

Status: **Reviewed**

Entry #: 16

Date Submitted: 10/29/2020 5:04 PM

2020-2021 ANNUAL REVIEW

OVERVIEW OF PROGRAM REVIEW AND PLANNING FOR NON- INSTRUCTIONAL PROGRAMS

Program Review is a self-study of your unit. For non-instructional program review, the definition of what is a unit varies based upon your division. A unit may be a department (e.g., Information Services, Institutional Research and Planning, Financial Aid), a program (e.g., EOPS, TRIO), or a division (Human Resource Services). The Vice Presidents for each division have identified/defined the units that will complete the review cycle.

Regardless of whether your unit is a program, department, or division, program review is about documenting the plans you have for improving Institutional Effectiveness in your area and sharing that information with the college community. Through the review of and reflection on key elements, program review and planning identifies program strengths as well as strategies necessary to improve the operation of your area. With that in mind, please answer the following questions.

The Annual Update is designed to help you track progress on your three-year plan. It allows for updates to your plan based on:

- 1) Updates to Service Area Outcomes assessment cycle or unit data;
- 2) new events, legislation, or processes that affect your unit's ability to meet your mission; and
- 3) a review of progress on your three-year plan's goals.

BASIC UNIT INFORMATION

Program/Unit Name

Information Services

Department Name

Information Services

Division Name

Finance and Administrative Services

Name of Person responsible for the Program/Unit

Connie Moise

Website address(es) for your program(s)/unit(s)**Webpage URL 1****Unit webpage**<https://www2.palomar.edu/pages/is/>**Please list all participants and their respective titles in this Program Review**

Participant	Title
Connie Moise	Director, Information Services
Michael Dimmick	Manager, Network and Data Center
Pajseu Lochungvu	Manager, Systems and Programming
Jose Vargas	Manager, Technical Services
Robert Akers	Infrastructure Systems Engineer
Juan Aviles	Senior Infrastructure Systems Administrator
Daniel Gunawan	Senior Infrastructure Systems Administrator
Elena Ibarra	Senior Infrastructure Systems Administrator
Brent Van Voorhies	Senior Infrastructure Systems Administrator
Robert Sedillo	Infrastructure Systems Administrator
Dean Peterson	Senior Infrastructure Systems Administrator
Wanicha Bergknoff	Oracle Database Administrator
Herminio Arevalo	Senior Programmer Analyst
Mark Hopkins	Senior Programmer Analyst
Tom Rowland	Senior Programmer Analyst
Mike Marsh	Programmer Analyst
Art Reyes	Programmer Analyst
Tim Chen	Programmer Analyst
Timothy Tran	Technical Services System Administrator
David Clayton	Senior Network/Systems Technician

Participant	Title
James Daugherty	Senior Network/Systems Technician
David Garcia	Senior Network/Systems Technician
Russell Thomas	Senior Network/Systems Technician
Perry Escamilla	Senior Network/Systems Technician
Robert Fulmer	Audio Visual Technician
Ryan Davis	Audio Visual Technician
May Chow	Network/Systems Technician
Jefferson Costella	Network/Systems Technician
Jorge Cossio	Network/Systems Technician
Sergio Almaraz	Technical Support Specialist
George Frederick	Technical Support Specialist
Elizabeth Schoneman	Administrative Specialist I

STAFFING AND SERVICE UPDATES

Staffing

Use the link provided to help answer the staffing questions below.

Link: [Permanent Employees Staff Count](#)

This form requires a login and password to access. Please use your Palomar email and password to log in.

Full-Time Staff

Total Number of Full-time Staff

32.00

Number of Classified Staff

28.00

Number of CAST Staff

0.00

Number of Administrators

4.00

Number of Full-time Faculty

0.00

Part-Time Staff

Total Number of Permanent Part-time Staff

FTE of Part-time Staff (2x19 hr/wk=.95)

FTEF of Part-time Faculty

Describe additional temporary hourly or contract staff who support this unit and/or department. (Include FWS/District Student Worker/Veteran Student Worker)

1-2 part-time temporary consultants periodically contracted to complete discrete, well-defined projects or scopes of work requiring specialized technical expertise

Have you experienced any changes in staff this past year? If so, please describe how the changes have impacted your operations.

