend 2.0 templates to campus users in July 2020. An editorial style guide and user training was also provided.

IRT communication campaigns increased during the COVID-19 campus closure to highlight new tools, how to's, support resources, phishing alerts and more. From March 2020 - May 2021, the IRT Division sent:

- 134 SacSend campaigns
- 2,378,503 messages reaching faculty, staff, students, and auxiliary members of the campus community





IRT QUARTERLY NEWSLETTER

Launched prior to the COVID-19 campus closures, IRT's quarterly newsletter "The Download" provided another essential link for faculty and staff to connect with the latest campus technology news, COVID-19 information, and return to campus resources.

- January 2020: Premiere
- · April 2020: Remote but Staying Connected
- August 2020: Digital Transformation
- January 2021: Waypoints and Fall Return Plans
- June 2021: Summer Work and Return to Campus Resources

In 2020-2021, all campus division communications were up from the previous year due to increased COVID-19 messaging, and the shift to remote communication methods.



15,999,270

Total campus emails sent

992 Total campaigns sent







Digital Transformation

SUPPORTING REMOTE OPERATIONS + BUILDING FOR THE FUTURE

Power tools such as OnBase - and the rapidly launched Adobe Sign - helped campus operate virtually when campus visits during the pandemic were not possible. Spurred by necessity, but part of strategic plans to support sustainable, accessible practices, these digital transformations are only the beginning.

STUDENT ACADEMIC FORMS

Created OnBase e-forms and workflows to automate the paper formats and manual processing of heavily-used undergraduate and graduate academic forms:

- Credit/No Credit Petition
- Incomplete Grade Completion Petition
- GE/Graduation Requirements Substitution Petition
- Application for Graduation for Grad Students
- · Leave of Absence Petition
- Diploma re-order form for Undergrad students
- Diploma/Certificate re-order for Grad Students
- Declaration/Change of Major/Minor/Concentration
- Grade Change Petition
- · Semester Withdrawal Form
- Add/Drop/Withdraw from Courses petition
- Deletion of Major/Minor form
- Repeat Grade Replacement Petition





"We joined forces with IRT and developed an automated workflow. And the great news is, it's easy for us and less work for you and/or administrative support staff throughout your Division!

-Human Resources

DIGITAL TRANSFORMATION TEAM

Team of

The IRT Campus Applications Team (CAT), CMS programmers, testers, and project managers quickly transformed paper processes to forever change the way Sacramento State manages academic, business, and personnel forms. Necessity is the mother of invention, and this nimble team worked remotely with nearly every campus division to ensure continuity during our virtual University days.



Digital Transformation

SUPPORTING REMOTE OPERATIONS + BUILDING FOR THE FUTURE

OFFICE OF GRADUATE STUDIES FORMS

New OnBase electronic forms and workflows plus Adobe Sign signature processing for student petition forms.



- Thesis/Project/Dissertation Receipt form
- Graduation Change form
- Application for Certificate
- Academic Certificate Course Verification





- Culminating Experience Approval
- Reinstatement Request
- Doctoral Dissertation Defense
- DPT Culminating Project Defense
- Results of the Qualifying Exam DPT
- Results of the Qualifying Exam EDD Continuous Enrollment Form
- · Leave of Absence Request

- Comprehensive Exam Report
- Project Completion Approval
- Nomination for Distinction
- Intent to Defend Dissertation
- Intent to Take Qualifying Exam

PERSONNEL TRANSACTION FORMS

With approximately 22,000 Personnel Transaction Forms (PTF) submitted each year via paper process, it was a welcome change to convert them into OnBase e-forms and workflows.



- · Employee PTF
- Student Employee PTF
- Academic Student Employee PTF

SSWD ACCOMMODATIONS

To save students with disabilities (SSWD) from submitting multiple paper forms each semester asking for accommodations - which are then manually processed and routed to several campus offices - we partnered with SSWD to implement the ClockWork software, which electronically automates the submittal and routing process.

- Shortens processing time
- Eliminates manual paperwork handling/processing
- Provides convenient access for SSWD students







Customer Services

SERVICE, SUPPORT, SOLUTIONS

IRT's Customer Services area is unified by the foundational goal of supporting effective use of campus technology. Three distinct support areas - Service Desk, Desktop Support, and Print Services - umbrella to provide end-to-end support.

IRT SERVICE DESK

When most people think "IRT" they think Service Desk. As the face of IRT, the IRT Service Desk Team is the core point of contact for campus technology services. This academic year saw the Service Desk team shoulder nearly double its support loads from previous years - with service delivered virtually! - in order to facilitate campus remote operations during the COVID-19 campus closure.

TECHNOLOGY EQUITY SOLUTIONS

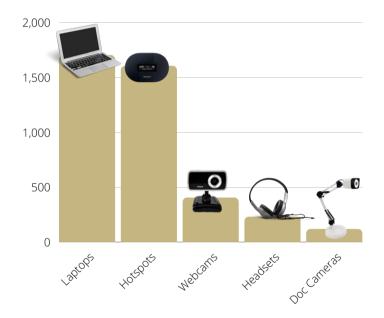
As part of the COVID-19 emergency response, the IRT Service Desk and Desktop Support teams offered an Emergency Equipment Checkout program to ensure faculty, staff, and students had access to essential equipment for teaching, learning, and working remotely. From June 2020-April 2021, the teams fielded 4,186 requests for emergency equipment.

