## Sacramento City College Strategic Planning System Cross-Divisional Program Plan

Planning years: 2023-2026 Plan Type: Program Plan

Planning Area: Information Technology

**Primary Division:** Information Technology & Media Services Division

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## **SECTION I: OVERVIEW & REVIEW OF PREVIOUS ACCOMPLISHMENTS**

## A. PROGRAM DESCRIPTION

Information Technology is a critical college resource supporting the achievement of student learning outcomes, student success, and college strategic goals, as well as supporting the effective delivery of college programs and services. IT provides services such as computer replacement and maintenance, software licensing and installation, network infrastructure assessment and improvement, and server replacement. The department also secures internal resources, in addition to supporting other student and employee technological needs.

## B. REVIEW OF ACCOMPLISHMENTS OVER THE PREVIOUS PLANNING CYCLE

2023-2026 AUO and SLO Assessment Results								
College Strategic Goal	Administrative Unit Outcome (AUO)/Student Learning Outcome (SLO)	Assessment Measure/Target	Outcome					
A2	AUO #1: Explore issues associated with making schoolowned portable technology available to students to promote success but address issues of security and management.	Target: Work with available campus programs to determine their requirements for making laptops and/or tablets available to students.  Baseline year: 2023-2026  Measure(s): Purchase requests, JAMF MDM usage for Apple products, KACE for PCs, PDQ Deploy.	During 7/1/24-6/30/25 accomplishments: Continued support for Business, Library, and BNC/Panther Cares for laptop checkout and distribution for laptops and Chromebooks.  Continued IT support for the Student IT Helpdesk for campus and student owned devices.					

		<b>Data Source(s):</b> Purchase requests and items received.	
A2	AUO #2: Facilitate student-owned computers in labs and classrooms, including access to cloud-based storage and printers via PaperCut, while protecting the security of college technology resources.	Target: Increase access to college IT resources by supporting students with their own computers in classrooms and labs wireless printing in computer labs.  Baseline year: 2023-2026  Measure(s): Number of computers accessed by students in the form of student and lab computers  Data Source(s): Records reflecting the number of computers in production, in labs, and the number of computers given away or loaned to students and employees; VDI server logs	Licensing servers allow students to utilize software such as avid ProTools and SPSS on student owned devices both on/off campus.  Multiphase campus Wi-Fi augmentation has broadened the access and throughput for student technologies.  OKTA — a secure single sign-on system is used to provide secure access to a wide variety of district technology and software. (IE, ADA software, office365, Google Drive, eService's etc.)  Link to New District Hub Page: https://lrccd.okta.com/  The number of laptops available to the students via Chromebook projects, laptop loans, and lab computers on campus have increased student computer accessibility. Also, the expended use of the VDI Open Lab increased access to hardware-specific programs.
A3	AUO #3: Increase access to college information resources for end users with mobile devices both on and off campus.	Target: Ongoing evaluation of campus-wide or classroom-specific wireless coverage Baseline year: 2023-2026 Measure(s): Number of installed Access Points (AP) on campus, number	During 7/1/24-6/30/25, the following network project is scheduled to be completed:  • 7 additional Indoor APs in multiple rooms buildings include: SG, NG, RHN, HUS, RHS, PAC

		of devices that the APs can support, and areas now covered that were not previously covered.  Data Source(s): Meraki management server, installation records, vendor AP specs and wireless heat map before/after installation.	Moves to upgrade to multiphase cabling are being pursued.
A5	AUO #4: Improve access to information technology resources at the Outreach Centers by improving network capabilities and access to computing resources.	Target: Provide sufficient IT resources to ensure the efficient operation of Outreach centers Baseline year: 2023-2026 Measure(s): Number of devices supported, number of labs and SMCL resources available and operational. Data Source(s): Inventory records, switch/AP	During 7/1/24-6/30/25, the following network upgrades were done in the Outreach Centers:  Upgraded servers for WSC and DAC  Secured network cabinet and AC power source at McClellan Center from unauthorized access.
		upgrade records, student use of lab info.	

