Santa Rosa Junior College

Program Resource Planning Process

Information Technology 2021

1.1a Mission

Information Technology is dedicated to supporting the Sonoma County Junior College District's Mission. We will maintain a commitment to service. Our focus will be both on supporting the effective integration of technology into the instructional and administrative life of our institution and on keeping campus user technology secure, accessible, current and easy to use. We will engage in an ongoing dialogue with the campus about needed priorities for service, while at the same time providing leadership in the definition of those needs.

The Information Technology department is a group of network technicians, computer lab coordinators and specialists, programmers, system administrators, help desk technicians, and telecommunications specialists. It is the responsibility of this group to provide hardware and software support for students, staff and faculty on the Santa Rosa campus, Petaluma campus, Southwest Santa Rosa Center, Public Safety Training Center, Shone Farm and throughout the District.

The mission of the Instructional Computing team is to promote and facilitate access and support for all teachers and learners to computer technologies that enhance the teaching/learning environment.

The mission of the Systems and Programming team is to provide student information systems and College business systems (HR, Payroll, Purchasing, etc.) that support to the District.

The mission of the Network Infrastructure team is to provide the computing platforms, productivity, collaboration and communication tools for the various needs of our College Community; to keep up with the ever-changing educational technology environment; and to maintain the highest possible level of customer support by maintaining high levels of access to the underlying infrastructure on which our systems run.

The mission of the Network Security team is to provide overarching guidance, processes, policies and systems to improve the security posture of all aspects of our data and network infrastructure.

1.1b Mission Alignment

Information Technology facilitates access for students, staff, and faculty to the resources needed to succeed in their work for the District. Specific areas currently include assistance with computer technologies and software planning, evaluation, acquisition, implementation, and support; coordination of efforts among departments' computer facilities and related services to achieve the college's objectives; provision of student access to computer technologies where they are not available in local department areas via the Instructional Computing Interdisciplinary Labs.

College Strategic Plan Goals	College Strategic Plan Objectives	Information Technology Mission Alignment
I. Support Student Success Support development of the whole student from early college awareness through successful completion of educational and career goals	• Expand and sustain access by eliminating barriers, expanding strategic outreach efforts, and delivering services effectively through current technologies • Increase retention and academic progress through student engagement with: academic and student services, faculty and staff, and campus and community activities • Increase the number of students who complete their educational plans and goals • Enhance cultural competency to better serve all student populations with a focus on first generation college students and the increasing Latino/a population	The mission of the Instructional Computing team is to promote and facilitate access and support for all teachers and learners to computer technologies that enhance the teaching/learning environment. The mission of the Systems and Programming team is to provide student information systems and College business systems (HR, Payroll, Purchasing, etc.) support to the District. The mission of the Network Infrastructure team is to provide the computing platforms, productivity, collaboration and communication tools for the various needs of our College Community; to keep up with the ever-changing educational technology environment; and to maintain the highest possible level of customer support by maintaining high levels of access to the underlying infrastructure on which our systems run.

II. Foster Learning and Academic Excellence Foster learning and academic excellence by providing effective programs and services	• Support and promote teaching excellence across all disciplines • Engage students and spark intellectual curiosity in learner-centered environments • Integrate academic and student support services across the college • Identify and implement responsive instructional practices that increase the learning and success of our diverse students	Information Technology is dedicated to supporting the Sonoma County Junior College District's Mission. We will maintain a commitment to service. Our focus will be both on supporting the effective integration of technology into the instructional and administrative life of our institution and on keeping campus user technology current and easy to use. We will engage in an ongoing dialogue with the campus about needed priorities for service, while at the same time providing leadership in the definition of those needs.
III. Serve our Diverse Communities Serve our diverse communities and strengthen our connections through engagement, collaboration, partnerships, innovation, and leadership	• Identify the educational needs of our changing demographics and develop appropriate and innovative programs and services with a focus on the increasing Latino/a population • Contribute to the richness of our multicultural community by promoting cultural initiatives that complement academics and encourage the advancement and appreciation of the arts • Meet the lifelong educational and career needs of our communities (e.g. seniors, emerging populations, veterans, re-entry students) • Provide relevant career and technical education that meets the needs of the region and sustains economic vitality	Provide technology access to all of the SRJC community that works for our diverse community.

IV. Improve Facilities and Technology Provide, enhance, integrate, and continuously improve facilities and technology to support learning and innovation	• Incorporate best practices and innovations for facilities and technologies in order to enhance learning and working environments • Improve and sustain infrastructure, facilities, and technology to proactively support our diverse learning community • Increase District-wide coordination and collaboration to improve facilities and technology access, efficiency, and effectiveness • Provide effective facilities and technology technical training for all employees to ensure operational effectiveness	Information Technology is dedicated to supporting the Sonoma County Junior College District's Mission. We will maintain a commitment to service. Our focus will be both on supporting the effective integration of technology into the instructional and administrative life of our institution and on keeping campus user technology current and easy to use. We will engage in an ongoing dialogue with the campus about needed priorities for service, while at the same time providing leadership in the definition of those needs. IT co-leads the development and maintenance of the District technology master plan which is reviewed yearly and revised every three years.
V. Establish a Strong Culture of Sustainability Establish a culture of sustainability that promotes environmental stewardship, economic vitality, and social equity	• Expand, support, and monitor district-wide sustainability practices and initiatives • Infuse sustainability across the curriculum and promote awareness throughout District operations • Promote social and economic equity in the communities we serve • Ensure economic sustainability by leveraging resources, partnering with our communities, and contributing to the economic growth of the region	IT provides equal access to technology for all SRJC students, staff, faculty and community users. IT researches and recommends technology solutions that have a low total cost of ownership including environmental impact. IT works with facilities to leverage technology to improve the efficiency and safety of our facilities leveraging technology.

VI. Cultivate a Healthy Organization Cultivate an inclusive and diverse organizational culture that promotes employee engagement, growth, and collegiality	• Foster an environment focused on collegiality and mutual respect in regards to cultural and individual perspectives • Recruit and hire outstanding faculty and staff and implement an exemplary Professional Development Program for all employees • Establish robust programs to improve the health and wellness of students and employees • Increase safety planning, awareness and overall emergency preparedness	The IT team engages with the campus community as members of shared governance committees to ensure that the technology recommended and provided serves the diverse needs of the District. The IT team participates in the recruitment and selection of new staff across the SRJC. The IT team participates in business continuity planning and disaster recovery planning as part of the District emergency preparedness.
VII. Develop Financial Resources Pursue resource development and diversification while maintaining responsible fiscal practices and financial stability	• Increase the amount of discretionary, unrestricted general fund local revenue • Increase and maintain the District reserves above the state requirements • Pursue alternative funding sources including grants, partnerships, and scholarships to support our diverse communities and students • Manage enrollment and course offerings to maximize apportionment funding	The IT team develops and supports tools to assist the District in managing our people and capital assets most efficiently; this includes class scheduling, financial and HR software, etc. The IT team works with grant teams to provide data to support the grants and provide the technology needed to meet the grant requirements and measure results. The IT team provides enrollment management software to assist in the management of enrollment efficiency and capacity modeling to maximize SRJC revenue and be compliant with ed code.

VIII. Improve Institutional Effectiveness Continuously improve institutional effectiveness in support of our students, staff, and communities	• Fully implement continuous quality improvement strategies to achieve greater transparency, effectiveness, efficiency, and participation • Enhance internal and external communication systems to ensure effectiveness	The IT team logs all incidents and requests to manage capacity, identify trends, and proactively address District technology needs most effectively with the limited resources allocated to IT. The IT team provides regular communications to the campus community on projects and major incidents. The IT team provides training to staff, facilitates access to Lynda.com online training for staff and PDA training sessions to improve their ability to use their technology resources. The IT team surveys the staff for feedback annually and solicits inputs from users through the committees we participate with on an ongoing basis to make sure the IT team delivers effective solutions.

1.1c Description

Services and responsibilities

Network Infrastructure team

The Network Infrastructure team provides support for district-wide servers, network resources and storage infrastructures. We maintain, manage, and upgrade ~~all~~ staff workstations, the voice and data infrastructure; we coordinate helpdesk tickets; and we design, implement, and manage district-wide IT resources.

- Plan for future technology adoptions
- Purchase, install, and maintain ~~all~~ computer hardware including: desktops, laptops, thin-clients, virtual and physical servers, on premise and cloud-based storage and related peripherals and services.
- Purchase, install and provide frontline support to all common software packages including: Windows/Macintosh OS's, Email, Browsers, Microsoft Suite, Adobe Suite, etc.
- Purchase and/or develop, maintain, and support Internet/Web services including: E-mail services, List-servers, and remote connection services
- Design, purchase, install and support institutional infrastructure including: telephone systems, voice mail systems, data storage, Security/monitoring tools and data networks
- Coordinate redistribution of surplus technology equipment
- Develop and maintain institutional standards including: hardware platforms, software, and training
- Serve on district-wide technology groups
- Solicit and disseminate technology information both within Information Technology and throughout the college community
- Use a Help Desk team to provide a common point of contact and end user support.

Instructional Computing Team

Instructional Computing facilitates access for students, staff, and faculty to the technology resources needed to succeed in their instructional objectives. Specific areas currently include: assistance with computer technologies and software planning, evaluation, acquisition, implementation, and support; coordination of efforts among instructional departments' computer facilities and related services to achieve the college's objectives; provision of student access to computer technologies where they are not available in local department areas via the Instructional Computing Interdisciplinary Labs Group in Maggini (includes 12 labs), and for faculty and staff access through the Center for Excellence in Teaching and Learning (CETL) which includes access to: current computer technologies; training and support related to hardware and software use and project development; as well as a venue for group work, sharing, training, and presentation; and finally, coordination with other college resources to provide related training, support, and technical services for departments as needed.

- Promote and facilitate faculty and student access to computer technologies that enhance the teaching/learning environment.
- Maintain Computer Labs on the Petaluma, Santa Rosa, PSTC, South West Center, and Shone Farm campuses.
- Design, purchase, install, maintain, repair, and replace workstations, printers, and other related computing technology in computer labs and classrooms throughout the district.