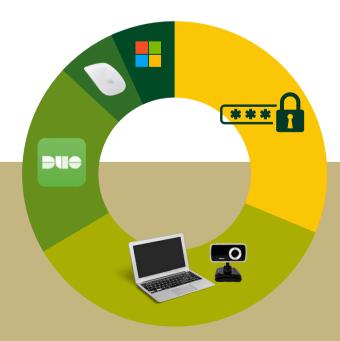
Additional equipment was procured despite industry shortages and shipping delays.

Laptops: 1,800+Hotspots: 1,700+Webcams: 900+Headsets: 700+

• Document Cameras: 200+

4,063 checked out laptops and equipment items by faculty, staff, and students since March 2020





SUPPORT REQUESTS AT-A-GLANCE





Customer Services

SERVICE, SUPPORT + SOLUTIONS



The Desktop Support team is the go-to when campus workstations experience technical issues, as well as establishing and maintaining the tools, standards, and processes by which the distributed IT community (ITC's) maintains campus workstations. With COVID-19 campus closures, the Desktop Support team's workload expanded to include:

- Co-managing IRT's Emergency Equipment Checkout Program. The team worked tirelessly to procure, configure, and support the use of emergency equipment.
- Coordinating and managing the HEERF workstation replacement project.
- Providing supplemental workstation support for the Academic Affairs division.
- Partnering with IRT departments and campus ITC's to overhaul campus workstation management by creating a campus standard to improve reliability, and increase security:



Support consistent device management through campus standards



Moving Jamf environment to the cloud



Implementing standard anti-virus and patching solutions for campus devices



Instituting always-on VPN



The reduction in printing, copying, and scanning due to the campus closure was an ideal time for reevaluation. Balancing user needs and sustainability, the Print Services team is taking steps toward digital transformation to reduce campus's need for print services, including:

- Conserving campus resources by facilitating the return of unused Xerox devices, including 45 student and 12 departmental multi-function devices
- Working on an RFP to identify a new campus print services vendor

Support Team

• Promoting scan-to-cloud as a preferred option

Onsite printing, copying, and scanning needs will resume with Fall 2021 campus repopulation, and the Print Services team is developing an improved service and support model to address changing campus needs.



jamf



8,000

Average number of supported campus workstations (desktop/laptop)



Project Management

LEADING CAMPUS TECHNOLOGY PROJECTS

IT PROJECT PRIORITIZATION

In collaboration with the IT Advisory Board, the IT project prioritization process continues to mature and align technology resources and priorities with campus imperatives. New additions for the 2020-21 academic year included:

- Project sizing
- More equitable distribution of project size based on division size
- Improved project request process, including scope, expected outcomes, deliverables, and total cost of ownership (TCO)
- Better resource identification and capacity planning

IT Advisory Board engagement and proposal presentations has further improved campus participation and buy-in, and has helped to make appreciable progress on key projects while balancing challenging budget futures.



Total Cost of Ownership (TCO) Current Year Costs Future Costs

- Recurring

- **Non-Recurring**

- Operating Cost Increases
- Upgrades
- Enhancements
- **Go Live**

Post Decommissioning **Data Retention**

Each project request now requires TCO to help campus make informed purchases with lasting value - and no surprises.



IMPROVING IT PROJECT PRIORITIZATION

- Mature technology project prioritization, planning, and execution
- Focus on delivering solutions, not just tools/products
- Improve resource management and capacity planning
- Grow campus partnerships and collaborations, engage stakeholders



Academic Technology Services

INNOVATING TEACHING & LEARNING WITH TECHNOLOGY

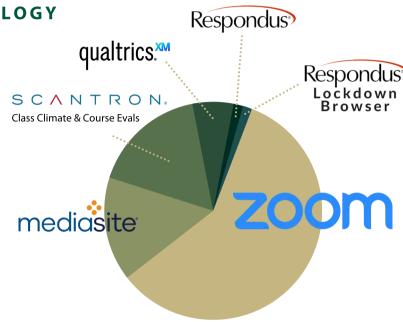
REMOTE TEACHING WITH TECHNOLOGY

With the quick pivot to full remote instruction in March 2020, academic technology played a critical role for teaching and learning continuity. Whether the Canvas Learning Management System, Zoom video conferencing, Class Climate virtual evaluations, Mediasite and others, the ATC team provided specialized virtual support to meet the teaching and learning needs of our faculty and students, including:

CONSULTATION + SUPPORT

- Scheduled virtual one-on-one and group appointments
- Drop-in virtual support hours with CTL

200+ Faculty Supported



July 1, 2020 - June 30, 2021

WORKSHOPS, TRAINING + EVENTS

2020 Summer Camp Teach ON!Line with CTL 600+ Faculty Supported

2021 Teaching with Technology Roundtables

- Reflecting on a Year of Remote Teaching
- Understanding Flexible Instructional Modes for Teaching
- · Engaging Students Online

Topic-Based + Open "Ask us Anything" Q&A Webinars

- Technology for Mitigating Cheating
- Grading in Canvas
- Preparing and Mapping Your Online Course
- Delivering Your Online Course

22Sessions hosted
April 2020-March 2021



24/7 ONLINE RESOURCES

The ATC and Learning Space Services teams launched two online resources to provide self-service teaching and learning support:

- Faculty Online Teaching Resources
 @ csus.edu/OTR
- Student Online Technology Resources
 @ csus.edu/OTR/student

Housed in Canvas, these user-friendly guides provide self-paced resources and how to's mapped out by tool, desired skillset, and time of semester.