A6	AUO #5: Evaluate Unit Plans and replacement cycles to determine the feasibility of proposed technology acquisitions and the usefulness of existing technology deployment.	Target: More efficient use of resources and assessing the feasibility of the request and computer acquisition/installations.  Baseline year: 2024-2025  Measure(s): The lab supports the software that the education plan requires and delivers the application efficiently to optimize learning opportunities.  Data Source(s): Campus IT, department requester & ACITE	24-25 Replacement Cycle for hardware and software is complete.
A7, A10	AUO #6: Implement software that can assist faculty and staff to improve student success	Target: Provide access to software relevant to increase student engagement.  Baseline year: 2023-2026	Ongoing usage of software to support remote instruction, such as Zoom, Google Apps, MS Teams, Adobe CC, Office 365 Apps,

		Measure(s): Software installation requests; demand for the VDI environment; software provided on campus and via remote access.  Data Source(s): Requests logged in Service Central.  Access logs in our virtual environment.	SplashTop, OneDrive, and the VDI environment that was provided.
A	AUO #7: Support college construction and renovation plans.	Target: Technology for the Health and Awareness Center, the newly constructed Basic Needs Center & Temp 1 remodel (MakerSpace) is ready to support these areas. Baseline year: 2023-2026 Measure(s): Buildings completed with technology installed. Data Source(s): Service Central tickets, number of computer carts prepared	During July 1, 2024 - June 30, 2025 SCC Health and Awareness Center Renovation Adding new workstations Wireless AP's, Cabling, Switches, Outdoor AP's. Expected completion date prior to 06/30/2025.
С	AUO #8: Develop ongoing communication mechanisms for facilitating dialogue on IT policies and issues.	Target: Increase communication with campus & District groups regarding IT matters  Baseline year: 2023-2026  Measure(s): Agendas and minutes of governance meetings demonstrating dialogue with the campus Education & IT Committee (EITC) And Senior Leadership Team (SLT)  Data Source(s): Meeting records	As an additional communication method, a Microsoft Teams channel has been established between campus IT and DO IT staff. This channel is dedicated to addressing high-priority issues (Priority 1/Priority 2 incidents) quickly and effectively. Communication is also established through the Public Information Office for major outages.  Furthermore, regular meetings are held to notify and coordinate campus IT about upcoming major projects, upgrades, and maintenance activities via districtwide Change Advisory

	Board/CAB (held weekly),
	and between DO IT and
	campus IT teams (bi-weekly).
	In conjunction with EITC,
	SLT, Campus Executive
	Team, and other
	Academic/Classified/Student
	Governance groups
	discussed campus-wide
	projects and weighed
	concerns and suggestions.

## Narrative: Brief summary -

IT continues to purchase and support employee remote efforts. The college achieved significant progress in IT services and infrastructure to support strategic goals:

## Recap:

- **Hardware Purchase:** Approximately 300 PC & Mac student and employee computers were purchased and deployed.
- Student Technology Access: Expanded laptop and Chromebook distribution through campus programs and enhanced support for student-owned devices via secure systems (OKTA) and tools like PaperCut and VDI Open Labs.
- Improved Connectivity: Upgraded campus Wi-Fi with several new Access Points, boosting network access and performance. (Indoor and Outdoor)
- Outreach Centers: Enhanced resources with server upgrades and secured facilities at West Sac, Davis and McClellan Centers.
- **Software Access**: Continued to provide essential tools like Zoom, Office 365, and Adobe CC for remote and on-campus use, increasing engagement and learning opportunities.
- **Construction Support**: Delivered IT infrastructure for new and renovated facilities, including the Health and Awareness Center and MakerSpace.
- **Communication Improvements**: Strengthened dialogue on IT policies via Microsoft Teams, governance meetings, and Change Advisory Board updates.
- Campus Inventory Maintenance: Improved accuracy of Campus IT inventory with the creation of a new database and program. Also hired a special projects employee to investigate DNR computers and computer usage

These initiatives highlight the college's dedication to advancing technology resources and fostering student success.