- Purchase, install, deploy, and maintain academic related software in classrooms and labs for desktops, laptops, servers, and related peripherals.
- Coordinate with Disability Resources Department to purchase, install, and maintain accessibility software and hardware in district labs and stations.
- Provide face-to-face, phone, and online software applications support for both faculty and students.
- Produce and maintain district wide online open labs schedule for student and instructor reference.
- Provide support to district wide technology groups.

Systems and Programming Team

The Systems and Programming team supports the college institutional, business services, and financial records software and databases, and the Web. The team primarily develops and maintains the student information services (SIS) software and databases, and provides district support for the Web. The team creates specialize reports to meet both government and internal reporting requirements. The following are the team's key services and responsibilities:

- Purchase and or develop, maintain, and support all institutional software packages including student registration and records, Business Services, and financial records packages, and Financial Aid packages.
- Serve on college wide technology groups.
- Provide institutional data for internal and external reporting needs.
- Coordinate and generate reports required by federal and state agencies.
- Provide development and support for ADA compliant web page design, content management, and templates.

1.1d Hours of Office Operation and Service by Location

Business Support Hours

Fall and spring semesters (excluding holidays)
8:00 AM - 5:00 PM
Monday - Friday

Summer semester (excluding holidays)
7:00 AM - 6:00 PM
Monday - Thursday

Instructional Support Locations & Hours

We are located in Bussman Hall, Doyle Library, Maggini Hall and Petaluma Campus (Call Hall).

Instructional Computing Interdisciplinary Labs in Maggini and Call are open for classes and drop-in work 8 AM. to 9 PM Mon – Thur; 9 AM to 3 PM Fri. in Maggini and in Call from 9 AM to 8 PM Mon - Thur: 9 AM to 1 PM Fri.

Instructional Computing Services Group in Doyle is open from 7:30 AM to 6:00 PM. Monday - Friday

Center for New Media is available for staff the same hours as the Library.

STAFF HELP DESK: The COVID-19 pandemic has required us to hire additional resources to maintain our current level of service during the duration of shelter-in-place. 2 25-hour/week STNCs will enhance our resources. Hiring Student workers has been problematic during the pandemic, due to District policies around student work on-campus.Other staff are currently working from home, and staff is onsite as needed, dependent on shelter-in-place orders from the Countly and the District. The Bussman Hall Help Desk, as well as Instructional Computing, has temporarily reduced hours for onsite work. Drop-off and pick-up of equipment and in-person support are available by appointment only

1.2 Program/Unit Context and Environmental Scan

The Information Technology Department is composed of a highly trained and experienced technical staff. These classified staff including programmers, Web designers, coordinators of instructional computer systems, lab specialists, network technicians, security specialists, helpdesk technicians, telecommunications technicians, system administrators and a technology prucurement coordinator, which are in high-demand in the private sector. In order to attract and retain staff in this competitive market salaries for technical staff are higher than the district average.

The use of technology is ubiquitous throughout the district and continues to be critical to the success of the SRJC. Enrollment data shows that online enrollment is growing faster than any other area in the district; demand for Internet access and storage space is also growing geometrically. As demand for services increases, we should increase support staff and/or strategically engage outside services where appropriate and cost-effective for the District.

There are currently over 100 instructional computer lab facilities and over 250 classroom instructor computer stations receiving services from Instructional Computing throughout the District. This encompasses a total of over 2,500 computers and over 300 iPads providing 120 software titles and access to the Internet for students and faculty across all disciplines and learning environments.

2.1a Budget Needs

See sections 2.1b, 2.2d, 2.2e, and 2.5a.

The IT staffing levels are not sufficient to maintain our continuously growing installed base of PC's, servers, network infrastructure devices and software.

Instructional Computing:
The number of computer labs as defined by a space with 20 or more computers for student use, has grown to over 50 labs supported by 10 classified employees. There has been an explosion in growth in the use of technology in areas like PSTC, KAD , Music, Healthcare and Assessment. As technology becomes critical to the pedagogy in these areas that had very little use of any technology 5 years ago. Significant expansion of instructional technology use at remote sites with no dedicated IT staff has increased the need for Instructional Computing staff with district wide support responsibilities. As needs expand across the district, additional resources may be needed. There may be additional requests in the future, depending on increasing need for resources.

Infrastructure: We are currently down one (1.0 FTE) Network Technician, after 3 failed recruitments. That position became the Network Security Manager, a position now swept - although the need for a Network Technician still exists. We now support hundreds of network routers and switches, hundreds of wireless access points, high speed data connections between sites and all of the computers and servers using this infrastructure. As more devices including phones, cameras, HVAC and lighting controls, and

wireless PCs, phones, tablets and other BYO Devices, we will need more resources to support this infrastructure.

This situation has been additionally complicated by the retirement of our Telecommunications Specialist, and one of the Network Technicians Working out of class to Coordinate Helpdesk activities in support of remote workers.

Over the past 7 years the number of Cisco managed switches has increased by 66%, the number of copper ports has increased by 87% and the number of fiber ports has increased by 93%, however it has proven difficult to recruit qualified Network Technicians as demonstrated by 3 failed recruitments. Student workers can support the Helpdesk which allows the Helpdesk to support the Technicians, however we also have trouble finding qualified and motivated students to support the Helpdesk. Over the past 5 years the number of systems supported by IT increased by an average of over 150 systems per year

1. Over the past five years the network infrastructure has become increasingly complex with the addition of wireless access points, routers, switches, security appliances, and voice over IP telephony.
2. The Infrastructure group has virtualized all of the core server infrastructure of the District and is now beginning to virtualize the Instructional Computing Servers as well as beginning the virtualization of District Desktop computers through Virtual Desktop Infrastructure (VDI)

The Department has completed a three year project to upgrade our entire District's data networks from 1 Gb backbone capacity to 10 Gb, and upgradable to 40 Gb. This final step of this project will be the construction of 2 new fiber-optic rings on the Santa Rosa campus. The project will be complete in Fall of 2020.

Request new Network Technician Position: One FTE.

Request new Helpdesk Technician, who can absorb some Telecom duties: One FTE

Systems and Programming

Continue two .5 FTE Students Workers:
for accessibility support to assist in the correction of non compliant online PDF documents.

Continue two .5 FTE (STNC) Web Designers: providing additional Web support for the migration of our Drupal 7 web pages to Drupal 8. These positions will go away once the project has been completed. The current projection is that the Drupal migration will be completed by the end of Fall 2021.

Add one .5 FTE Coordinator of Online Accessibility to provide District online accessibility support in order to maintain section 504/508 Federal accessibility compliance. This will be a permanent half time position to replace a full time position that was vacated by the previous employee.

Continue one .5 FTE (Professional Expert) Data Base Analyst to support existing SQL Data Bases. This position will go away once a permanent DBA is hired.

2.1b Budget Requests

Rank	Location	SP	M	Amount	Brief Rationale
0000	ALL	01	07	$510,000.00	Bond Fund - Instructional equipment servers replacement, student lab desktop replacements and classroom computer replacements
0001	ALL	08	04	$60,000.00	General Fund - Travel and training budget for IT staff. Required to maintain and acquire new technology skills, e.g., virualization, new security requirements like PCI, new software versions like SQL, .NET, Exchange Server, SharePoint, etc. Included is a training budget for online training resources such as SkillSoft.
0001	ALL	04	07	$40,000.00	General Fund - Monthly charges AT & T Integra ISDN, Long Distance, AWS storage / cloud back-ups
0001	ALL	04	07	$500,000.00	ITG Bond Fund - Replacement for staff computers and peripherals. Necessary to provide technology users with the appropriate technology to do their jobs.
0001	ALL	04	07	$100,000.00	ITG Bond Fund - Replacement for failed equipment: switches, phones, faxes, etc... Maintain support for networking infrastructure. Repair and replace aging cable plant infrastructure..
0001	ALL	04	07	$150,000.00	ITG Bond Fund- Professional Expert Data Base Analyst for ERP integration. Code 5190.
0001	ALL	04	07	$218,500.00	General Fund Annual maintenance agreements for institutional software, e.g., , student right to know, Regroup, informacast, Neogov $23.5K, Live Action, e-transcript,*** , Adobe $50K, Turn it in $40K, VMWare $50K Lumens community ed$11K FormStack ADA $15K
0001	ALL	04	07	$100,000.00	ITG Bond Fund- Phone system components, new phones and accessories
0001	ALL	04	07	$26,000.00	General Fund - Software renewal for SQL server monitoring tool (SolarWinds)$800, Web monitoring tool (Siteimprove) with analytics$22.3K, and Visual Studio source control tools (Beyond Compare, etc)$2000
0001	Other	01	07	$16,500.00	General Fund Comcast Enterprise Fiber circuit to Southwest Center
0001	ALL	04	07	$30,000.00	General Fund - Additional software to manage added computers in labs and classrooms- Ghost licenses $10K, Jamf for managing mobile devices and BYOD $20K
0001	ALL	01	02	$12,500.00	General Fund - Maxient student conduct tracking software
0001	ALL	04	07	$66,000.00	General Fund Software: VEEAM DataCenter and cloud backup, Barracuda Email Essentials Anti-Spamand Malware, Backup, and archiving for E-discovery compliance
0001	ALL	04	07	$40,000.00	General Fund - Annual contract for Acquia Drupal Web hosting service
0001	ALL	04	07	$20,000.00	General Fund -Continue Link Creative contract to provide new Drupal 8 templates, assist with ADA compliance, add multilingual Web development.
0001	ALL	08	06	$150,000.00	ITG bond fund - ERP Project Manager code 5190
0001	ALL	08	06	$25,000.00	General Fund purchase - KnowBe4 software for Security Awareness and phishing response orchestration
0002	ALL	08	04	$5,000.00	General Fund - Licensing and recertification testing for technicians