Jenae Cohn, PhD

In October 2020, Jenae Cohn, PhD, joined as the new Director of the Academic Technology Center (ATC). Under her guidance - and through a pandemic! - she is leading the ATC team in partnership with campus divisions to support faculty, students, and staff in how to effectively use campus-supported technologies, with special focus on helping faculty explore flexible teaching strategies with technology.



Academic Technology Services

INNOVATING TEACHING & LEARNING WITH TECHNOLOGY

COLLABORATIONS

The Academic Technology team partners with a variety of divisions and campus organizations to help faculty meet their goals in teaching with technology:

- Academic Information and Technology (AITC) Committee
 IRT's CIO, AVP, and Director for Academic Technology attend as
 non-voting members to engage with faculty.
- Center for Teaching and Learning (CTL)
 Center for Teaching and Learning lends a pedagogically-driven perspective to academic technology, and partners with the ATC team to provide live support, events and workshops.
- Student Affairs

From New Student Orientation and beyond, the ATC team partners with Student Affairs staff to educate and support students in maximizing the available suite of academic technologies.

Services for Students with Disabilities (SSWD)
 ATC team members serve on the Accessible Technology team, the University Committee for People with Disabilities (UCPD), and works closely with SSWD to ensure academic technologies are aligned with equity-focused practices.



PILOT PROJECTS

What's new and what's next begins with pilot testing and extensive campus collaboration involving faculty, staff, and often students. Here are highlights of pilot projects that aim to enhance and innovate our campus academic technology toolkit with industry leading solutions:



• Panopto: Launching May 2022

A faculty/staff led pilot group selected Panopto to replace Mediasite as the new campus solution for recording, sharing, and engaging with video-based instructional content.

- NVivo: Fall 2021
 An industry-leading qualitative research tool for coding data.
- Gradescope: Piloting Fall 2021
 Digitizes paper-based exams, with an engine for faculty to offer feedback on exams.
- ePortfolio Solutions: Spring 2022
 A valuable tool for assessments across disciplines.

FACULTY ADVISORS

Professors Dennis Dahlquist and Jean-Pierre Bayard serve as trusted advisors, mentors, and evaluators/testers assisting in the development and support of academic technology strategies supporting campus imperatives. I learned new ways to engage students, developed greater understanding of the technology I needed to use, and I felt so welcomed – thank you!

I had so much to learn!



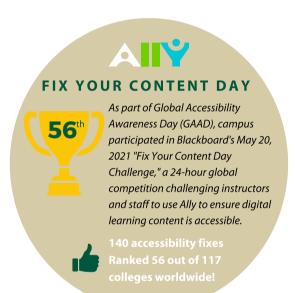
Accessibility

SUPPORTING LEARNING ACCESS
FOR EVERY HORNET

UNIVERSAL DESIGN FOR LEARNING (UDL)

Our diverse campus community requires flexible approaches to teaching and learning. Universal Design for Learning (UDL) is a set of educational principles that expands learning to all individuals in a variety of ways, and our UDL team champions tools, best practices, and training to ensure accessible learning across campus, including:





- Accessible Technology Initiative (ATI)
 Leadership and cross-division collaboration supporting UDL.
- Workshops and Trainings
 "5 Tips for Making Your Online Course More Accessible," "Accessibility in Canvas," and "Designing Accessible Events."
- One-on-One Consultations

 Guide faculty on how to design accessible course materials.
- Remediation Support
 Hired and supervised six student workers to provide document remediation support for the campus community.
- Installation and promotion of Blackboard Ally in Canvas

 Built-in tool within Canvas to help faculty gauge digital accessibility of course
 materials, and recommended corrections.
- Captioning + Transcription Services
 Use CaptionSync, an ADA-compliant captioning and transcription tool

SSWD COLLABORATION

We partner and regularly meet with Services for Students with Disabilities (SSWD) to better serve students with disabilities:

- Discuss shared services, and identify mutual support needs
- Improve interdepartmental workflows
- Ensure campus technologies are aligned with equity-focused practices



Academic Technology team members also serve on the University Committee for People with Disabilities (UCPD) to help turn recommendations into actions.



50%

Faculty converted inaccessible instructional materials (July 2020-April 2021)







Accessibility

EXPANDING + IMPROVING THE STUDENT EXPERIENCE

SOFTWARE ACCESSIBILITY

To ensure campus divisions buy the most universally-accessible products, all prospective technology equipment and/or software is evaluated through the Information & Communication Technology (ICT) process. Conducted in partnership with the IRT Information Security Office, this required evaluation ensures that tools are accessible for persons with disabilities in support of state and federal laws.