## Review of previous years' resource use:

## 7/1/23-6/30/24

• Vacant Sr. IT Tech position was used to convert several positions within the IT department to assist with ongoing support efforts for employees and students. IT was able to convert 9 & 10-month

Senior IT Techs to 12-month employees. Additionally, the IT Specialist I was converted from a 9-month to a 12-month Specialist II position.

- Over 547 PC & Mac student and employee computers were purchased and deployed
  - o IT hired Student Help to assist with the laptop deployment project and to surplus the old equipment.
- The IT department hired a temporary classified Senior IT Technician to support upgrading of 190 laptops for the L&L carts.
- Districtwide integration of new Single Sign-on system, OKTA, for students and employees
- Continued enhancement of Wireless Access Points (WAP) & wired infrastructure, improved monitoring of wireless systems (18 indoor in campus)

#### **AOU #1**

After the districtwide Chromebook project ended in October 2023, there was still a demand for Chromebooks. To address this, the Basic Needs program bought 400 Chromebooks and 100 laptops. These devices were quickly set up and made available for students to borrow from the library. The IT department's Student Help and a temporary IT Tech I played a key role in having those units to be imaged and deployed in short notice.

Before buying the devices, the project was introduced and reviewed/approved by the campus Education & IT Committee. They agreed that filling this gap was important.

#### **AOU #3**

- 11 additional outdoor APs: These were added to extend outdoor wireless coverage.
- **B153 network cabling**: Setup to support Career Center employee and student machines move into Bus building.
- **18 additional APs for the PAC Building**: These are intended to support instructional needs within the PAC Building, providing improved wireless coverage and capacity for users in that area.
- **3 additional APs for RHS**: These are intended to support instructions within the BSS division at RHS.
- **7** additional APs for Hughes Stadium training rooms: This addition is aimed at enhancing wireless connectivity within the training rooms.
- 1 external AP for section 15 ticket booth: This external AP will provide wireless coverage specifically for the ticket booth area in section 15.
- Establishment of a new IDF in Lusk Building: This involves setting up a new Intermediate Distribution Frame (IDF) in the Lusk Building, which includes an Access Point (AP) in room 115. This infrastructure setup is crucial for distributing network connectivity within the building.
- **New Basic Needs Center**: This center will have 3 internal APs and 1 external AP. These APs will provide both internal and external wireless coverage for the Basic Needs Center to ensure users have reliable connectivity both inside and outside the facility.

## AOU #4

- Switches were updated at West Sac, Davis, and McClellan locations. This likely involved upgrading or replacing network switches at these sites to ensure optimal performance and reliability.
- Additional APs added to West Sac: Eight additional Access Points (APs) were installed to augment the wireless coverage and to accommodate growing demands at that site.

## AOU #5

• To optimize the remaining 61 PC and 10 Mac employee mobile workforce laptops, they were imaged and deployed to the Library for the student checkout program. This strategic move

ensures that these resources are put to effective use, benefiting students who require access to laptops for their academic pursuits.

## AOU #7

 Construction was finalized for the Basic Need Center and remodel of the Temp 1 building to accommodate the MakerSpace program. These initiatives are aimed at enhancing facilities and resources to better serve the campus community needs.

## 7/1/22-6/30/23

## **AOU #1**

The pandemic caused a huge upswing in the purchase of technology for students. Chromebooks (1,123), hotspots (243) and laptops (40 high-performance loaner laptops for CTE students). Distribution of the devices was handled by LRC, IT, and other departments. For security measures, District Anti-Virus, Chrome device management, JAMF and KACE management tools were all used.

#### **AOU #3**

## Wireless AP project:

Replaced Cisco with Meraki Wireless Access Points. Also, added new Access Points as needed (total of 234 APs). The new APs can handle more devices with better coverage.

**Switch Project:** Replaced 139 Cisco with Meraki switches. In addition, the bolstered fiber backbone provided more throughput to the wireless APs.

## Campus VDI system:

Allowed students to remotely access specific software that was previously only available on lab/classroom machines. Allowed approved employees to access District/campus internal resources remotely.