Rank	Location	SP	M	Amount	Brief Rationale
0002	ALL	04	07	$35,000.00	ITG Bond fund Professional services for microsementation of Network core architecture to support VMWare NSX and Virtual Palo Alto Networks Firewalls
0002	ALL	04	07	$75,000.00	ITG Bond Fund New PAN Firewalls for Shone and PSTC backup circuits
0002	ALL	08	07	$25,000.00	General Fund Purchase - Kore Technologies Data warehouse ETL software to setup and implement a datawarehouse for institutional reporting

2.2a Current Classified Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Network Technician (6 FTE, currenlty staffed at 5)	40.00	12.00	Identify, analyze and troubleshoot a wide range of complex technical computer- and network-related problems effectively; listen and communicate information to a wide variety of clients and vendors at all levels of skill; deliver customer support both in-person and over the phone in a professional manner; support the District's objectives by training others in use of their computers and application; learn and provide support for the District's network; learn and apply new technical knowledge quickly; communicate effectively with a diverse client base both verbally and in writing; work independently and as a member of a team; maintain cooperative work relationships; demonstrate sensitivity to, and respect for, a diverse population.
Programmer Analyst (3 FTE)	40.00	12.00	Analyze, design, and develop computer programs and systems; assist users in troubleshooting system problems; perform complex technical tasks accurately and within defined deadlines; identify, evaluate, and solve program problems; learn new technology; communicate effectively; work in a team environment; prepare written reports and make oral presentations; plan and present training and/or give presentations to individuals and groups; establish and maintain effective working relationships.
Programmer Analyst, Senior (4 FTE)	40.00	12.00	Analyze, design, and develop computer systems and programs; assist users in troubleshooting system problems; perform complex technical tasks accurately and within defined deadlines; learn new technology; prepare written reports and make oral presentations; plan and present training and/or give presentations to individuals and groups; act as a lead worker to other classified staff in the area; maintain effective cooperative working relationships; demonstrate sensitivity to, and respect for a diverse population.
System Administrator (3 FTE)	40.00	12.00	Principles, practices, and technologies of computer operations, programming, and systems analysis; operating systems such as UNIX, Windows, programming languages such HTML, Java Script, Perl and PHP; use of microcomputer and network hardware and software; website design and development; Internet resources such as web pages and electronic mail.
Administrative Assistant II (0.5 FTE)	20.00	12.00	Administrative Assistant Department support, schedule meetings, manage budget entries, NOA's, office supplies, manage help email box for the District, enter fixed assets for IT, assist in managing the ITG tech plan and meetings. Provide other admin support duties as needed.
HelpDesk Technician (3 FTE)	40.00	12.00	Deliver technical customer support over the phone in a call center environment; identify, troubleshoot and resolve a wide range of technical computer-related problems; make the distinction between Level One and Level Two end-user problems; identify, evaluate and solve end-user workstation problems; support and train end-users in a wide range of software applications as needed; read, understand and apply complex technical information; master new computer technology; maintain cooperative working relationships; demonstrate sensitivity to, and respect for, a diverse population.

Position	Hr/Wk	Mo/Yr	Job Duties
Technology Procurement Coordinator (1 FTE)	40.00	12.00	Under general supervision, perform technical duties related to the requisitioning of computers and related hardware, software, services and supplies; perform administrative duties in office management, fiscal management, and/or customer relations; and perform related work as required. Learn and interpret Purchasing policies and procedures, rules, regulations, and instructions; perform detailed work related to requisitioning computers and software; keep informed on new technology products, market conditions and current prices; perform complex administrative work in the support of the District's purchasing and inventory control functions; maintain and prepare records, files and reports; communicate effectively in English; follow and give oral and written directions; supervise student assistants and short term, non-continuing employees; interact with the public in a helpful, courteous and friendly manner; establish and maintain effective working relationships; demonstrate sensitivity to, and respect for, a diverse population.
Computer Lab Coordinator (0 FTE)	40.00	12.00	Under direction, plan, organize and coordinate activities within microcomputer laboratory; order, receive, store, issue and inventory laboratory supplies and equipment; troubleshoot, repair and maintain computer hardware, software, and peripheral equipment; train and direct the work of laboratory staff; and perform related work as required.
Micro Comp Lab Specialist I (1 FTE)	40.00	12.00	Under general supervision, coordinate activities within microcomputer laboratory; maintain standards for lab use; serve as a liaison between faculty and students; assist students with assignments; may supervise the work of student assistants; and perform related work as required.
Instructional Computing Systems Coordinator 6 FTE	40.00	12.00	Under general supervision, design, implement, analyze and troubleshoot multi-site instructional computer systems District-wide, departmental computer labs without local technical support staff (31 total), and instructor computers in classrooms (94 total). Participates in the network system coordination of Instructional Computing Systems. Trains faculty and staff in the use of and administration of computer systems; and perform related work as required.
Micro Comp Lab Specialist II (2 FTE)	40.00	12.00	This position is distinguished from level 1 by the addition of network administration duties performed and the maintenance of a local area network. Also includes data recovery and backup duties and may specialize in a specific area such as assistive technology.
Web Design Specialist (1 FTE)	40.00	12.00	This position provides web design support in conjunction with the Web Developer. Supports PR for public facing pages like the SRJC home page, Theater Arts, Art Gallery Exhibits, President's Page, Upcoming Events, etc. This position also helps define the SRJC standards for web pages including content management, look and feel, links, mobile versions, etc.

Position	Hr/Wk	Mo/Yr	Job Duties
Web Developer (1 FTE)	40.00	12.00	The Web Developer serves as the College's primary web design and development expert. He/she ensures that the college web vision (mission), objectives, and strategy meet student, faculty, staff, administration, and the general public needs with respect to information accuracy, currency, timeliness, design, usability, and functionality.
Coordinator Online Accessibility	0.00	0.00	Th Coordinator Web Accessibility helps assess District software for ADA accessibility compliance and provides training to web administrators on how to assess and modify their web sites to be compliant. We would want this position to be reinstated as a .5 FTE once Jim G retires, and Drupal migration is done. See 2.2e.

2.2b Current Management/Confidential Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Senior Director of Information Technology (1 FTE)	40.00	12.00	Directs all IT functions, budget, resource allocation. Liaison to District. Responsible for data Security and Governance.
Director of Systems and Program (1 FTE)	40.00	12.00	ABILITY TO: 1. Work with users to define requirements. 2. Prepare and/or supervise preparation of systems design documents. 3. Recommend hardware and software as necessary. 4. Supervise Programmer/Analyst in systems development. 5. Maintain systems. 6. Train users and technical staff as necessary. 7. Supervise technical staff and be able to work well with faculty and staff. 8. Demonstrate sensitivity to, and respect for, a diverse population.
Manager of IT Infrastructure (1 FTE)	40.00	12.00	KNOWLEDGE OF: 1. The telecommunications industry including Local Area Networking. 2. Wide Area Networking. 3. VoIP telephony. 4. Data Center security and communications. 5. Management practices and principles required to supervise classified staff and student employees.

Manager of Instructional Computing (1 FTE)	40.00	12.00	1. Directs the day-to-day operations of Instructional & Interdisciplinary Labs programs and services including classified and certificated employee supervision, evaluation, and work assignments. 2. Serves as a member of the Institutional Technology Group (ITG); on facilities planning, construction, and implementation groups on matters related to instructional computing; and on standing and ad hoc committees, including attendance at appropriate local, regional, and state-wide meetings as required. 3. Evaluates and manages the District's instructional computer equipment and software upgrading and replacement schedule, and associated licensing requirements; researches and recommends appropriate and cost effective equipment and software solutions that address both instructional and technical support requirements in keeping with emerging technologies; oversees related purchase requisitions for instructional departments. 4. Consults and advises Academic Affairs administration, department chairs, and faculty, including attendance at department and cluster meetings as required to assess and evaluate the need for new instructional computer equipment and software. 5. Oversees the shared campus Instructional Computing Group and provides computer lab access for all instructional departments who do not have sufficient local resources. 6. Directs computer hardware and software installation and ongoing technical support services as required for instructional computer labs, instructor/presenter computer equipment, and student computer stations in classrooms and instructional spaces. 7. Provides assistance to departments who have their own instructional computer technical staff with related job assignment development and evaluation as needed. 8. Oversees the purchasing and access to servers and system administration for instructional program applications.

Position	Hr/Wk	Mo/Yr	Job Duties
			9. Coordinates with Media Services, and other technical support services as required to accomplish related tasks and mutual objectives. 10. Provides access for individuals and groups of faculty and staff to current computer technologies, and coordinates with the Staff Development Program and appropriate academic departments for the development and provision of associated training andsupport. 11. Participates in administration of the District's annual Staff Computer Purchase Program, and assists faculty and staff on an ongoing basis with personal computer purchases related to instructional endeavors. 12. Maintains appropriate statistical reports, surveys and other records to assess departmental needs and accomplishments and to direct program goals and objectives, including budget development and monitoring of expenditures; and program evaluation and planning.
Manager of Network Security	0.00	0.00	Directs day-to-day operations of Operational and Security personnel and systems. KNOWLEDGE OF/ABILITY TO: Network architecture, hardware, software and infrastructure; Data Security processes, tools, and systems. Data and Network Security policies and procedures. Present and communicate security and infrastructure concepts and projects to various constituencies. Management practices and principles required to supervise classified staff and student employees. Propose replacing this position with Classified Security Analyst.

2.2c Current STNC/Student Worker Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Lab Assistant (Students: 7) * when labs open	105.00	12.00	Hrs/Mos vary. Under supervision, perform lab duties, as directed.
2 x .5 Student Workers for Web Accessibility	40.00	12.00	Assist the Online Accessibility Coordinator for correcting departments online accessibility issues.
2 x .5 Help Desk Student Worker *	40.00	12.00	Answer phones and handle walk-in traffic. Provide first tier technology support services to staff.
Data Base Analyst	6.00	12.00	DBA to monitor and manage database performance and tuning,
2 x 25 hr/wk STNCs to support onsite projects	50.00	12.00	
	0.00	0.00	

2.2d Adequacy and Effectiveness of Staffing

Recommendation:

Continue to develop and train a Senior Programmer Analyst on Database Administration in order to provide ongoing Student Information System database maintenance, performance monitoring and tuning, and optimization support.