LIVE CAPTIONING + TRANSCRIPTION

Use of instructional video in classes during the pandemic greatly increased, and these tools are enhancing the accessibility of instruction for all students:

• Otter.ai live transcription software

This new software tool supports synchronous instruction and live note-taking through video applications like Zoom, or for transcribing previously-recorded instructional videos for asynchronous use.

CaptionSync captioning and transcription tool

In addition to Zoom's built-in live captioning, this ADA-compliant software has been highly used - from January 2020-March 2021, nearly 230,000 minutes of captioned audio/video content, and over 220,000 minutes of transcribed audio/video content were created.



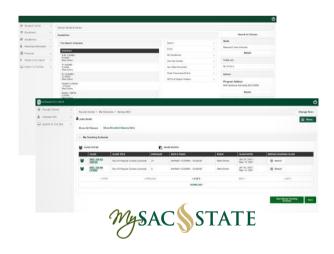


ACCESSIBLE STUDENT + FACULTY CENTERS

In Summer 2021, the IRT Enterprise Systems team worked with the Appsian vendor and Student Affairs to unveil an improved Student Center experience. The new Student Center redesign includes:

- A more modern look and feel
- · Significantly improved accessibility
- A consistent self-service experience on desktop and mobile devices.

Sacramento State will also be one of the first CSU campuses to roll out a new Faculty Center - launching in tandem with the Student Center, and featuring the same improved user experience.















230,000

Minutes captioned audio/video content and 220,000+ minutes transcribed audio/video content



Learning Space Services

ENSURING A CAMPUS-WIDE TECHNOLOGY STANDARD



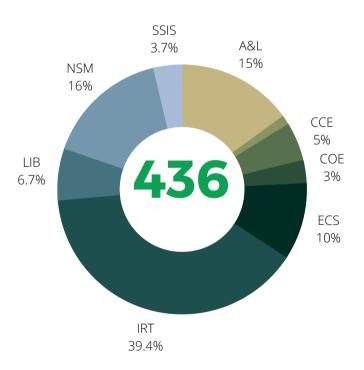
CLASSROOM TECHNOLOGY RENOVATION

Learning Space Services (LSS) supports the video conferencing, recording and captioning services for instruction, meetings, and webinars through the use of Zoom, Mediasite, and Otter.ai. As with so many pivots during the campus closures, the LSS team diversified focus from the daily support of instructional and administration video infrastructure to include supporting the increased demand of video conferencing, recording and captioning, and preparations for a full-scale update to University classrooms in advance of the Fall 2021return to campus planning.

CARES/HEERF CLASSROOM STANDARDS UPDATE PROJECT

While primarily supporting the increased demand of video conferencing, recording and captioning, the LSS team also embarked on a full-scale update to University classrooms to support the mixed modes of instruction (face to face/flexible/remote) for Fall 2021. Partnering with Procurement, Facilities and College representatives, the project utilizes CARES/HEERF funding to facilitate a common standard across campus learning spaces:

- Consistent audio/visual configurations across classroom environments
- Flexible classroom environment that is responsive to faculty mobility needs and today's learner needs
- Establish a resources/support partnership between IRT and the colleges for classrooms under their scheduling responsibilities
- A defined refresh strategy and budget to keep classrooms up-to-date





ALL of your team stepped up to the added challenges presented by the [COVID-19] required remote learning mode. As I said to a few people, without IRT, there would not be virtual classes.



Diversity, Equity, Inclusion + Anti-Racism



GENDER PRONOUNS PROJECT

Supporting the Inclusive Excellence and Student Success campus imperatives, the Gender Pronoun Project activated the Chancellor's Office-provided PeopleSoft module for CSU students to enter and manage their gender pronouns within campus systems. Faculty and advisors can see their students' gender pronouns, supporting respectful engagement during class or advising sessions, fostering a sense of safety and belonging.

The solution adjusted data feeds to provide a single-entry process for students to enter their gender pronouns (or non-binary) in their Student Center on My Sac State, and have it propagate across Canvas, StarRez Campus Housing System, Class Roster, and their Advising Center and Advising Summary.



NEW BIAS + CONDUCT ONLINE REPORTING

The new Maxient online reporting tool is part of a more robust, centralized system to streamline reporting and case management of campus conduct, CARES, Title IX and bias cases. Used by student conduct, HR, and Inclusive Excellence, Maxient leverages both employee and student data, produces reports for managers and Clery, provides form templates for online reporting, as well as:

- Improves ability to track and address accusations of racism, bias, and conduct incidents
- Manages visibility and communication between departments within the system
- Provides direct access to reports that were previously not readily available

"We will be able to capture more things in real time and deal with them in a timely way."

-William "Skip" Bishop
Director Equal Opportunity and
Title IX Coordinator



STINGERS UP FOR DEI

Diversity, Equity, Inclusion, and Anti-Racism

"Adopt and advance diversity, equity, inclusion, and anti-racism to flourish individually, excel professionally, and advance knowledge in information technology."