**Global Protect/GP VPN**: allows staff to access campus network resources remotely.

## Factors affecting the work of the program:

- a. Structural organizational changes occurring at both the district and college level have impacted the IT department because of workflows that have changed and are undefined. Personnel changes have also impacted the IT department and service interruptions occur due to unknown organizational hierarchy, end-user unfamiliarity with support offerings, and employee onboarding and transitioning workflows.
- b. Forecasting the future requirements of labs and classrooms untouched since the pandemic poses many challenges. Under these circumstances, planning, procuring, and deploying new computers to these areas become more complex. The absence of recent usage data complicates the accurate evaluation of technology resource demands in these environments, thus hindering effective resource allocation.
- c. Additionally, IT staff may face occasional demands for learning and training with innovative technologies with short notice. For example, the integration and adaptation of technologies such as Amazon Web Services (AWS), Microsoft Teams, Office 365, OneDrive, and OKTA (single

sign-on) may require rapid skill acquisition and training. Adapting to these innovative technologies while managing existing systems and responsibilities can strain IT resources and personnel.

- d. During the college reorganization, the IT department took over the Student Tech Support role previously held by LRC. The rationale was establishing a centralized support hub for students facing technical challenges with their laptops and software. Currently, this support is offered within the IT staff's workspace, which creates challenges due to limited space and lack of visibility for students seeking assistance.
- e. Ongoing DNR (Do Not Replace) concerns college-wide have an impact on the IT staff workload. Additionally, DNR computers are not part of the Computer/Laptop Replacement Cycle, which places the college and department in a vulnerable position as DNR computers are past their hardware warranty and cannot be easily replaced. Moreover, DNR computers are a security concern with limitation being upgraded to the latest OS (Operating System) or security updates due to aging and outdated hardware. VPA's email to the college addressed concerns of DNR computers, data room usage for computer labs and how much they are used. A Special Project Employee has been hired to help verify the locations, and status of DNR/REMOVE stations. This includes communications with existing staff, and physical checks of the inventory in question against the surplus lists.

## **SECTION II: FUTURE GOALS, DIRECTIONS, AND STRATEGIES**

## A. MULTI-YEAR DIRECTIONS AND STRATEGIES

Most objectives outlined in the 2023-2026 IT Program Plan have roots in prior strategic and program plans. While there may be changes in emphasis or specific technologies each year, many strategies are multi-year including the following:

- Student Tech Support
- Expand on digital equity and accessibility for student and employees at the college and centers
- Network switches and Wireless Access Points performance evaluation and improvement
- Upgrade multi-mode fiber cables with single-mode (from IDF to the distribution switch)
- VoIP phones ongoing maintenance and support
- o Review/Replacement cycle for hardware, networking, servers
- Expenditure in institutionally supported software & hardware
- Mobile Device Management and systems deployment strategies that impact network planning
- Organizational changes based on changing work requirements and institutional priorities
- Virtualization as a strategy for providing desktop, laptop and server access
- Addressing information security concerns (SCC-IT and DO-IT)
- Providing training to faculty, staff, and students on both educational and administrative technologies
- Ensuring ADA compliance with purchased and developed technologies
- Assess and upgrade the physical network cable plan infrastructure, including upgrading Ethernet cables i.e., Cat5e to Cat6
- o Purchased PDQ Deploy to push updates and new software in a more efficient capacity

- Investigate technologies that help monitor, alert, and remediate system threats and performance issues
- Analyze the environment of the server room and supplement the current configuration to better provide an optimized, controlled facility for system functionality and longevity
- Investigate ways to improve our current document imaging technology to align with enterprise best practices
- o Professional development and training for IT staff
- Align future college IT program plan with DO-IT Strategic Alignment and Guiding Principles.
   <u>Technology Strategic Plan 2024-2030 (losrios.edu)</u>
- Analyze/Pilot the AWS environment of the servers selected for migration and advise college
   VPA with recommendations to invest in AWS or if further analysis needs to be conducted

## B. UNIT OUTCOMES: <u>ADMINISTRATIVE UNIT OUTCOMES (AUOs)</u> or <u>STUDENT LEARNING OUTCOMES (SLOs)</u> FOR THE PLANNING CURRENT CYCLE