Senior Programmer Analyst retired - impact to work on major projects in Human Resources and Fiscal Services (e.g., Commitment Accounting Project in response to FCMAT recommendations)

Technical Support Specialist retired - impact to IS Help Desk and institutional switchboard services

Program/Unit Description

Have the services your unit performs change in any way over the past year?

In response to safety planning in light of COVID-19 and the governor's stay-at-home order, institutional technology support and services were significantly impacted. Some of the changes that Information Services implemented and continue to sustain and support include:

Configured and equipped employees institution-wide with laptops/computers (and a few other devices such as headsets/hotspots) for home use based on their requirements.

Arranged for staggered shifts for a very limited number of on-site technical support staff to minimize on-site presence and maximize safety.

Licensed and configured an appointment system for on-site technical support (and to facilitate equipment loans to employees, lab kit distribution to students and other activities requiring on-site visits) to prevent a rush of on-site access to pick up equipment, and coordinate campus visits to facilitate safety.

Configured virtual machines for remote access by employees using VMware Horizon Client (as opposed to VPN connections).

Configured specialized computer labs and virtual machines for remote access by students based on course requirements.

Deployed VMware Horizon and Splashtop to facilitate remote access and remote technical support.

Configured MS Teams for meetings and collaboration work, including its use by the institution's Emergency Operations Center for daily incident response meetings.

Established switchboard and IS Help Desk coverage through the use of softphones and virtual machines.

Provided instructions to employees on remotely using the District's phone system so they can continue to represent Palomar College (and protect their private phone numbers) when calling students or communicating with our community by phone.

Provided instructions and materials for employees on a wide range of technical topics to facilitate successful telecommuting.

Built a website to provide detailed technology help for students, including materials and instructions on accessing resources remotely.

Reminder: Data does not autosave. Save this content before moving to the next section or closing form.

PROGRAM/UNIT ASSESSMENT

SERVICE AREA OUTCOMES UPDATE

GOT SERVICE AREA OUTCOMES?

Outcomes are statements written in support of student learning to show direct support (instruction) or indirect support (services) provided on campus. Assessment is the way we measure how well we are achieving our outcomes.

For non-instructional areas, outcomes are called Service Area Outcomes (SAO).

So, what is an SAO?

A Service Area Outcome (SAO) is a statement about what a client will experience, receive, or know as a result of a given service. Clients can be students, faculty, staff, or community members.

As part of our three-year planning and review cycles, all non-instructional units are asked to:

- identify at least two SAOs,
- develop a plan and assess their SAOs,
- reflect on the results,
- and take action, as necessary.

Palomar has adopted Nuventive Improve (previously named TracDat) as our official repository for SLO and SAO Assessment information.

Review and/or define your SAOs and assessment plans and ensure they are entered in Nuventive Improve by:

1) Login to Nuventive Improve (previously TracDat) <https://www2.palomar.edu/pages/sloresources/2015/08/10/tracdat/>. Your Palomar username and password is your login.

2) Check your SAOs for **currency** and **sunset** any SAOs if you no longer plan to assess them.

3) Revise or edit your current SAOs by revising their wording and/or updating the assessment and assessment results.

NEED HELP?

Nuventive Improve:

1) If you need help with anything Nuventive Improve related such as login, unit identification, entering SAO info, contact Marti Snyder at msnyder2@palomar.edu.

2) Check out this video on how to enter SAOs in Nuventive Improve: <https://youtu.be/b1sRa68wm4c>

Defining and Assessing SAOs:

Not sure if your SAOs make the grade? Need some help writing an SAO? Not sure about how to assess your SAOs?

1) [Hartnell's SAO Guide](#) is a nice resource! Thank you Hartnell!