Database administration is critical to the planning, designing, implementing, maintaining, and improving the Student Information Services (SIS) Database. Activities involve interaction with development and end-user personnel to determine application data access requirements, transaction rates, volume analysis, and other pertinent data required to develop and maintain the integrated SIS database. This person assists in analysis and design activities associated with the development and maintenance of the SIS database to ensure its optimal performance. This critical job position is currently being performed by a contract Database Analyst Professional Expert. Without this position, we cannot maintain SIS and support the daily operations of the District.

2.2e Classified, STNC, Management Staffing Requests

Rank	Location	SP	M	Current Title	Proposed Title	Type
0001	ALL	04	07	Help Desk Technician		Classified
0001	ALL	04	07	.5 Coordinator of Online Accessibility		Classified
0001	ALL	04	07	2 x .5 Web Designer		STNC
0001	ALL	04	00	2 x 25 hr/wk STNCs for onsite projects		Classified
0002	ALL	04	07	2 x .5 student helpdesk technician		Student
0002	ALL	04	07	2 x .5 Student online accessibility support		Student
0002	ALL	04	07	Network Technician		Classified

2.3a Current Contract Faculty Positions

Position	Description

2.3b Full-Time and Part-Time Ratios

Discipline	FTEF Reg	% Reg Load	FTEF Adj	% Adj Load	Description
N/A	0.0000	0.0000	0.0000	0.0000	N/A Information Technology is not a discipline that offers a curriculum for students; it is an instructional service.

2.3c Faculty Within Retirement Range

No faculty in IT at this time.

2.3d Analysis of Faculty Staffing Needs and Rationale to Support Requests

N/A- Information Technology is not a discipline that offers a curriculum for students; it is a District service.

2.3e Faculty Staffing Requests

Rank	Location	SP	M	Discipline	SLO Assessment Rationale
0001	ALL	03	00		

2.4b Rationale for Instructional and Non-Instructional Equipment, Technology, and Software

Information Technology's mission includes assisting all instructional areas to acquire the hardware and software required to provide approved curricula. With the passage of Measure H, IT is upgrading the District IT infrastructure to optimize support for students, faculty, staff and administration.

2.4c Instructional Equipment Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	Santa Rosa	04	06	Doyle Library Student Access Computers	230	$1,250.00	$287,500.00	Mike Roth	Doyle Library	Mike Roth
0001	ALL	04	06	Laptops for rebuilding classroom deployments	100	$1,250.00	$125,000.00	Mike Roth	District	Mike Roth
0001	Petaluma	04	06	Mahoney Library Student Access Computers	75	$1,250.00	$93,750.00	Mike Roth	Mahoney Library	Mike Roth
0001	Windsor	04	06	32 laptops to replace aged out equipment	32	$1,250.00	$40,000.00	Mike Roth	PSTC	Mike Roth
0001	ALL	04	06	Computers for instructor station replacement	50	$1,100.00	$55,000.00	Mike Roth	District	Mike Roth
0001	ALL	04	06	Instructional Servers (for SCCM)	4	$5,000.00	$20,000.00	Mike Roth	District	Mike Roth
0001	ALL	04	06	Repair and upgrade existing equipment	1	$50,000.00	$50,000.00	Mike Roth	District	Mike Roth
0001	ALL	04	06	DRD station replacement	30	$1,500.00	$45,000.00	Mike Roth	District	Mike Roth

2.4d Non-Instructional Equipment and Technology Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	ALL	04	07	ITG Cisco Phone equipment	100	$500.00	$50,000.00	Dan Exelby	Districtwide	Dan Exelby
0001	ALL	04	07	ITG Firewalls for Shone and PSTC	4	$12,500.00	$50,000.00	Dan Exelby	PSTC/Shone	Dan Exelby
0001	ALL	04	07	ITG Staff Computer replacements	300	$1,500.00	$450,000.00	Dan Exelby	Districtwide	Dan Exelby
0001	ALL	04	07	ITG network equipment repair budget	10	$7,500.00	$75,000.00	Dan Exelby	Districtwide	Dan Exelby
0001	ALL	04	07	ITG Datacenter server upgrades	2	$75,000.00	$300,000.00	Dan Exelby	1466/634	Dan Exelby
0001	ALL	04	07	ITG Datacenter storage upgrades	2	$40,000.00	$80,000.00	Dan Exelby	1466/634	

2.4f Instructional/Non-Instructional Software Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	ALL	08	06	KnowBe4 Awareness and Phishing training	1	$30,000.00	$30,000.00	Sr. Director, IT	N/ N/A	
0001	ALL	04	06	Kore Technologies Data Warehouse ETL	1	$25,000.00	$25,000.00	Director Systems & Programming	N/A	Director Systems & Programming

2.5a Minor Facilities Requests

Rank	Location	SP	M	Time Frame	Building	Room Number	Est. Cost	Description

2.5b Analysis of Existing Facilities

With Phase 1 of the Bussman Annex remodel and the move in of Human Resources complete, and the Datacenter and Phase 2, South bathroom and STEM storage, underway, the IT department is working with Capital Projects to identify the next steps for the improvements needed in the IT areas of the building. In addition to the need for FF&E throughout, there are also some other areas of concern:

- Rest Rooms- The entire Bussman building has only 2 unisex, 1 stall rest rooms, to support 30 IT staff and Human Resources with no student access rest rooms in the building. The South restroom will be remodeled in the next phase of construction but the North Rest Room also needs both aesthetic and functional improvements.
- Reclaimed Datacenter space: Once the Datacenter remodel is complete, there is approximately 1,000 sq. ft. of space that can be reclaimed for a new use.
- The IT Break room in Bussman also desperately needs remodeling

3.1 Develop Financial Resources

IT supports new software for managing room rentals. IT supports the software used for community education. IT is working with the District to evaluate ERP software to help us better manager enrollment, personnel and processes.

3.2 Serve our Diverse Communities

All hiring committees are trained by Human Resources to value diversity as one of the factors in the hiring process.

3.3 Cultivate a Healthy Organization

We encourage our staff to attend professional events, participate in On-line webinars, take classes and acquire knowledge transfer from our vendors. Online training via Lynda.com, SkillSoft.com (provided to all CCC employees via the Chancellors Office) and the District funds up to two SRJC classes per semester. We also encourage our employees to participate in Fit SRJC by forming teams and take continuing ed classes here at the SRJC with release time.

3.4 Safety and Emergency Preparedness

For the following Buildings, the listed individuals are the "Safety Leaders"

Bussman Hall

- Jordan Mead

Doyle Library Santa Rosa

- Library: Dustin Zuckerman

- Instructional Computing: George Lancina

Maggini

- 2nd and 3rd floor labs: Karen Horii

Call Hall Petaluma

- Marshall McGowan

3.5 Establish a Culture of Sustainability

Doyle Server Room

- The 3rd floor Doyle server room does not have back up HVAC due to a building design mistake, so if the power fails, there is a backup generator for power to the servers but no HVAC (heating or cooling in the server room). This design flaw will cause the room to overheat if a power failure occurs on a hot day and would cause the servers to shut down or be damaged by the excess heat.
- ACTION NEEDED: Move all business critical servers like the online class servers to the Bussman server room which has adequate power backup and HVAC to allow continued operations during a power failure.
- As soon as the Bussman Data Center upgrade is complete, this project willl take place.
- We qualify for PG&E rebates for shrinking our data center footprint.

SERVER and Desktop VIRTUALIZATION

The IT Department has been actively working on reducing power consumption in our data centers.

Through our Server Virtualization Program, we have taken the following steps:

1- Consolidating the Bussman and Bailey Data centers into a single room in Bussman
2- Remodeling the Bussman Datacenter and reducing its size by nearly 2/3rds
3- Installing new Energy efficient CRACs that utilize night air for cooling when available
4- Consolidated the number of existing hardware servers and removed old servers from productions;
5- Increased efficiency by installing multiple applications on a single server hardware;
6- Purchased new virtual server farms which will reverse server hardware proliferation.

Remote Computing Services:

Our current infrastructure gives us the capability of deploying virtual desktops. Citrix is nearly ready for removal.

The goal of these measure is to considerably reduce our power consumption.

PAPERLESS INITIATIVES

The IT department has been developing in collaboration with our supported departments, digitized work processes that rely less on paper. The followings are the major initiatives:

1- Scanner/Printer deployment: we encourage technology users scan more and print less
2- Digital fax system deployment: we offered our technology users the option of sending and receiving fax without having to print hard copy
3- The IT department will be working with the HR and the Finance Department to adopt paperless solutions such as:
    a. Time sheets
    b. PAF's

4- The IT department is working closely with the Student Services department to digitize student forms.

5- The IT Department is assisting rollout of Adobe e-signature technology. The need to support remote workers has greatly accerated the adoption of Adobe E-Sign throughout the District.

4.1a Course Student Learning Outcomes Assessment

Not applicable.

4.1b Program Student Learning Outcomes Assessment

Not applicable.

4.1c Student Learning Outcomes Reporting

Type	Name	Student Assessment Implemented	Assessment Results Analyzed	Change Implemented

4.2a Key Courses or Services that address Institutional Outcomes

Course/Service	1a	1b	1c	2a	2b	2c	2d	3a	3b	4a	4b	5	6a	6b	6c	7
Student Web Portal		X			X					X	X					X

4.2b Narrative (Optional)

The IT Department provides a SharePoint site for the faculty to use to store and track their SLO's.