	2023-2026 AUOs and SLOs							
College Strategic Goal	Administrative Unit Outcome (AUO)/Student Learning Outcome (SLO)	Expected Outcomes/Targets						
Goal 1	AUO #1: Implement hardware and software that can assist faculty and staff in ensuring student success.	Provide students with the methods to experience education through various modes on campus, at home, synchronously and asynchronously using expanded Wi-Fi (Appendix B), student use computers, and video capture software. Increased use of the library's loaner laptops/Chromebooks and VDI system would allow the campus lab experience to be extended off-campus (Appendix D)						
Goal 2 & 4	AUO #2: Improve communication and project coordination with the college and District entities responsible for the range of technologies.	Quality and timeliness of services will be improved by standardizing the campus by using Service Central, MS Teams, and Maintenance Connection.						

Goal 2 & 5	AUO #3:	Allow all affected and
	Develop ongoing communication mechanisms for	interested parties to
	facilitating dialogue on IT policies and issues with	express their points of
	EITC, SLT, Campus Executive Team, Campus Safety	view concerning campus-
	groups (LRPD & Operations) and other	wide IT projects equally
	Academic/Classified/Student Governance groups.	and fairly.
Goal 1 & 3	AUO #4:	Continuous assessment,
Godi I & S	Maintain teaching and learning environments for	procurement, and
	students by implementing a computer replacement	deployment of
	cycle for desktops and laptops purchased in the 3-6-	instructional hardware to
	year period depending on need; improve wireless	support contemporary
	coverage campus wide; maintain the VDI	teaching environment.
	infrastructure; advanced loaner PC laptops for CTE	In FY 24/25, IT completed:
	programs via Business division; standard laptops for	=
	regular classes via Library check out process.	Replacement of
	legular classes via Library check out process.	over 300 desktop
		and laptop
		computers in the
		labs/classrooms as
		more on-ground
		instruction was
		hosted in Fall 24 &
		Spring 25
		(Appendix A).
		Improved outdoor
		wireless coverage,
		adding 11 Wireless
		Access Points
		(Appendix B).
		Renewed 300 VDI
		licenses to provide
		students access to
		VDI OpenLab and
		on campus labs
		(Appendix G).
		IT imaged and  deployed ever 171
		deployed over 171
		laptops and 600
		Chromebooks

## SECTION III: ANNUAL PROCEDURES AND RESOURCE REQUESTS FOR THE PLANNING YEAR

## The college's Information Technology functions are conducted through the following procedures:

- 1. The IT department establishes the annual review and replacement cycle for computers and servers. The proposed technology scheduled for replacement is reviewed with area IT support and college division deans/supervisors to ensure the schedule is complete and correct.
- 2. The IT department works with the DO-IT, EIT committee, FM/OPS divisions, and departments to define technology standards for the college environment.
- 3. The IT department works with college divisions to define the needs for modern technology through the Unit Planning process and assess project feasibility.
- 4. The IT department works with the District Office on defining infrastructure needs and district-wide technology requirements and resources.
- 5. The IT department works with departments to control access to accounts, file shares, systems, and computing resources.
- 6. The IT department works with divisions hiring new faculty and staff to obtain necessary technology and access.
- 7. The IT department works with district-based committees and task groups to ensure development and implementation of systems to support student success and college functions.
- 8. Information security procedures and training are the responsibility of the college Information Security Officer, working with the District and college.

# <u>Resource requirements</u>: State the resources (human, financial, facilities, and IT) needed to implement program objectives.