IRT Strategic Goal #6



Information Security

24/7/365 DATA + NETWORK SECURITY

MITIGATING RISK

In the first few months of 2021, the ISO team made substantial progress towards reducing the number of aged vulnerabilities in our campus systems. Within the IRT division, we are managing operating systems and application vulnerabilities in a more timely manner, and are now developing a new reporting process to apprise deans and other campus leaders of the server and application vulnerabilities in their respective areas.



PCI COMPLIANCE

The ISO team completed the credit card compliance project (PCI), and submitted a compliance status report for all credit card processors to the CFO.



TECHNOLOGY PROCUREMENT + CONSULTATION

A new Risk Analyst joined the team in Fall 2020 to reenergize the campus Information & Communication Technology (ICT) process. This important evaluation process - part of any technology purchase - ensures campus system compatibility, security, accessibility, and compliance with federal and state laws. Efforts are also better connecting the ICT process with the IT project management intake and prioritization process to provide a streamlined experience, with new step-by-step web resources to assist campus requestors, and consultation services:

- Partner with campus divisions to consult on purchases
- Provide assistance with the ICT process
- Ensure all IT purchases are documented, have completed risk assessments, and will provide value to campus.

SAFER BY DESIGN

In Summer 2020, the ISO and IRT Networking teams developed a new High Security Workstation image. The secure image eliminates the need to use the now-retired Citrix virtual desktop, and configures Global Protect VPN for advanced security for computers accessing sensitive data, and has been rolled out to these areas:

- Human Resources
- Office of Faculty Affairs
- Financial Aid
- Bursar's Office

GOALS

- Eliminate non-modern authentication, and enforce campus-wide Duo use to prevent compromised accounts and phishing runs
- Perform critical application risk assessments



Information Security

PROTECTING CAMPUS WITH EVERY CLICK

PROTECTING SENSITIVE LEVEL 1 DATA

Beyond the due-diligence of every campus member, a significant part of cloud storage security processes are tools and internal audits that support compliance, help identify and mitigate potential risks, and reduce or eliminate information security breaches.

- Implemented Prisma, Palo Alto Network's Cloud Access Storage Access Broker, that helps ensure that files containing Level 1 data housed within Microsoft 365 tools are stored properly and securely, and automatically notifies a user if a file needs to be moved to a secure storage location.
- Every University-managed workstation/device includes Identity Finder (also known as Spirion), a manually run scanning software that locates sensitive data saved locally on a device.



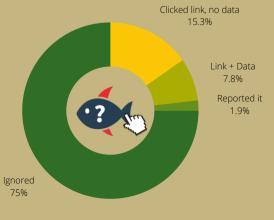


DATA SECURITY & RECORDS RETENTION

The ISO team continues to partner with ABA to create an inventory of campus records and data, and develop consistent processes for data requests and other aspects of data management. The team performed many security training sessions, and distributed a revamped Sensitive Data Inventory Survey to campus in April 2021, which provided education about the Data Classification and Protection Standard, and supports building the critical inventory of sensitive data sources and locations campus-wide.

PHISHING AWARENESS

The ISO continues to improve phishing awareness through periodic PhishMe education campaigns. Whether general, or targeted to address timely threats - such as phishing aimed at student financial aid, tax scams, and COVID-19 - we're seeing improvement across the campus community, and will continue to provide training and education campaigns.



Results from March 2021 Student PhishMe campaign

MANDATORY MFA



In addition to ongoing phishing education tests, campus now requires everyone to use Multi-Factor Authentication (MFA) with Two-Step Verification with Duo. Should a Hornet fall for a phishing attack, there's a critical security layer in place to help protect account information from would-be hackers.



Systems + Identity Management

INFRASTRUCTURE, APPLICATIONS + SUPPORT

MITIGATING RISK, INCREASING CAPACITY

The Systems and Identity Management team manage critical University infrastructure systems and applications, along with providing tier three support for almost 1,000 servers, as well as:

- Identity and Password Management
- Server Virtualization and Storage
- Active Directory
- Microsoft 365
- Single Sign-On (SSO) + Multi-factor Authentication (MFA)
- Data Backup and Restoration
- Load Balancing and Redirection
- Server Vulnerability Management
- · Application and System Monitoring
- Advanced OS Support and File Sharing

PLANNING FORWARD

The team performed a 5-year Total Cost of Ownership (TCO) exercise for campus storage, backup systems, and servers. While long-term funding shortfalls are anticipated, offset strategies including cloud migration and a reduction of campus-hosted services are being evaluated, as well as:

- Continued work towards a 'cloud first' campus strategy
- Reduction of servers and services hosted in the campus data center
- Full modern authentication integration in Microsoft 365

The team completed projects to sustain and increase the supportability, capacity, and capability of IT infrastructure, along with performing critical assessments related to backup systems and disaster recovery readiness. Among the most critical work:

- Evaluating the vulnerability of data backups to ransomware attack.
- Supporting remote teaching, learning, and working capabilities through enterprise use of Microsoft Teams.
- Enabling self-service SacLink password resetting via personal email or text message.