2) Contact Michelle Barton at mbarton@palomar.edu. We have a resource support team to help.

A template for entering SAOs can be found on the [IR&Ps Non-instructional Program Review and Planning website](#)

SERVICE AREA OUTCOMES TEMPLATE					
Date Identified or Last Reviewed	Description of SAO (What is your SAO?)	Assessment Method (How will/ do you measure or assess it?)	Criterion (How will/ do you know if you met the outcome?)	Date of Assessment	Date of Next Assessment
1)					
2)					
3)					
4)					

Are all of your unit's SAOs and assessment plans **UPDATED** and **ENTERED** in Nuventive Improve?
Yes

SAOs Summaries / Reflection

If you have completed any SAO assessments over the past year, summarize what you learned from the assessment and what improvements you have implemented or plan to implement as a result of your SAO assessments. If you have not completed SAO assessments, document why (e.g., SAO was assessed last year).

SAOs

SAO 1

SAO Title

Information Technology Security

Assessment Status

Assessed

SAO Summary and Reflection

Protect and secure the District's data and access to mission critical systems, measured through

- Threat Protection Services

Audits were completed in the following areas during the past year:

- Review of accounts and access privileges. This resulted in account disabling for vendor/consultant accounts and for employee separations, and access restrictions based on job requirements.
- Ongoing review of network threat protection reports such as Cisco Umbrella reports. This enabled IS staff to tune system security and data protective measures by exposing areas of increased cyber threats to District systems, accounts and data.

SAO 2

SAO Title

Help Desk Services

Assessment Status

Not assessed

Next planned assessment

Service Area Outcome assessments in Information Services are completed as part of the Finance and Administrative Services Division Survey which is next scheduled to be completed in 2021.

SAO 3

SAO Title

Technical Services

Assessment Status

Not assessed

Next planned assessment

Service Area Outcome assessments in Information Services are completed as part of the Finance and Administrative Services Division Survey which is next scheduled to be completed in 2021.

SAO 4

SAO Title

Systems and Programming Services

Assessment Status

Not assessed

Next planned assessment

Service Area Outcome assessments in Information Services are completed as part of the Finance and Administrative Services Division Survey which is next scheduled to be completed in 2021.

SAO 5**SAO Title**

Network and Data Center Services

Assessment Status

Not assessed

Next planned assessment

Service Area Outcome assessments in Information Services are completed as part of the Finance and Administrative Services Division Survey which is next scheduled to be completed in 2021.

OTHER ASSESSMENT DATA

Review the Quantitative and Qualitative Data from your comprehensive review. If there are updates please describe them below.

ACHIEVEMENTS AND OTHER RELEVANT INFORMATION

Describe your program's achievements this past year. Where possible, describe how these achievements are related to our students and their success!

Information Technology Security

- Upgraded the District's email threat protection system.
- Formed a cybersecurity team to focus on technology solutions and make information technology security recommendations.
- Implemented new security features available in Cisco ISE, DNA and Stealthwatch to tighten District data and systems protection.
- Implemented 2-factor authentication for access to sensitive data and administrative systems.
- Moved remote access employee accounts to VMware Horizon, eliminating VPN access for users without business requirements for VPN.
- Implemented new VLAN infrastructure to improve security and performance.
- Implemented Microsoft email encryption services.
- Implemented data loss policies to prevent Personally Identifiable Information (PII) from being sent via email.
- Implemented Azure security features to help secure user accounts and information.

Help Desk Services

- Reconfigured the layout of the service area in A-110 to accommodate visitors to the Help Desk for more efficient service, and added protections such as plexiglass shields in response to the pandemic.
- Recorded new District phone system greetings, including a Spanish version.
- Provided new employee orientations to District Information Services, describing IS resources, services, contact information and procedures.
- Participated in professional development trainings, providing technical information and resources to employees.
- Prepared and added documentation and helpful materials to the All Employee Telework Team (files) to facilitate remote work.