• 2025-26 ACITE (Annual Campus Information Technology Expenditures) attached

## **ACITE/Annual Campus Information Technology Expenditure - FY 2025-26**

Vendor	Product	Due Date	Qty.	Cost	GenFund	VTEA	SEAP	DSPS
Comput	ter Replacement Cycle – PC Com	puters (AC	ITE-01	)	,			
CDWG/Staples	HP Mini - RHS 270		1	1,000	1,000			
	PC Laptops - Standard Faculty & Staff		30	1,350	40,500			
	PC Laptops - Standard Faculty & Staff		111	1,171	130,000			
	PC Laptops - Standard Adjunct Faculty		7	1,350	9,450			
	PC Laptops - Standard Front Counter		1	1,350			1,350	
	PC Laptops - Standard Lab Cart		16	825	13,200			
	PC Laptops - Standard Lab Cart		3	825				2,475
	PC Laptops - Standard Lab Cart		1	825			825	
	PC Laptops - Temp Class		5	1,350	6,750			
	PC Laptops - Standard Smart Classroom		4	825	3,300			
	PC: Lab ATC Program from DAC114		8	1,500				
	PC: Lab High End		27	2,400		64,800		
	PC: Lab		96	1,200		115,200		
	PC Lab		40	1,200	48,000			
	PC Lab		1	1,200				1,200
	PC: Standard Faculty & Staff		14	1,200	16,800			
	PC: Standard Faculty & Staff		2	1,200				2,400
	PC: Higher End Faculty Staf		1	1,600	1,600			
	PC: Front Counter		2	1,200				2,400
	PC: CTS/STS		2	1,200	2,400			
	PC: Career ASST		1	1,200	1,200			
	PC: Standard Adjunt Faculty		23	1,200	27,600			
	PC: Measure		1	1,200	1,200			
	PC: Smart Classroom		8	1,200			9,600	
	PC Smart Classroom	-	22	1,200	26,400			
	Totals				329,400	180,000	11,775	8,475

Comput	er Replacement Cycle – Mac Con	nputers (A	CITE-0	2)	-	-		
Apple	MAC: Smart Classroom		3	2,800		8,400		
Apple	Mac: Laptop Faculty and Staff High End		6	3,460	20,760			
	Totals				20,760	8,400	-	
	Server Replacement Cycle (A	CITE-03)						
CDWG/Lenovo	Replacement Production VM Host	1-Dec	2	12,000	24,000			
	Totals				24,000	-	-	
	Software Maintenance Licensing	(ACITE-04	)					
JAMF -Mobile Device Management for MAC OS X & iOS devices	JAMF AT Mac OS	9/1	160	18	2,880			
	Business Mac OS	9/1	30	18	540			
	Journalism Mac OS	9/1	12	18	216			
	Spare Mac OS	9/1	5	18	90			
	Employee MacBook Mac OS	9/1	95	18	1,710			
	Employee iMacs Mac OS	9/1	6	18	108			
	Spare iPads(15 iPads not joined Jamf the rest projected growth)	9/1	30	9	270			
	DSPS iPads	9/1	8	9	72			
	CDC iPads	9/1	11	9	99			
	HFA iPads	9/1	29	9	261			
	AT/Photo & Cosmo	9/1	13	9	117			
	Bus iPads (10 ECC & 3 division iPads)	9/1	13	9	117			
	Math and Statistics iPads	9/1	3	9	27			
	L&L iPads	9/1	4	9	36			
	makerspace ipads	9/1	10	9	90			
	SCC undocu ipads	9/1	10	9	90			
	RN325 + RN 302 ipads	9/1	7	9	63			
	projection growth OS (we still have 22 extra as of 12/2/24		0				-	
	projection growth iOS	9/1	20	9	180			