Microsoft Teams utilization continues to grow



1.7 PB

Petabytes of managed storage
1.5 PB = 10 billion photos on Facebook



3.9M

Campus emails processed each week



Enterprise Systems

ENGINEERING THE USER EXPERIENCE

ACCOUNT ADMINISTRATION

IRT's Enterprise Systems team manages the majority of the University's critical PeopleSoft systems - think CMS HR, as well as employee and student administration systems accessed through the My Sac State portal.

Partnering with ABA, HR, Student Affairs, and Academic Affairs, the team provides day-to-day support, as well collaborates on divisional projects that require student and/or employee data integration.



PROTECTING SENSITIVE DATA

In coordination with the IRT Information Security Office, the team has reinforced firewall security measures to protect data access within our PeopleSoft CMS systems. These important security enhancements provide increased protection for our most sensitive data:

- Implemented Location-Based Security for employees who have access to sensitive data
- VPN requirement for employees accessing sensitive data in CMS, including HR, Financial Aid, and Registrar Office employees

SUPPORTING REMOTE TEACHING + LEARNING

With COVID-19 remote learning requirements, the team worked closely with Academic Affairs and Student Affairs to ease the impacts to students, including:

- Ongoing support for student self-service grading basis changes
- New integrations for OnBase workflow processes
- Addition of Instruction Mode in student class search results
- Launched redesigned, more accessible Student Center and Faculty Centers in Summer 2021



THE CAMPUS DUO-VOLUTION



Instituting mandatory multi-factor authentication for campus was a massive undertaking pre-pandemic, but became even more essential for protecting Hornets during the virtual University days. In partnership with Student Affairs, students now benefit from Duo security.

66,000 8,527

Enrolled Duo users

May 2021

Enrolled Duo users

March 2020



Campus Applications

POWERING DIGITAL TRANSFORMATION

SYSTEMS ADMINISTRATION

The Campus Application Team (CAT) provides primary administration and support for OnBase, Adobe Sign, SacSend 1.0, SacSend 2.0 powered by Emma, a suite of applications the supports philanthropy efforts for University Advancement, integrations with other campus systems using GoAnywhere, and internally written integration applications. The CAT team also helps campus departments with technical administration of the following systems:



Academic

- CAT (Course Catalog Maintenance System)
- CIM (Curriculum Management Workflow Solution)

Transactional

• CashNet, and OneCard

Operational

- AiM (Facilities Services Work Orders)
- Astra Schedule
- Go Anywhere
- T2 Parking System



DIGITAL TRANSFORMATION

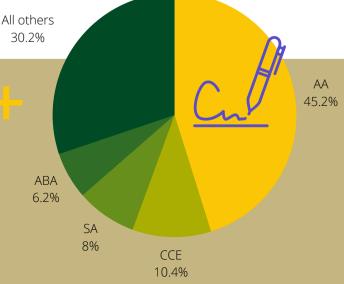
As the primary administration and support team for academic, business, and philanthropic campus applications, the Campus Application Team (CAT) supports a host of essential transactional software tools used daily.

With the COVID-19 campus closure, their work turned to rapid-fire digital transformation efforts, leveraging OnBase and the newly launched Adobe Sign to create workflows and forms support to ensure continuity of academic and business operations.



41,000+

FORMS SENT FOR E-SIGNATURES VIA ADOBE SIGN





Change Control

COLLABORATIVE CAMPUS IT CHANGE MANAGEMENT

CAMPUS TECHNOLOGY COLLABORATION

Led by Information Resources & Technology, Change Control is the process to coordinate application and system modifications to increase availability and reliability for our campus-wide IT stakeholders.

A dedicated SharePoint site is used to record, review, and provide a historical log of IT changes that are outside of routine daily operations to help document/ensure:

- Awareness and Collaboration
- Expected Impact and Risk Level
- Communications and Timing
- System Outage Root Cause Analysis
- Server/App Vulnerability Checkpoints
- Process Review and Improvement



IT COMMUNITY ENGAGEMENT + COLLABORATION



During the pandemic, weekly Change Control meetings continued via Zoom, and were attended by:

- · IRT staff
- Area IT Consultants (ITC's)
- IT functional owners
- Other IT stakeholders



Evaluate big impact/high risk changes 2+ weeks in advance for planning and communications purposes.



Discuss outages, root causes, and process improvement; periodic application and system vulnerability reviews for items over 90+ days





41.25

Average technology change projects per month



Operations & Network Services

INNOVATIVE SOLUTIONS FOR CONNECTING CAMPUS

CONNECTION ALTERNATIVES

With the COVID-19 campus closure, campus Wi-Fi usage predictably dipped - which posed challenges for faculty, staff, and students who rely on the campus eduroam network for daily connectivity. The Network Team worked closely with campus partners including Student Affairs and the Chancellor's Office to promote alternatives, including the following:

- Wireless access points in Parking Structure 5
 Added wireless coverage to provide students
 with drive-in network access.
- Comcast Internet Essentials Program
 Distributed internet discount codes to students
 for Comcast home internet service.
- Hotspot Deployment

Assisted the IRT Service Desk distributing Internet Hotspots for faculty, staff, and students.