Students will be able to:

1. Know where the helpdesk is located in each lab facility and how to request assistance
2. Know how to log in and out of the Timekeeper system
3. Learn how to locate related College services (e.g. library reference services, writing labs, tutorial)
4. Demonstrate ability to carry out basic software operations such as opening, saving and closing data files, editing and printing documents
5. Demonstrate ability to use the Internet to do research

6. Demonstrate ability use specialized computer equipment such as ergonomic keyboards, trackballs and headsets
7. Demonstrate ability to use student mail system
8. Demonstrate how to locate and navigate the distance education online education system

5.0 Performance Measures

Instructional Computing Access in Labs and Classrooms

Instructional Computing ensures access to computer technologies for students and instructors in the learning environment. Currently, accessibility is primarily provided in 92 different classroom and computer lab facilities throughout the District comprising over 2,000 instructional computers, serving a combined total of over 120 software titles and access to the Internet. Additionally, seven of these facilities have scheduled open lab hours when students and faculty can drop in to work on school related projects, including the ability to run the specialized software required by different curricula. There is currently drop-in computer access available for students among these labs from 8:00 A.M. -7:00 P.M. Monday through Thursday and 8:00 A.M. to 12:00 P.M. on Friday. Different locations have different hours that are posted on the Campus Computer Labs Schedule available online each semester.

Faculty and Staff Computer Support

The Center for Excellence in Teaching and Learning in the Doyle Library - Instructional Computing provides access and support for individuals and groups of faculty and staff to hardware and software use and related project development. The Center includes a 25 station computer lab; audio, video, and production quality printing technologies; a 50-seat presentation and meeting area; and a new multi-media production studio. Hours of access are the same as the Library.

Instructional Computer Equipment and Software Acquisition and Implementation

Current request/allocation process works well in addressing the critical hardware needs of approved curricula. The approval and aquisition process for new instructional software would improve with a clearer definition of what financial resources are available and a better defined process for approval of requests. Required faculty and administrators participate directly in the proposal process for computer equipment and software through the annual Instructional Equipment Request as part of this PRPP process. Information Technology evaluates, researches, and recommends appropriate products to address the approved requests and

reviews recommendations with the end users. We then acquire the equipment and software, and assist with installation and implementation and ongoing support as needed and as we're able to accommodate.

Computer Lab	***No. of Labs***	***Current Employee***	***Computer Lab Technical Position***	***Load***	***Notes***
Instructional Computing Large Labs (54 total labs)					
Maggini & Barnett	10				
CS,Music,English		Marc Rudlin	Instructional Systems Coordinator	1.0 fte - 12 mo.	
BAD,BOT,ESL,COM		Debbie Gonnella	Microcomputer Lab Spec II	1.0 fte - 10 mo.	
CS, Music		Karen Horri	Microcomputer Lab Spec I	1.0 fte - 12 mo.	
		4x	Student Lab Assistants		
Applied Tech, Elec, Physics	9	Gamal Mansour	Instructional Systems Coordinator	1.0 fte - 12 mo.	
Math/Chem	5	Marc Rudlin	Instructional Systems Coordinator	1.0 fte - 12 mo.	
Petaluma Campus	17	Marshall McGowan	Instructional Systems Coordinator	1.0 fte - 12 mo.	
		Antoine Sarragossa	Microcomputer Lab Spec II	1.0 fte - 12 mo.	
		3x	Student Lab Assistants		
Doyle Library	9	Andre' Siedentopf	Instructional Systems Coordinator	1.0 fte - 12 mo.	*Public Access stations, 300 computers + Media Viewing lab + Lecutre Lab + 50 Laptops + iPads*
		Joe Owen	Instructional Systems Coordinator	1.0 fte - 12 mo.	*Public Access stations, 300 computers + Media Viewing lab + Lecutre Lab + 50 Laptops + iPads*
Mahoney Library	4	Marshall McGowan	Instructional Systems Coordinator	1.0 fte - 12 mo.	*Public Access stations, 110 computers + Media Viewing lab + Lecutre Lab + 50 Laptops*
	54				

83,960 *Total drop-in* ***student*** *use, recorded by Timekeeper across all labs throughout the district for Spring 2017(Library Access and some labs not captured)*

*8,668 Total drop-in **student** use, recorded by Timekeeper across all labs throughout the district for Summer 2017(Library Access and some labs not captured)*

*70,689 Total drop-in **student** use, recorded by Timekeeper across all labs throughout the district for Fall 2017(Library Access and some labs not captured and time reduced by fires)*

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Timekeeper Lab Sign-Ins by Day/Time — Summarized

Spring 2019

Room: All Rooms

Hour	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
07:00-07:59	0	131	144	145	111	0	0
08:00-08:59	0	996	1018	1136	901	143	2
09:00-09:59	1	1464	1639	1559	1523	279	28
10:00-10:59	2	1860	2464	2212	2195	363	99
11:00-11:59	3	1697	2302	1755	2183	452	36
12:00-12:59	4	1408	1672	1500	1563	527	14
13:00-13:59	1	1350	1753	1564	1488	258	8
14:00-14:59	1	1064	1246	1223	1147	109	1
15:00-15:59	1	945	687	1145	650	75	1
16:00-16:59	0	788	748	817	521	38	0
17:00-17:59	0	521	751	644	412	7	0
18:00-18:59	0	188	367	210	231	3	0
19:00-19:59	0	10	59	11	25	0	0
20:00-20:59	0	0	4	0	6	0	0
21:00-21:59	0	0	0	0	3	0	0

Timekeeper Lab Sign-Ins by Day/Time — Summarized

Hour	Monday	Tuesday	Wednesday	Thursday	Friday
06:00-06:59	8	3	4	4	0
07:00-07:59	25	14	20	33	0
08:00-08:59	74	65	69	70	0
09:00-09:59	216	206	218	165	0
10:00-10:59	221	219	258	143	1
11:00-11:59	170	197	222	169	0
12:00-12:59	241	223	249	114	0
13:00-13:59	180	141	166	71	0
14:00-14:59	95	99	113	52	0
15:00-15:59	66	90	80	50	0
16:00-16:59	35	21	21	22	0
17:00-17:59	24	20	15	11	0
18:00-18:59	1	36	3	20	0
19:00-19:59	0	2	0	1	0
20:00-20:59	0	1	0	0	0
21:00-21:59	0	1	0	0	0

Timekeeper Lab Sign-Ins Summarized by Day/Time

Room: All Rooms

Hour	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
07:00-07:59	0	281	197	310	158	0	0
08:00-08:59	0	972	932	1116	903	133	0
09:00-09:59	0	1102	1312	1186	1132	242	7
10:00-10:59	1	1881	1739	2065	1571	357	11
11:00-11:59	0	1454	1690	1576	1579	374	14
12:00-12:59	0	1307	1496	1383	1184	344	12
13:00-13:59	0	1089	1487	1108	1236	247	4
14:00-14:59	0	1001	1041	984	856	98	3
15:00-15:59	0	857	794	857	698	46	1
16:00-16:59	0	650	811	633	500	8	0
17:00-17:59	0	599	718	589	407	0	0
18:00-18:59	0	150	214	153	160	0	0
19:00-19:59	0	3	57	5	11	0	0
20:00-20:59	0	1	8	1	2	0	0
21:00-21:59	0	0	2	0	1	0	0

Other Departmental Labs (not listed above) without Local Computer Technical Staff, but Supported by Instructional Computing (38 total labs)

— Over time these labs' technical support needs have been covered hit-or-miss by local department faculty and classified staff hired in other assignments. Over the last few years,
Instructional Computing technical staff has been striving to assist with support tasks for many of these areas as time permits. These Instructional Computing staff primarily
*include **George Lancina, Andre' Siedentopf, Debra Miller, and Marc Rudlin***

Campus	Building	Lab name
PSTC		General PSTC Lab
PSTC		General PSTC Lab
PSTC		Student Center
PSTC		AJ/Fire Lab
Santa Rosa	Analy Hall	Art Computer Lab
Santa Rosa	Analy Village	College Skills ASK Lab
Santa Rosa	Analy Village	College Skills Math Labs
Santa Rosa	Analy Village	College Skills Math Labs
Santa Rosa	Analy Village	Disability Resources ATTC Lab
Santa Rosa	Analy Village	Oakleaf Journalism Lab
Santa Rosa	Baker Hall	Biology lab laptops
Santa Rosa	Baker Hall	Biology Lab
Santa Rosa	Baker Hall	Physiology Lab
Santa Rosa	Bertolini Student Center	MESA Labs
Santa Rosa	Bertolini Student Center	Career Center
Santa Rosa	Bertolini Student Center	Puente Lab
Santa Rosa	Burbank Auditorium	Theatre Arts Laptop Lab
Santa Rosa	Burbank Auditorium	Theater Arts lab
Santa Rosa	Burbank Auditorium	Forensics Lab
Santa Rosa	Emeritus Hall	Modern and Classical Languages Lab
Santa Rosa	Emeritus Hall	English Writing Center Lab
Santa Rosa	Emeritus Hall	English Mac Classroom/Lab
Santa Rosa	Emeritus Hall	English Reading Lab
Santa Rosa	Forsyth Hall	Music Lab
Santa Rosa	Frank P Doyle Library	Library Teaching Classroom/Lab
Santa Rosa	Frank P Doyle Library	Center for Excellence in Teaching and Learning Lab
Santa Rosa	Frank P Doyle Library	Doyle Library Public Access areas
Santa Rosa	Haehl Pavilion	PE Lab
Santa Rosa	Bussman	English Lab
Santa Rosa	Lark Hall	Ag and Nat Resource Lab
Santa Rosa	Lounibos	Machine Tools Lab
Santa Rosa	Lounibos	Diesel Tech Lab
Santa Rosa	Lounibos	Automotive Lab
Santa Rosa	Plover Hall	Assessment Lab
Santa Rosa	Plover Hall	Assessment Lab
Santa Rosa	William B Race Building	Health Science Lab
SWC	Southwest Center	ESL – Southwest Center
SWC	Southwest Center	ESL - Mobile Laptop Cart Lab

Media Enhanced Classroom Instructor Computer Stations

200+ total stations (by year's end) in classrooms spread out in buildings across the District

Center for Excellence in Teaching and Learning

Includes 30 computers for faculty and staff use.