Technical Services

- Filled vacant Network/Systems Technician positions.
- Configured standard computer lab software image and specialized (course enrollment-based) software images for access by students and faculty, including updates for Fall and Spring semesters to reflect instructional requirements, updated software versions, and security patches.
- Migrated the Palomar College Foundation's Abilia Database to a new server and newer version of SQL Server.
- Configured all the Hyperion database connections for Institutional Research and Planning.
- Updated virtual infrastructure to support the GIS instructional program.
- Retrofit and installed new state-of-the-art audio visual control systems in 30 classrooms and conference rooms.
- Updated device firmware to 1,000+ devices, increasing reliability and stability of District audio visual control systems.
- Implemented a remote technical support solution (using Splashtop) to enable technicians to assist employees with most computer and software issues without requiring physical contact in response to the pandemic.

Systems and Programming Services

- Upgraded PeopleSoft Human Capital Management to improve usability and maintain technical currency of this mission critical system, for which Oracle support ended in December 2018.
- Upgraded PeopleSoft Campus Solutions to improve usability and maintain technical currency of the District's mission critical student information system that directly serves students.
- Completed modifications and enhancements to Starfish to support student success through Early Alert and Degree Planning.
- Enhanced Cornerstone interface to improve integration data quality in support of Palomar Powered Professional Development (3PD).
- Completed periodic updates, application and security patches in all PeopleSoft environments.
- Completed database backup, recovery and migration from the old Linux server to the new Linux servers.
- Modified Oracle database refresh scripts following PeopleSoft upgrades (all environments) to increase database refresh efficiency.
- Created database views for SEM Data Warehouse project.
- Created database link and Linux shell script to automate daily tuition refunds.
- Implemented performance optimization for Oracle database and increased disk space.

Network and Data Center Services

- Expanded Wireless Access Service by adding access points and controllers, along with analytical tools to aid the Network and Data Center team in maintaining and supporting this service.
- Acquired and installed Data Center and infrastructure components to replace end-of-life equipment, including a very large project to replace and upgrade all infrastructure equipment in the MD building.
- Filled vacant Senior Infrastructure Systems Administrator position.

- Provided virtual connectivity and remote support software (VMWare Horizon, Splashtop) for students and employees, including remote, internet-based access to virtual computer labs and lab software.
- Migrated on premise Exchange to Exchange Online (O365).
- Replaced old data center backup systems and move the disaster recovery site to Rancho Bernardo.
- Migrated internet/network connectivity to all sites via CENIC from Layer 2 to Layer 3 and implemented Quality of Service (QOS) feature.
- Implemented new virtual data center load balancer which improved reliability and performance.
- Implemented new District auto attendant (Main Greeting) for the phone system and included a Spanish version.
- Rolled out Microsoft Teams to all faculty and staff, to enhance collaboration, particularly during remote work.
- Increased data center storage capacity at San Marcos and Rancho Bernardo to host the District department shares.
- Move the District's Domain Name Service (DNS) from on premise to Microsoft Azure.
- Eliminated unused phone lines and T1 services, generating cost savings to the District.

Provide an update on recent changes in legislation, policies, procedures, processes, and/or technology (software and hardware) that have impacted or will impact your program/unit? What effect will these changes have on your program/unit?

The Student Centered Funding Formula impacts and influences the District's data collection and mandated reporting practices, (e.g., SB 1359, AB 705, AB 19). Changes to mandated MIS reporting data elements continue to be implemented by the CCCCCO, requiring changes to long-standing programs and procedures. Since Information Services is responsible for this mandated reporting, changes in programming are continually implemented in response, based on consultation with the Data Integrity Team.

In addition to (or in response to) the changes listed above, what board policies, procedures, and processes need to be updated, created, or deleted?

With the migration to primarily online and remote work, strong operational and data security protection and data loss prevention measures must be reflected more prominently in the institution's computer and network use policies and procedures, including BP/AP 3720. A revision to AP 3720 must highlight the need for all employees to be trained in data protection and data management practices.