Cleverbridge	Bitvise SSH Server Upgrade Extension-Maint. Fee	9/1	2	20	40		
CDWG	VMWare Licensing Maintenance for Server Virtualization Exp: 10/20/19 Renewby: Sept 2019	9/1	1	7,000	7,000		
Computer Land	Adobe Creative Cloud	7/1	696	80	56,000		
	Visio Pro Device #D8701057CFU	8/1	60	55	3,300		
	Visual Studio enterprise with MSDN per user #MX300115CFU	8/2	2	375	750		
Computer Land Desktop bundle	Windows VDA per device #4ZF-00019CFU	8/3	150	34	5,040		
for Faculty and Staff Microsoft	SQL Server Standard Core #7NQ-00303CF	8/4	14	348	4,872		
License Renewal	SQL Server Standard Per Server #228-04437CF	8/5	2	88	176		
	Windows Server Datacenter Core #9EA-00271CF	8/6	10	360	3,600		
	Windows Server Standard #9EM-00265CF	8/7	13	52	676		
Faronics	DeepFreeze	7/1	670	3.75	3,500		
CDWG	VEEAM	10/1	4	425	1,700		
CDWG	VEEAM agent 10 pack	10/1	1	1,300	1,300		
CDWG	Scanner for replacement as needed		1	8,000		8,000	
Naviant	OnBase hardware & software renewal	7/1	1	35,000		35,000	
SSPI	SARSGrid "Anywhere", SARS Grid Add-on Text, SARS Messages, SARS Alert, SARSCall, SARSTrak	4/5	1	13,127	13,127	13,127	
TechSmith	Camtasia Support Exp: 12/2023 RenewBy: 10/24/2023	11/1	41	36	1,476		
PDQ	PDQ Deploy	3/7/24	2	1,575	3,150		
CDWG	Manage Engine (SIEM/Log Correlation/Analytics)	12/1/24	1	4,000	4,000		
CDWG	Pure Storage Array Maintenance	6/1/26			17,000		

CDWG	Pure Storage 2 Array Maintenance	6/1/26			17,000			
IBM	SPSS	12/13/24	1	6,758	6,758			
Card Integrator	Card Integrators (BADGE)	N/A	3	1,195	3,585			
	Totals				161,016	-	56,127	-
l	Jpgrades to Redeploy Computer	s (ACITE-05	)	•				
	Emergancy sinking funds for empl laptops		1	10,000	10,000			
	Redeployment supplies		1	7,500	7,500			
	Totals				17,500	-	-	
Virtual Deskto	p Infrastructure Maintenance a	nd Expansi	on (A	CITE-06)				
VMWare	Maintenance of Current VDI Licenses Exp: 10/24/2024 RenewBy: Sept 2024	9/1	300	150	45,000			
CDWG	Replacement VDI Host		2	15,000	30,000			
	Totals				75,000	-	-	-
	Server room upgrade (ACI	TE-07)						
Various	Equipment to support network changes		1	3,000	3,000			
	Totals				3,000	-	•	-
-	Networking (ACITE-08	3)						
DO IT	Cable installation/replacement (CAT5e with CAT6) for indoor WAPs (wireless access points);	Ongoing for 3/4 years			12,000			
CDWG: DO IT / SCC	UPS Replacement Project.		30	3,000	90,000			
	Totals				102,000	-	-	
	AWS (ACITE-09)							
DO IT	Cloud Virtualized Servers		1	45,600	45,600			
	Totals				45,600	-	-	
	Combined Totals				778,276	182,800	67,902	8,475
	l-			·				

VTEA	\$188,400
SEAP	\$67,902
GENFD	\$778,276
DSPS	\$8,475
Total for FY 24-25	\$1,034,578

## **APPENDICES:**

## A. Computer Replacements

A yearly review and replacement cycle for computers has been re-established based on the age and functionality of the equipment. Campus IT will annually establish the Standard PC, MAC, desktop and Laptop Standard. Most of the computers will be replaced with standard computer configuration. Instructional Labs/Classrooms that may require computers with additional capabilities above standard and the replacements will meet Instructional requirement. Staff computers that require additional capabilities above the campus standard will be required to go through the campus established process.

Switches to other technology (PC to Mac or desktop to Laptop, Real to Virtual) will be decided at the time of replacement cycle review. Currently software is being developed, in-house to keep a more accurate inventory database and hardware tracking system.