Servers supported by Instructional Computing

Instructional computing staff maintain and support the servers for the Instructional Computing Labs and classroom workstations.
Server services include image deployment, file sharing, online education, GoPrint pay for print system, and other departmental instructional
computing needs.

5.0 Infrastructure Performance Measures: Helpdesk, Network & Telecommunications

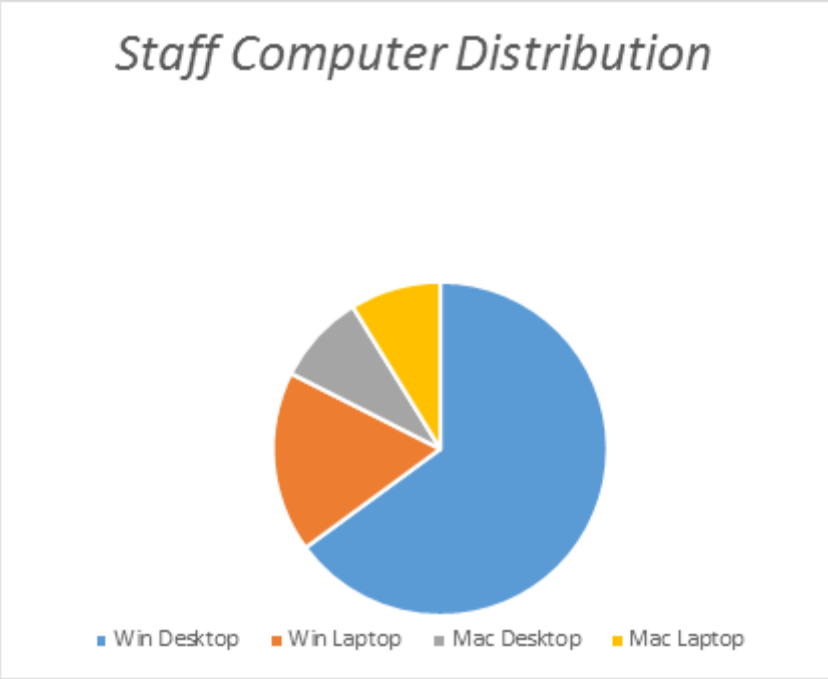
The Infrastructure team supports all District staff computers, all District phones and telecommunications equipment including E-911, emergency and mass notification systems, all District administrative servers, and the entire District computer network, including Wide Area Network (WAN), Local Area Networks (LANs) and Wireless Local Area Networks (WLANs).

1. Service requests entered into the Helpdesk system.

Thousands of requests per year are received and acted on by the Infrastructure group, with peak activity clustered around the beginning of the Fall and Spring Semesters.

	2015	2016	2017	2018	2019
Jan	1044	847	580	579	609
Feb	743	691	493	430	430
Mar	762	688	579	414	470
Apr	673	552	670	232	519
May	567	480	343	447	599
Jun	679	511	551	450	542
Jul	554	478	608	396	649
Aug	964	957	935	693	864
Sep	772	692	762	504	720
Oct	825	581	1132	560	424
Nov	560	485	744	415	453
Dec	457	485	774	353	898
Totals	**8600**	**7447**	**7721**	**5473**	**7177**

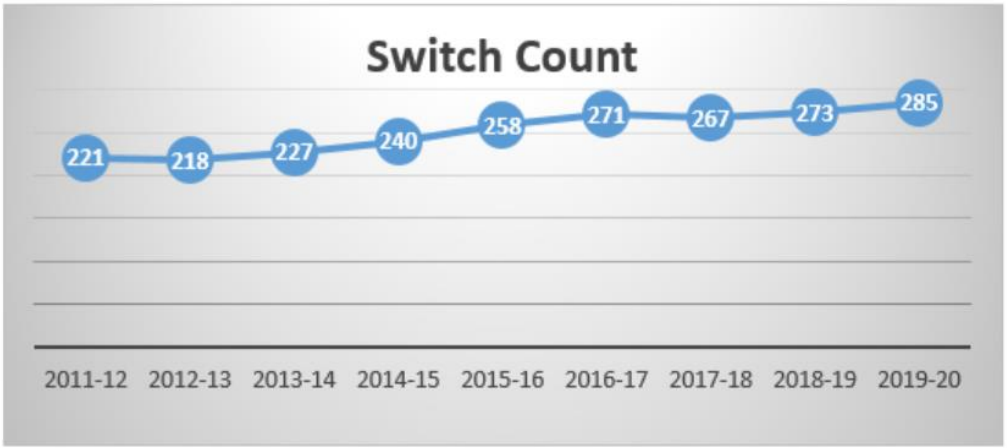
The Help Desk has deployed close to 300 loaner laptop computers, supporting SRJC staff to work remotely during the COVID Pandemic

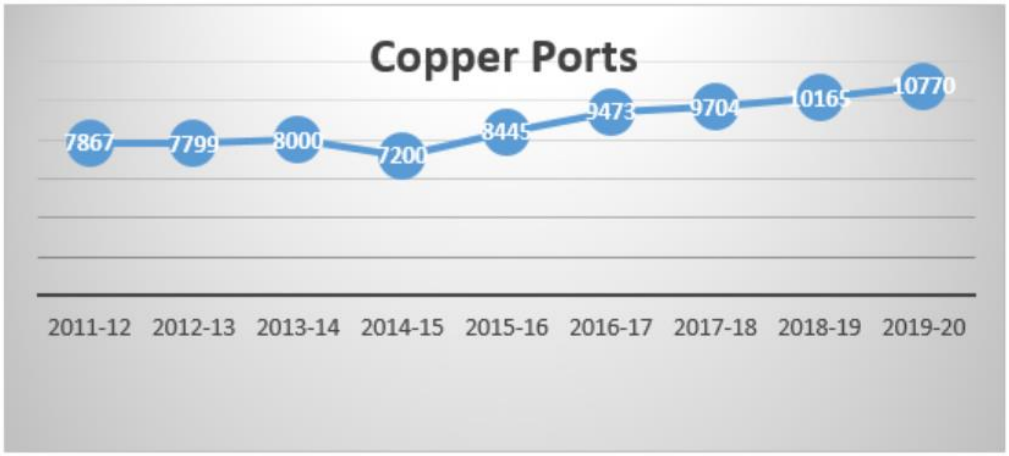


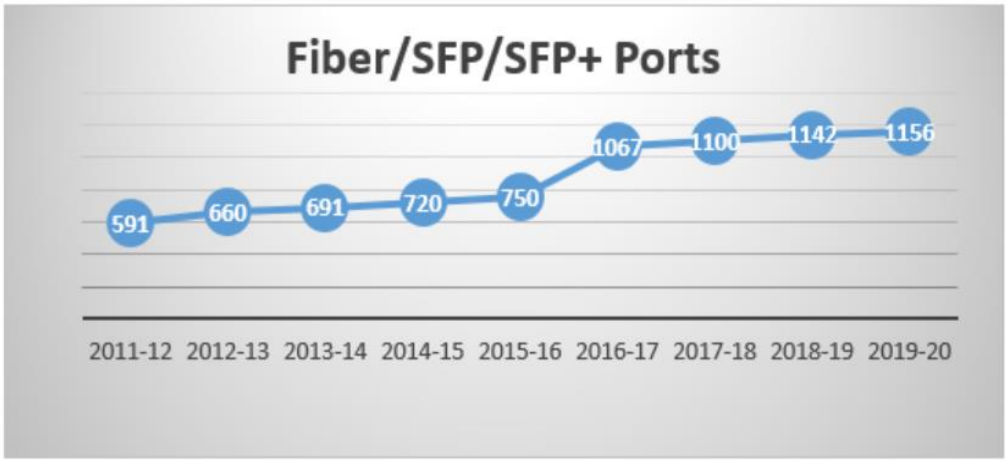
3. Managed Network Switches

All of the core and distribution layer network switches were replaced during year one of the 3 year upgrade project. We have currently deployed most of the new and replacement access layer switches. As new buildings are added and modernized under Measure H, new networking equipment will be deployed.

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Switch Count	221	218	227	240	258	271	267	273	285
Copper Ports	7867	7799	8000	7200	8445	9473	9704	10165	10770
Fiber/SFP/SFP+ Ports	591	660	691	720	750	1067	1100	1142	1156



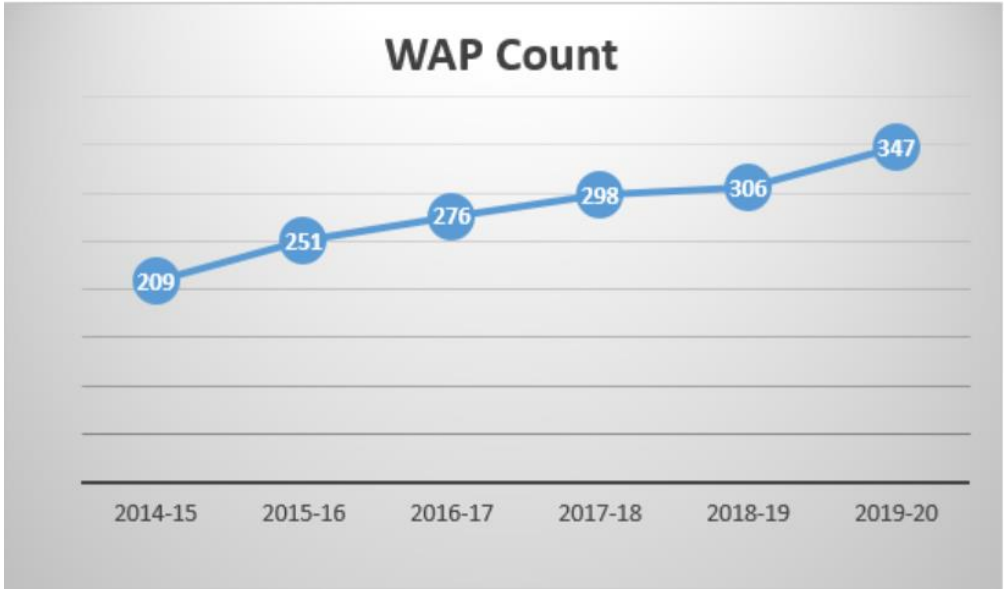




4. Wireless Access Points

The district is currently replacing our aging and outdated Wireless Access Points (WAPs) and adding new ones as necessary to cover all indoor instructional areas and those outdoor areas which see the greatest use.