Reminder: Data does not autosave. Save this content before moving to the next section or closing form.

PROGRESS ON GOALS

Review the goals listed on your comprehensive review and summarize progress you have made on the strategies for implementation. If your unit has experienced challenges implementing the goals, describe those challenges.

Click on "+Add Goal" below for each additional goal.

Goals

Goal 1

Goal

Ensure operational and data security, data integrity, and reliable technology infrastructure.

Choice

In progress

Describe Progress

1. PARTIALLY COMPLETE: Replace old phones and integrate VOIP functions.
 - Integration of VOIP functions with MS 365/Teams is in progress and expected to be complete by the end of the 2020 calendar year. Funds are needed to upgrade the physical phones on-site.
2. PARTIALLY COMPLETE: Implement/apply common reporting/querying tools.
 - BI Publisher, PSQuery, and nVision are tools used for PeopleSoft reporting, however, some users find these tools too arduous and have requested a reporting tool that will be easier for end-users. The Data Integrity Team is making progress on identifying standard data elements for use in reporting, in order to improve consistency and accuracy when reports are prepared by different departments.
3. COMPLETE: Expand port security to all buildings.
 - New security features available in Cisco ISE, DNA and Stealthwatch address this requirement.
4. Establish change management system, particularly for institutional mission critical systems, and for key infrastructure components.
5. PARTIALLY COMPLETE: Implement data retention policies that cover user data (email and user files)
 - Draft email retention policy developed by the Technology Master Plan Work Group is ready for review by FASPC.
6. PARTIALLY COMPLETE: Reduce/eliminate shadow systems and duplicate data repositories.
 - Complete except in the area of tutoring center data. Implementation of PAT 2.2 by Enrollment Services is expected to address this.
7. PARTIALLY COMPLETE: Implement stronger security protections such as 2-factor authentication for access to sensitive data and administrative systems.
 - 2FA is implemented and required for all IS employees, not yet mandatory for all District employees. In addition, moved virtually all remote access accounts to VMware Horizon, eliminating VPN access for users without business requirements for VPN.
8. ONGOING: Maintain current software licensing and versions to support instructional and institutional requirements.
 - current and ongoing

Describe Challenges

Many strategies in support of Goal 1 require new funding so completion is dependent upon funding allocations.

Vacant Technology Security Analyst, Infrastructure Systems Administrator and Technical Services Systems Administrator positions must be filled to make substantial progress on strategies in support of Goal 1.

District employees are sometimes reluctant to learn and apply data protection measures (such as multi-factor authentication or using complex passwords), or to adjust poor data security habits (such as opening email attachments from unverified senders). This presents a significant challenge to ensuring operational and data security, and puts the institutional data, systems and infrastructure at risk.

Tools are needed to enable thorough testing and eliminate impact to production environments when new technologies are being explored/implemented.

Acquisition of Data Center and infrastructure components are needed to replace those at end-of-life.

Additional Wireless Access Points and Controllers, along with analytical tools, are need to expand the wireless access service more broadly for student and employee use.

Additional phone equipment is needed to replace end-of-life equipment, and funds are needed to update IP phone software.

Describe Outcomes (if any)

Completed annual review of accounts and access privileges.

Completed reviews of network threat protection reports such as Cisco Umbrella reports.

No mission critical system outages.– Achieved during this period.

No data or system security breaches.– Achieved during this period.

Goal 2**Goal**

Facilitate student services, and enhance teaching and learning objectives, through smart campus, classroom and online technologies.