ON-CAMPUS WI-FI USAGE



February 2020 - March 2021

REMOTE WORK CONTINUITY + SECURITY

Global Protect VPN Support

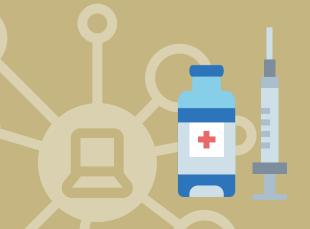
Global Protect Virtual Private Network (VPN) usage scaled up from roughly 100 employees to remote work levels of 1,200 concurrent users and 4000+ devices.

High-Security Workstation

Configured VPN system to add advanced security protection on employee computers that access sensitive data.

Softphone Deployment

Coordinated with the IRT Desktop Support team to deploy Avaya OneX Communicator softphones, which mimics campus desk phones while working remotely.



SUPPORTING COVID-19 VACCINES

The IRT Network and Facilities Management teams worked together on critical infrastructure upgrades and installations to support Sacramento State as a regional COVID-19 vaccination location:

- Installed wireless access points and equipment in Parking Structure 3 for drive-through vaccinations.
- Connected sub-zero freezers storing the vaccine in the Ernest E.
 Tschannen Science Complex to the network for monitoring.



Operations & Network Services

NETWORK UPGRADES + EXPANDING WIRELESS COVERAGE

Taking advantage of an unpopulated campus during the COVID-19 campus closure, the Operations & Network Services team resumed planned network upgrade projects, transitions, and expanding campus infrastructure capacity.

Wi-Fi 6 Upgrade

Upgrading existing wireless access points in campus buildings to the more powerful Wi-Fi 6.



ECS Workstation Transition

Replaced network network switches, access points and IP phones, and transitioned ECS workstations to the campus network.

Outdoor Wi-Fi Social Distancing Project

Expanding access points to accommodate campus repopulation needs.



Athletics

Assisted Athletics to scope and help install vendor video recording devices to capture campus sporting events per NCAA compliance.

WEERGEZCY

CAMPUS SAFETY

- e911 server upgrade
 Upgrading the system that tracks
 building/room of IP phones to
 locate emergency callers.
- Blue Light Emergency Phones
 Added new emergency phones near
 Shasta, Santa Clara, Kadema, and
 Lassen Halls.
- University Union IP Speakers
 Added network infrastructure to
 accommodate 200+ public
 address speakers.



TELECOM

- USGS Placer Hall IP phones
 Upgraded wiring infrastructure and added new switches for 180 IP phones to replace aging digital phone sets.
- Consolidating Phone Lines
 Consolidating analog and digital phone line ports to save on maintenance costs.
- Cloud Migration + Reporting
 Migrating campus telecom accounting system to the cloud to reduce on-premises software and server requirements, and tap into new reporting that generates monthly chargebacks.



- 4x the network capacity and wider range
- 8k streaming ability
- 40% increase in data throughput = faster downloads
- Better performance in multi-device environments such as classrooms and labs
- Longer device battery life

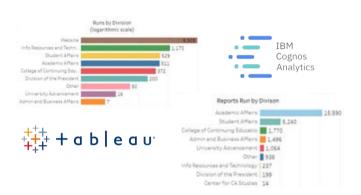


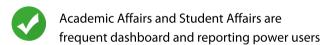
University Reporting & Data Services

DATA-DRIVEN ANALYSIS + DECISION MAKING

BY THE NUMBERS

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.





Provisioned campus users can run and request reports and dashboards needed for business processes and data-driven decision-making

Campus data scientists (CDS) are able to take a deeper dive via CDS data sets

In addition to completing charter documentation with Institutional Research, Effectiveness, and Planning (IREP) for the University Data Governance Program, here are project highlights from 2020-2021:

Student Financial Aid Dashboard

Visual display of applications and disbursements.



College of Education Credential Report

Completed CTC Credential Report and mapped out a process for automating the collection of the data in subsequent years.

College & Career Readiness Dashboard

Presented needed datasets for dashboard development.

Foreign Student Dashboard

Completed a mapping dashboard for foreign students by origin, and mailing address.

Full Circle Project

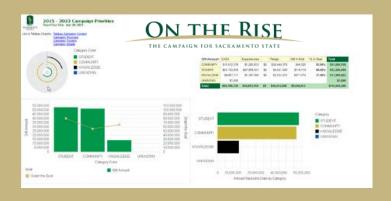
Ongoing collaboration to develop a project dashboard.