Year	WAP Count
2014-15	209
2015-16	251
2016-17	276
2017-18	298
2018-19	306
2019-20	347



2014-2015	Qty	Type
Cisco 1230G Series	38	Access Points Campus Wireless
Cisco 1242AG Series	122	Access Points Campus Wireless
Cisco 1142N Series	45	Access Points Campus Wireless
Cisco 350 Series Bridge	2	Point to Point: PSTC-Windsor Warehouse
Cisco 1310 Series Bridge	2	Point to Point: SRJC-Shone Farm Backup

2015-2016	Qty	Type
Cisco 1242AG Series	102	Access Points Campus Wireless
Cisco 1142N Series	88	Access Points Campus Wireless
Cisco 2700 Series	5	Access Points Campus Wireless
Cisco 3700 Series	53	Access Points Campus Wireless
Cisco 1530 Series	3	Mesh Outdoor Access Points

2014-2015	**Qty**	**Type**
Cisco 1230G Series	**38**	**Access Points Campus Wireless**
Cisco 1242AG Series	**122**	**Access Points Campus Wireless**
Cisco 1142N Series	**45**	**Access Points Campus Wireless**
Cisco 350 Series Bridge	**2**	**Point to Point: PSTC-Windsor Warehouse**
Cisco 1310 Series Bridge	**2**	**Point to Point: SRJC-Shone Farm Backup**

2015-2016	**Qty**	**Type**
Cisco 1242AG Series	**102**	**Access Points Campus Wireless**
Cisco 1142N Series	**88**	**Access Points Campus Wireless**
Cisco 2700 Series	**5**	**Access Points Campus Wireless**
Cisco 3700 Series	**53**	**Access Points Campus Wireless**
Cisco 1530 Series	**3**	**Mesh Outdoor Access Points**

2016-2017	**Qty**	**Type**
Cisco 1242AG Series	**57**	**Access Points Campus Wireless**
Cisco 1142N Series	**84**	**Access Points Campus Wireless**
Cisco 2700 Series	**5**	**Access Points Campus Wireless**
Cisco 3700 Series	**121**	**Access Points Campus Wireless**
Cisco 1530 Series	**5**	**Mesh Outdoor Access Points**
Cisco 1570 Series	**4**	**Mesh Outdoor Access Points**

2017-2018	Qty	Type
Cisco 1230G Series	1	Autonomous Access Point
Cisco 1242AG Series	2	Access Points Campus Wireless
Cisco 1142N Series	71	Access Points Campus Wireless
Cisco 2700 Series	5	Access Points Campus Wireless
Cisco 3700 Series	205	Access Points Campus Wireless
Cisco 3800 Series	2	Access Points Campus Wireless
Cisco 1530 Series	8	Mesh Outdoor Access Points
Cisco 1570 Series	4	Mesh Outdoor Access Points

2018-2019	Qty	Type
Cisco 1230G Series	1	Autonomous Access Point
Cisco 1242AG Series	2	Wireless Bridge
Cisco 1142N Series	36	Access Points Campus Wireless
Cisco 2700 Series	4	Access Points Campus Wireless
Cisco 3700 Series	215	Access Points Campus Wireless
Cisco 3800 Series	36	Access Points Campus Wireless
Cisco 1530 Series	8	Mesh Outdoor Access Points
Cisco 1570 Series	4	Mesh Outdoor Access Points

2019-20	Qty	Type
Cisco 1230G Series	0	Autonomous Access Point
Cisco 1242AG Series	2	Wireless Bridge
Cisco 1142N Series	0	Access Points Campus Wireless
Cisco 2700 Series	0	Access Points Campus Wireless
Cisco 3700 Series	206	Access Points Campus Wireless
Cisco 3800 Series	123	Access Points Campus Wireless
Cisco 1530 Series	8	Mesh Outdoor Access Points
Cisco 1560 Series	4	Mesh Outdoor Access Points
Cisco 1570 Series	4	Mesh Outdoor Access Points

5. Telecommunications Infrastructure

The District continues to increase the number of IP phones at a rapid rate. We have now deployed IP phones to virtually every classroom in an effort to improve faculty and student safety and service. Over 200 new Cisco Jabber software phones have been configured and deployed for remote workers during the COVID Pandemic

Total Phones - 1969
Total Classroom Phones – 228
Jabber Phones (Remote Software Phones to support remote work) - 276
Voicemail endpoints (Mailboxes and Call Handlers) – 1332

6. Total Core Infrastructure Counts for 2019-2020

Wireless Hardware	Qty	Type	Usage Description
Cisco 1242AG Series	2	Wireless Bridge	Windsor Warehouse connectivity
Cisco 3700 Series	206	Wireless Access Point	Campus Wireless Access
Cisco 3800 Series	123	Wireless Access Point	Campus Wireless Access
Cisco 1530 Series	8	Outdoor Access Points	Shone Greenhouse, Custodial, 705 Elliott, SW Center Bldg 1 and 2 Connectivity
Cisco 1560 Series	4	Outdoor Access Points	Kunde , Burbank outdoor
Cisco 1570 Series	4	Outdoor Access Points	Bailey Field Wireless Access
Cisco 8510 WLC	2	Wireless LAN Controller	Controller for all Wireless Access

Switching Hardware	Qty	Type	Usage Description
Cisco 2940 Series	2	Access Layer Switching	Campus endpoint connectivity
Cisco 2950 Series	1	Access Layer Switching	Campus endpoint connectivity
Cisco 2960 Series	11	Access Layer Switching	Campus endpoint connectivity
Cisco 3560 Series	32	Access Layer Switching	Campus endpoint connectivity
Cisco 3650 Series	32	Access Layer Switching	Campus endpoint connectivity
Cisco 3750 Series	3	Access Layer Switching	Campus endpoint connectivity

Cisco 3850 Series	**157**	**Access Layer Switching**	**Campus endpoint connectivity**
Cisco 9300 Series	**28**	**Access Layer Switching**	**Campus endpoint connectivity**
Cisco 3850-12XS	**6**	**Distribution Layer Switching**	**Fiber Distribution to Access Switches**
Cisco 4500-X	**5**	**Distribution Layer Switching**	**Fiber Distribution to Access Switches**
Cisco 6880-X-LE	**2**	**Distribution Layer Switching**	**Fiber Distribution to Access Switches**
Nexus 7700 distribution	**3**	**Core Layer Switching**	**Core connectivity to UCS/HyperFlex Server environment and WAN**
Nexus 2000	**3**	**Core Layer Switching**	**Physical server connectivity**

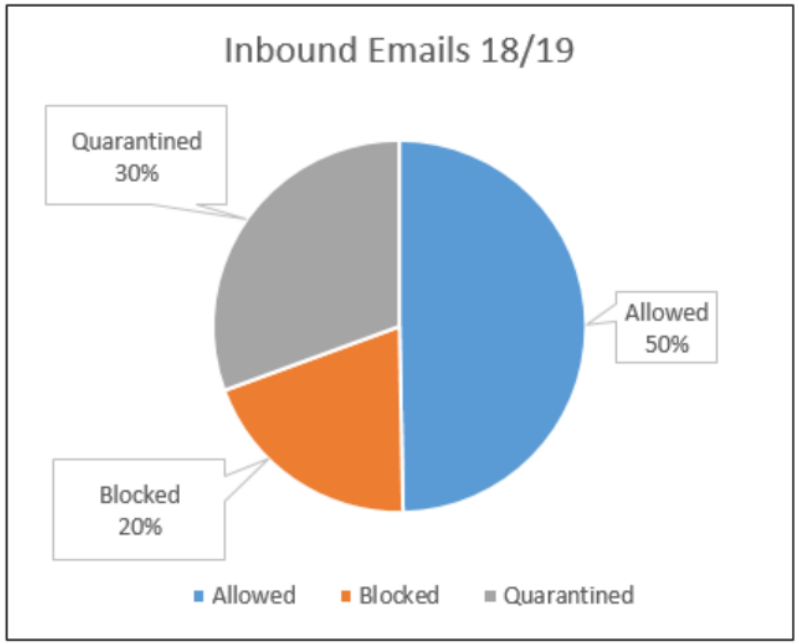
Routing Hardware	**Qty**	**Type**	**Usage Description**
Cisco 2911 ISR	**3**	**Integrated Services Router**	**Shone, Southwest WAN Router, PSTC Voice Router**
Cisco 2951 ISR	**1**	**Integrated Services Router**	**Petaluma Voice Router**
Cisco 4431 ISR	**2**	**Integrated Services Router**	**Santa Rosa PRI Voice Routers**
Cisco 1001-X ASR	**2**	**WAN Aggregation Services Router**	**Santa Rosa, PSTC WAN Router**

Analog Voice Hardware		**Type**	**Usage Description**
Cisco VG 224	**9**	**Analog Voice Gateway**	**Analog line endpoint access**

Security Appliances	**Qty**	**Type**	**Usage Description**
Palo Alto PA-5220	**3**	**Internet firewall**	**Santa Rosa and Petaluma main security gateway to CENIC ISP**
Cisco ASA 5506-X and SRJC Internet access	**1**	**Police firewall**	**Main gateway between Pedroncelli police network, County network,**
Cisco ISE (VM)	**3**	**Identity Services**	**Policy engine and authentication for wireless and network hardware**

Network Mnagement	**Qty**	**Type**	**Usage Description**
Cisco Prime Infrastructure (VM) hardware	**1**	**Network Hardware Management**	**Central management for Network and Wireless**
LiveAction (VM) WAN routing	**1**	**Netflow and QOS Management**	**Netflow collector and QOS policy integration for VLAN and**

6. E-Mail Statistics: Actions on Incoming Mail from Outside Sources



Annual Volumes

Inbound Emails

2014	**3,800,000**
2015	**3,900,000**
2016	**7,450,000**
2017	**11,300,000**
2018	**7,000,000**

5 years **33,450,000**

SRJC
18/19

Inbound Emails

Allowed	**3,372,528**
Blocked	**1,337,448**
Quarantined	**2,075,628**
Total Emails	**6,968,280**

7. Web page hits, visits and page views.

What are the differences?