Choice

In progress

Describe Progress

1. COMPLETE: Audio visual system equipment upgrades replaced outdated systems in classrooms and conference rooms.
2. PARTIALLY COMPLETE: Implement District-wide Digital Signage management system.–System has been selected and implemented in some areas. Standards for content management and administration have been defined.
3. Replace 2 large outside Digital Displays at SU.
4. COMPLETE: Upgrade Global Viewer to maximize efficiency of Extron devices (used in classrooms). While Global Viewer has been updated, many older classrooms have technology that is not yet incorporated.
5. ONGOING: Maintain current software licensing and versions to support instructional and institutional requirements.
- current and ongoing.
6. COMPLETE: Provide equipment and system/data access for employees to support remote instruction and student services during mandated stay-at-home order.
- Prepared and loaned equipment to employees.
- Provided virtual connectivity and remote support software (VMWare Horizon, Splashtop) for students and employees, including remote, internet-based access to virtual computer labs and lab software.
- Implemented improved MS 365 functionality through upgraded license (A5) for employees, including significant team collaboration tools, integrated phone service, and web-based tools.
7. Transition to a Zoom sub-account for Palomar College to enable tighter integration of Zoom with Canvas, offering increased functionality and improved integration to support teaching and learning.

Describe Challenges

Many strategies in support of Goal 2 require new funding so completion and timelines are dependent upon funding allocations.

Acquisition of Digital Displays, software and controllers is needed to manage sign operation, as additional digital signs are added to the system.

Adequate staffing is required in the Technical Services Systems Administrator position. Currently we have one person filling this role in Technical Services.

Additional Wireless Access Points and Controllers, along with analytical tools, are needed to expand the wireless access service more broadly for student and employee use.

Describe Outcomes (if any)

Updated and current classroom technology, and other technologies used to facilitate student engagement and support.– Partially achieved during this period.

Increased quality information to District constituents through signage improvements.

Added/configured significant resources to facilitate remote student services, teaching and learning.

Maintained quality, responsive Help Desk services once the governor's stay-at-home order began by implementing remote support resources.

Goal 3**Goal**

Ensure sustainable technology by using current vendor-supported software, by reducing local customizations, and by participating in statewide technology initiatives.

Choice

In progress

Describe Progress

1. COMPLETE: Upgrade Global Viewer to maximize efficiency of Extron devices (used in classrooms). While Global Viewer has been updated, many older classrooms have technology that is not yet incorporated.
2. Implement Cornerstone Performance software system to manage and facilitate employee performance evaluations.
3. Establish change management system, particularly for institutional mission critical systems, and for key infrastructure components.
4. ONGOING: Implement state sponsored systems and take advantage of CCC Technology Center services where feasible for the District. – ongoing
5. ONGOING: Maintain current software licensing and versions to support instructional and institutional requirements. –ongoing
6. PARTIALLY COMPLETE: Implement Commitment Accounting functions and use delivered features in PS Finance and HCM to facilitate position control, budgeting and accounting integrations and workflows.

Describe Challenges

Some strategies in support of Goal 3 require new funding so completion and timelines are dependent upon funding allocations.

A Systems Administrator position for Systems and Programming is needed to facilitate implementation support for PeopleSoft and integrated third party systems. Or, alternatively, funds could be allocated for these services through a consulting agreement with a firm that provides these services.

Describe Outcomes (if any)

Potential to lower Total Cost of Ownership (TCO).

Quicker time to resolution of software/system problems through vendor support.

Improved user experience and service to students through modernized interfaces and clearer procedures.

Reduce confusion by consolidating multiple data sources to one authoritative source for key institutional data.

More complete and accurate data leading to better information-driven decision management.–Improvements have been made during this period.

Goal 4**Goal**

Optimize business processes and facilitate decision-making through automated workflows, dashboards and targeted reports.