Advancement Donor Behavior Dashboard

Created a series of dashboard views supporting the On the Rise Campaign for Sacramento State:

- · Annual campaign results
- Gifts by college/program
- Active prospects by assignment group
- Prospect stage by assignment
- · United States map of gifts by year





University Reporting & Data Services

DATA-DRIVEN ANALYSIS + DECISION MAKING

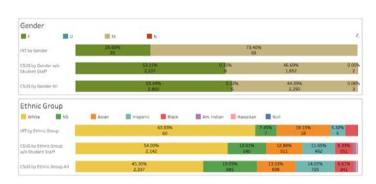
METRICS DASHBOARDS

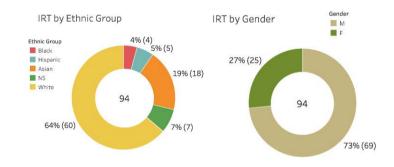
Created a number of IRT Metrics Dashboards highlighting the usage of top applications and campus processes:

- · Adobe Sign
- Laptop & Equipment Checkout requests
- Verizon and AT&T Hotspot utilization
- Canvas
- Zoom
- SacSend 2.0 powered by Emma
- Daily Health Assessment (Sac State Mobile App)
- Staff Demographics for Diversity, Equity, and Inclusion

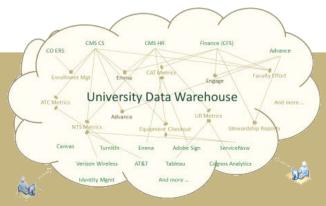


DIVERSITY, EQUITY & INCLUSION





IRT staff demographics for Diversity, Equity, and Inclusion



The University Data Warehouse integrates the University's multiple data sources to provide helpful insights.





Web & Mobile Services

STAYING CONNECTED TO THE SAC STATE EXPERIENCE



SAC STATE MOBILE APP

As expected, downloads for the Sac State Mobile app increased significantly during the campus closure, as faculty, staff, and students utilized this handheld lifeline to manage many formerly in-person activities, and tap into newly launched remote-friendly features.

WORKREADY MOBILE ASSESSMENT

In preparation for some faculty, staff, and students to return to campus in limited numbers, the IRT Web & Mobile team collaborated with Modolabs to implement their "Workready" solution.

The Workready Mobile Assessment, which appears as a badge on the Sac State Mobile campus app, supports a process to:

- Screen campus visitors for COVID-19 symptoms before campus arrivals
- Track data for general public safety, contact tracing and health compliance reporting preparation.

10K

70%

Increase in app downloads in the past 12 months!







CONTACT-LESS MOBILE PAYMENTS

In partnership with Student Affairs, we rolled out a new way for student organizations to pay their club dues through Modo Marketplace, a mobile payment platform. Club officers can manage their club information online, and all members can pay their dues through their mobile phones via the Sac State app.



CARMENCEMENT

Putting the 'social' into the first-ever CARmencement! The IRT Web & Mobile team worked with the President's Office to help graduates and their families connect and celebrate live through the Sac State mobile app, including:

1,900 Unique page visitors!

- Parade route map
- Live cameras
- Social media feed
- KSSU live stream + music playlist





Web & Mobile Services

STAYING CONNECTED TO THE SAC STATE EXPERIENCE



ON THE RISE CAMPAIGN WEBSITE

To provide a branded but distinctive web experience for donor and community engagement, U/X professionals from the Web & Mobile team collaborated with University Advancement to create the new "On the Rise" campaign website. Launched in March 2021, content sections highlight the University campaign to raise \$225 million to support students, deepen knowledge, and build community. Animations, a philanthropic giving map showing how and where donations are making an impact, and alumni profiles create an immersive experience.

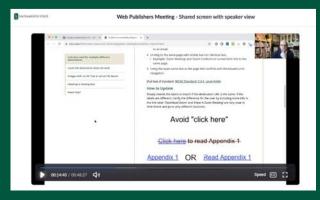
UNIFIED NEWS PROJECT

Developed in partnership with University Communications, the newly consolidated campus news experience improves visibility of Sac State news and events, plus easier backend administration. Visitors enjoy a convenient one-stop at csus.edu/news for all things Sac State news, including:

- Sac State Newsroom
- Sac State Magazine
- Made at Sac State blog
- Beyond J podcast
- University social media

Plus, a new story archive filter for quicker searches!





WEB PUBLISHERS GROUP

The Web Publisher group meetings gather together provisioned faculty and staff who manage campus web pages to ensure compliant, accessible, and engaging web experiences.

- Campus web accessibility guidelines and utilizing SiteImprove
- Content structure and usability best practices
- Enhancements and sneak peeks
- Support for web content creation, tips, and troubleshooting



IRT Teambuilding

CONNECTION, RECOGNITION, PROFESSIONAL DEVELOPMENT



GO, TEAM IRT!

Within the mission critical support for our campus community, we dedicated time each week to connect as a division, and have some virtual water cooler time with each other.

While there is an "I" in IRT, this past year committed us more than ever to "we" within the unprecedented campus closure, campus depopulation, and redefining how we provide service, support, and solutions to our Hornet Family.

WEEKLY TEAM MEETINGS

Internal collaboration - thanks, Zoom and Teams! - helped, along with weekly IRT division check-ins where we connected, shared project updates, and made time for fun to help manage daily stresses:

- Featured department updates
- · Trivia and games
- Desk aerobics
- Breakout rooms for social time









SO 'REWARDING'

The annual IRT Project Awards and People's Choice Awards ceremonies went virtual, with lighthearted COVID twists to the award categories and "trophies."



2020 ENS Information Review/Update Process

2021 IRT: Exchange 2020 Upgrade Divisional: Hornet Launch

IRT PEOPLE'S CHOICE

2020 Teresa Palmer + Long Lim (IRT Service Desk)

2021 Meng Her (Web & Mobile Services)