Technical definition of a hit

Each file sent to a browser by a web server is an individual hit.

Technical definition of a page view

A page view is each time a visitor views a webpage on your site, irrespective of how many hits are generated. Pages are comprised of files. Every image in a page is a separate file. When a visitor looks at a page (i.e. a page view), they may see numerous images, graphics, pictures etc. and generate multiple hits.

For example, if you have a page with 10 pictures, then a request to a server to view that page generates 11 hits (10 for the pictures, and one for the html file). A page view can contain hundreds of hits. This is the reason that we measure page views and not just hits.

Hits are not a reliable way to measure website traffic.

Additionally, there is a high potential for confusion here, because there are two types of 'hits'. The hits we are discussing in this article are the hits recorded by log files, and interpreted by log analysis. A second type of 'hits' are counted and displayed by a simple hit counter. Hit counters record one hit for every time a webpage is viewed, also problematic because it does not distinguish unique visitors.

Technical definition of a visit

As of February 2015, we began using “Siteimprove”, which provides not only Web metrics but it also analyzes our Web pages for ADA 508 compliance. The following Web metrics reported from February 2015 to February 2020 are from Siteimprove data. We have kept the reporting periods the same for comparison. Using the following definitions for a page view and a visit:

1. A page view is a count of how many times a page has been viewed on a website within a chosen period of time.

2. A visit is defined as a series of page requests from the same uniquely identified visitor with a time of no more than 30 minutes between each page request.
3. A unique visitor is defined a visitor that is counted only one time, as long as they have accepted / not deleted a cookie, used the same device, and used the same browser. If any of these are not true than that visitor would be counted again.

Siteimprove for almost a 13 month period, 2/3/15 to 2/2/16)
Visits: 2.6 million
Page Views: 6.2 million
Unique Visitors: 0.92 million

Siteimprove for almost a 13 month period, 2/3/16 to 2/2/17)
Visits: 3.8 million
Page Views: 11.3 million
Unique Visitors: 1.6 million

Siteimprove for almost a 13 month period, 2/3/17 to 2/2/18)
Visits: 4.6 million
Page Views: 14.2 million
Unique Visitors: 2 million

Siteimprove for almost a 13 month period, 2/3/18 to 2/2/19)
Visits: 4.57 million
Page Views: 14 million
Unique Visitors: 2.12 million

Siteimprove for almost a 13 month period, 2/3/19 to 2/2/20
Visits: 4.08 million
Page Views: 12 million
Unique Visitors: 2.18 million

The Web traffice trend for 2019-2020 is relatively the same as compared to the previous year. Siteimprove only collects data from the Drupal sites.

8. Programming tasks

Information Technology identified approximately 70 programming projects that are defined in the “Systems & Programming Projects” list that can be reviewed from the Information Technology website at:

https://it.santarosa.edu/sites/it.santarosa.edu/files/documents/District%20IT%20Systems%20%20Programming%20%20Project%20list%205_1_2020.pdf

During the past 12 months 19 Projects were completed. There are currently 23 programming projects that are actively being worked on and 28 additional projects that are pending approval since the last project review meeting. Because programmers can only develop one solution at a time, many projects are in programmer’s queues but have not been started.

The development of the new Student Information System competes for time with the other duties assigned to the programming staff, including the following:

1. Develop, maintain, and support all institutional software packages including: Business Services and Financial Records packages, and Financial Aid packages.
2. Support of the Escape Online Business Services and Financial Records package.
3. Provide institutional data for internal and external reporting needs which are growing as the District faces more financial pressure. Departments and Administrators are requesting more data and reports than ever to estimate the performance of their departments and measure student success.
4. Coordinate and generate reports required by federal and state agencies, MIS reporting with over half a dozen new data elements to be implemented this year and another half a dozen next year, the new gainful employment reporting requirements and many other data requests.
5. PCI compliance. We are currently PCI compliant with all Credit Card payment systems used at the District.
6. Provide software changes to meet state compliance regulations such as ADA 504/508, Title 5 and SSSP.
7. Implement California Community Colleges Education Planning and Student Success Initiatives as a pilot college for EPI/DAS Starfish, Online Education (Canvas), State Portal MyPath, and AB705.

5.0 Data Governance Maturity

The SRJC is embarking on a project to improve Data Governance at the District. This is the first year (2020) that maturity is being tracked, so there is no trending as yet. The Stanford Maturity Model is being used. Goal for SRJC is to average 3.00 for each section.

Current score:

Foundational	People	Policies	Capabilities	Average
Awareness	1	1	2	1.33
Formalization	1	2	1	1.33
Metadata	1	1	1	1.00
Average				**1.16**
Project	People	Policies	Capabilities	Average
Stewardship	2	2	1	1.67
Data Quality	2	1	2	1.67
Master Data	2	1	2	1.67
Average				**1.67**

5.0 Security Metrics

Starting in 2020-21, the IT Department will track the following:
Number of phishing exploits (264 in 2019-20);
Number of users responding to various exploits;
Number of Critical server vulnerabilities (same time each year)

6.1 Progress and Accomplishments Since Last Program/Unit Review

Rank	Location	SP	M	Goal	Objective	Time Frame	Progress to Date
0001	ALL	01	07	Upgrading SIS to a next generation commercial product	Work with planning teams and Consultants to help define next generation ERP needs	36 months	In process
0002	ALL	04	07	Upgrade Network Infrastructure from 1 GHz backbone to 10 GHz backbone	Year 1 - Upgrade the core routers and switches $2M project. Buy Cisco UCS servers and Nimble Network storage appliances. COMPLETED Year 2- Upgrade access-layerswitches, upgrade wireless access points. IN PROGRESS Year 3- Upgrade wiriing and switches and access points and expand adding new access points.	36 months	In process
0003	ALL	01	06	ADA 504/508 WCAG 2.0 Compliance	Work with Department Web authors to verify and or correct their Web content for ADA compliance. Ensure all PDFs, Videos, and Forms are ADA compliant.	ongoing	ongoing
0004	ALL	04	06	Migrate SRJC Web to Drupal 8	Transfer all Department Web pages to Acquia	12 months	Complete
0005	ALL	02	06	Implement standard instructor work station on all SRJC sites	Work with Media and Academic Affairs to develop and implement a single standard hardware and software configuration for a consistent instructor station standard for the SRJC. Ongoing deployment of current instructor station standard configuration.	ongoing	ongoing
0006	ALL	04	06	Implement effective software tools for MacOS and iOS manamagent	Continue to implement Jamf management system for MacOS and iOS systems.	ongoing	ongoing
0007	ALL	00	00	Implement Multifactor Authentication for increased security of sensitive data	Place an additional barrier (factor of authentication) between hackers and sensitive data, by raising the authentication bar to include “something you have”.	12 months	In process

6.2b PRPP Editor Feedback - Optional

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6.3a Annual Unit Plan

Rank	Location	SP	M	Goal	Objective	Time Frame	Resources Required
0000	ALL	00	00	Purchase and implement KnowBe4 Security Awareness and phishing orchestration software to bolster data security	Improve awareness, reduce clicking on phishing links, automate responses to phishing attacks.	6 months	$25k/year, one resource to manage orchestration (PhishER) one to manage phishing campaigns.
0001	ALL	01	07	Upgrading SIS to a next generation commercial product	Work with planning teams and Consultants to help define next generation ERP needs	36 months	- SIG Corp for consulting help to define needs via business process analysis and surveys. Also, use SIG for procurement management - SRJC staff and faculty participation in planning and implementation - IT Staff for planning and implementation - $15-25M in bond funding
0002	ALL	04	07	Upgrade Network Infrastructure from 1 GHz backbone to 10 GHz backbone	Year 1 - Upgrade the core routers and switches $2M project. Buy Cisco UCS servers and Nimble Network storage appliances. COMPLETED Year 2- Upgrade access-layerswitches, upgrade wireless access points. IN PROGRESS Year 3- Upgrade wiriing and switches and access points and expand adding new access points.	36 months	- $2M in bond funding for equipment and consulting - Network Tech time to plan, install and test - Coordination with Facilities and Capital improvement
0003	ALL	01	06	ADA 504/508 WCAG 2.0 Compliance	Work with Department Web authors to verify and or correct their Web content for ADA compliance. Ensure all PDFs, Videos, and Forms are ADA compliant.	ongoing	- Staff time to manage compliance checking - Dedicated Accessibility Coordinator and two student workers to correct accessibility defects - Provide staff training

Rank	Location	SP	M	Goal	Objective	Time Frame	Resources Required
0004	ALL	04	06	Migrate SRJC Web to Drupal 8	Transfer all Department Web pages to Acquia	12 months	- Setup CAS server for Web author access - Migrated 160+ department web sites to Acquia - Web author Acquia training
0005	ALL	02	06	Implement standard instructor work station on all SRJC sites	Work with Media and Academic Affairs to develop and implement a single standard hardware and software configuration for a consistent instructor station standard for the SRJC. Ongoing deployment of current instructor station standard configuration.	ongoing	- ITG Bond funding for new workstations - Staff time to image and implement
0006	ALL	04	06	Implement effective software tools for MacOS and iOS manamagent	Continue to implement Jamf management system for MacOS and iOS systems.	ongoing	Staff time for Jamf admistration and equipment configuation
0007	ALL	00	00	Implement Multifactor Authentication for increased security of sensitive data	Place an additional barrier (factor of authentication) between hackers and sensitive data, by raising the authentication bar to include “something you have”.	12 months	Staff time to design and implement. General funds of $20k first year, $7k/year thereafter.