Choice

In progress

Describe Progress

1. PARTIALLY COMPLETE: Implement attendance accounting system to support regional as well as state reporting requirements.
 - Developed/configured attendance accounting options in PeopleSoft to support specific requirements for occupational and non-credit course attendance accounting.
 - Student Services lead consultant-completed PAT upgrade.
2. Implement Cornerstone Performance software system to manage and facilitate employee performance evaluations.
3. ONGOING: Fully implement and configure features for District standard products and systems. –ongoing
4. PARTIALLY COMPLETE: Implement Commitment Accounting functions and use delivered features in PS Finance and HCM to facilitate position control, budgeting and accounting integrations and workflows.
 - Systems and Programming staff are providing support to Fiscal Services and HR as this significant project progresses, with the support of expert functional consultants.
5. PARTIALLY COMPLETE: Automate business processes.
 - Licensed GT eForms and trained Business Systems Analysts and IS Programmers to utilize this software to automate processes that rely on PS integrations.
 - Licensed Gravity Flow and Gravity Views to facilitate quick form processing, reporting and workflow automation for web-based forms that do not rely on PS data or integrate with PS processes.

Describe Challenges

Strategy 5 requires new funding so completion and timeline is dependent upon funding allocation.

Other barriers are simply based on staffing workloads, which could be eased by filling the vacant Senior Programmer Analyst and Infrastructure Systems Administrator positions.

Describe Outcomes (if any)

Reduce/eliminate paper processes or cumbersome data collection/reporting processes.– Improvements have been made during this period.

Increase transparency and ease-of-access to data.– Improvements have been made during this period.

Improve communications with prospective and current students, thereby improving enrollment and retention.

Goal 5**Goal**

Train and support users for effective use of technology.

Choice

In progress

Describe Progress

1. ONGOING: Educate users regarding best practices in data protection, account/access and security practices. – ongoing
 - Proposed update to AP 3720 - Computer and Network Use that incorporates a requirement for basic data protection training for all District employees.
2. ONGOING: Train technical staff in configuration implementation, system administration, support procedures, and hardware and software system capabilities for mission critical systems. –ongoing
 - Systems and Programming staff are scheduled to complete training on Gideon Taylor eForms and Oracle PeopleSoft Integration Broker in the next fiscal year.

Describe Challenges

Filling the vacant Technical Trainer position would provide the resource to facilitate technical training efforts.

District employees are sometimes reluctant to learn new technical skills, and sometimes persist in using outdated/arduous procedures instead of embracing new technical tools. This presents a challenge to ensuring effective use of technology, and can cost the District in time and effort.

Describe Outcomes (if any)

Increase in productivity.–Improvements have been made during this period.

Improves institutional data protection, security and stewardship. –Improvements have been made during this period.

Increases the District's self-reliance, reducing dependence on outside consultants for technical projects and technology support.

Goal 6**Goal**

Maximize efficiency through planned resource stewardship; clarify technology replacement plan and stabilize associated operational funding.

Choice

In progress

Describe Progress

1. PARTIALLY COMPLETE: Replace old phones and integrate VOIP functions.

- Integration of VOIP functions with MS 365/Teams is in progress and expected to be complete by the end of the 2020 calendar year. Funds are needed to upgrade the physical phones on-site.

2. Replace 2 large outside Digital Displays at SU.

3. ONGOING: Replace/upgrade aging infrastructure in Data Center. – ongoing

4. COMPLETE: Replace obsolete audio-visual equipment in classrooms and meeting spaces.

5. ONGOING: Replace student, faculty and staff computers with expired warranties. –ongoing

6. ONGOING: Maintain current software licensing and versions to support instructional and institutional requirements.–ongoing

Describe Challenges

These strategies require new funding so completion timelines are dependent upon funding allocations.

Reliable and consistent operational funding is required to support timely technology replacement for network infrastructure systems, Data Center equipment, audio-visual equipment, and student, faculty and staff computers.

Funds are needed to replace Data Center and infrastructure components, audio-visual equipment, and computers that are at end-of-life.

Describe Outcomes (if any)

Improved security, reliability, speed, capacity and overall effectiveness of network infrastructure systems, Data Center equipment, audio-visual equipment, and student, faculty and staff computers.– Improvements have been made during this period.

Improved technology user experience for students, faculty and staff.– Improvements have been made during this period.

Improved cost effectiveness while giving employees mobility and flexibility by implementing a one computer per employee practice (usually a laptop), reducing instances where an employee is assigned several District computers to use, such as a desktop, laptop and tablet.