## **B. Network Planning Assumptions**

We continue to focus on the availability and coverage of our wireless infrastructure and updating our wired network. We added 11 outdoor Wireless Access Points (WAPs) to various areas, including the outdoor quad area in the center of campus, the Art court, and the PAC corridor. Expanding this service to these areas allows for a more robust wireless infrastructure and enhances adjacent areas where coverage exists and provides a more seamless network experience when traveling across campus. Another upgrade to the wireless network will be replacing the cabling leading to the WAPs. Currently, there are approximately 130 WAPs to upgrade to meet the new cabling standards (Cat5e to Cat 6). It is anticipated that this project can take 3-4 years by completing 30 per year. This project also has a dependency, FM will need to complete the conduit pathways for the cabling. The wireless APs will be transitioning to new mounting brackets. These will move the APs from vertical wall mounts to horizontal ceiling mounts. The change in orientation will improve signal quality and range. We anticipate completing 59 UPS replacements in the Spring of 2025.

## Here are some network-related projects that campus IT is planning for 2023-26:

- Indoor & outdoor Wi-Fi coverage has been improved across the campus including the PAC building.
   Ongoing process.
- The wired network will also undergo cabling upgrades, and existing cCt5e cabling will gradually be replaced with high-flex Cat6 cables.
- The McClellan center classroom IDF was provided a locking power cable and structures put in place to make the cabinet more ADA-compliant. Completed in Summer of 2024
- Basic Needs Center (Panther Cares) New building will have up-to-date networking, including outdoor and indoor Wi-Fi.
- Replacing multi-Mode fiber with Single-Mode fiber from the distribution switch to the edge switches.
   Multi-Year joint operation with LRCCD District Office IT.

## C. Server Replacement Plan

Physical campus servers are evaluated yearly according to functionality, reliability, and status of the warranty. If a server is approaching the end of its warranty, we determine if it can be virtualized or if a physical unit must be replaced. Servers that house our virtual environment are expanded based on the quantity and storage necessary for campus needs.

Our storage array servers were replaced by units from Pure Storage and our storage infrastructure is now modern and fully supported. Due to available fiscal resources, we were able to realize additional savings by purchasing a 3-year support plan. In 2026, we will need to re-evaluate the available support options and select the soundest option that meets the department's goals and objectives.

Amazon and Microsoft cloud-computing solutions are also being explored as possibilities to house virtual servers. If it is determined to be a viable and cost-effective solution, it will limit some of the hardware purchases and reduce some environmental costs on cooling and electrical usage, as well as reducing theft and fire/water risks.

## **D. Virtual Desktop Maintenance**

The Virtual Desktop Infrastructure continues to have broad adoption and high utilization. Campus IT continues to evaluate new hardware and software tools to help virtualize Graphic intense programs. Campus and DO IT are exploring potentially utilizing cloud-based technologies for some of the campus services.

## E. Server Room Upgrade – Environmental

Please see the Whole Room UPS project in our 2023-24 ITIP.

A whole room UPS was installed and brought online to address instability with the local power grid. Combined with a power generator, the server room power needs are configured to meet current and near-future requirements to support the SCC IT infrastructure. We will continue to monitor and maintain this as needed. HVAC will be re-addressed with FM to have a stable and reliable cooling system for the server room, LRC125.

## F. Security Focus on System Monitoring/Analytics/Visibility

District IT is exploring modern security tools (NAC – Network Access Control) that help to monitor devices connected to our network to ensure they meet district security standards. It also protects campus/district data and hardware from zero-day exploits, malware, and viruses. Additionally, as of the Fall of 2021, DO IT implemented Multi-Factor Authentication (MFA) via Okta/Duo to safeguard the Los Rios District's information systems and the confidential data stored on those systems. In addition, Global Protect (VPN) is being used to access the administrative network which contains sensitive high-risk data. Our network, and computer systems are being scanned and protected by Palo Alto Cortex XDR for Anti-Virus and Malware. A district IT project is in the beginning phases for Managed Detection Response **MDR**.

## G. Mobile Device Management (MDM)

We continue to use products such as JAMF to support the instructional and employee Apple devices. JAMF allows remote management, software installation, configuration changes, and the locking of missing devices.

For PCs, the District uses KACE for patch management of mobile devices. DO and campus IT are also exploring Microsoft products such as Intune and Autopilot, allowing IT to setup devices right out of the box while in the users' possession.

SCC IT utilizes SplashTop to remotely assist users and distribute needed files and updates both on and ${ m o}$	ff
premises.	