Provided laptop computers on loan to employees for telecommuting during stay-at-home order, using rapid standardized preparation and safe deployment and technical support.

The Strategic Plan 2022 includes the College's Vision for Success (VfS) outcomes. Review the VfS goals and reflect on how your unit supports these outcomes. Identify one strategy your unit will implement to help the college meet these outcomes.

Information Services provides MS 365 accounts and relentless technical support for every student, which enables students to access technology resources and the support they need to be successful. This effort helps support the institution's goals to decrease the equity gap (VfS Goal 5), as well as the goal to increase completion (VfS Goal 1). In addition, Information Services engages in data integrity improvement and completes mandated reporting on behalf of the District, both of which contribute to accuracy in reporting institutional VfS achievements across all VfS goals.

Describe any changes to your goals or three-year plan as a result of this annual update.

Generally the Information Services goals are not expected to change very often, as they are ongoing and reflect the institution's Strategic Technology Master Plan Goals. However, this annual review resulted in some fine tuning to Goal 1 which formerly stated:

"Ensure operational data integrity and reliable technology infrastructure."

The updated Goal 1 places additional emphasis on security:

"Ensure operational and data security, data integrity, and reliable technology infrastructure."

In addition, we have updated the IS department's Mission to:

"The Information Services department serves students, faculty, staff, administrators and our community through high quality technical support and proactive leadership in institutional information systems and services. We take pride in our role as a strategic partner advancing technology within the District's academic divisions, administrative and service departments in support of the institutional mission."

Reminder: Data does not autosave. Save this content before moving to the next section or closing form.

RESOURCES

Congratulations! You are nearing completion. In this section, you will consider the resources you need to implement your three-year program review plan and/or address any findings from your assessment of your discipline.

The section is organized into the following four parts:

PART 1: Staffing Needs (Faculty and Additional Staff)

PART 2: Budget Review

PART 3: Technology and Facilities Needs

PART 4: One Time Request for Other Needs (NonTechnology Equipment, Supplies, Operating Expenses, Travel)

Reflect upon the three year plan you created above, your current operations, and any upcoming factors (retirements, changes in legislation, and changes in policies or procedures) that will impact your unit. How will you allocate resources to implement your plan? Describe additional resources needed to improve the effectiveness of your unit/program. All resource requests must be aligned with the College's **Strategic Plan 2022.**

Summarize any reallocation/re-organization of resources you are making based upon your three-year plan, your current operations, and any other factors (e.g., legislation). Describe the impact of the reallocation of resources to your unit.

PART 1: STAFFING NEEDS

Are you requesting new Classified, CAST, or AA positions?

Yes

If you are requesting STAFF, please fully complete this section. If not, you can skip to the next resource section. Click "+Add Staff, CAST, AA request" below for each additional request.

When considering the funds required for a position, consult the HR website for position salary schedule and the [Benefits Worksheet](#) for additional costs related to benefits for the position.

REQUEST FOR ADDITIONAL CLASSIFIED, CAST, AA

Staff, CAST, AA request 1

Title of position

Senior Programmer Analyst - position # 5610

Is this request for a full-time or part-time position?

Full Time

How does the position fill a critical need for current, future, or critical operations? e.g. accreditation, health and safety, regulatory, legal mandates, institutional priorities, program trend analyses of growth/stability.

Workloads of the current Senior Programmer Analysts are beyond maximum, which has resulted in other departments paying for consulting support to accomplish their objectives. Filling this currently vacant senior position will enable Systems and Programming to address requirements that have been deferred, or will require costly consulting support to implement.

Does the position assist in establishing more efficient District Operations through either of the following: reorganization/restructuring OR use of technology?

This currently vacant position provides key support for HR and Payroll processes, related state mandated reporting, improving business process efficiency and use of technology in those areas.

Is there funding that can help support the position outside of general funds?

No

Describe how this position helps implement or support your three-year PRP plan.

This position directly supports PRP Goals 1, 3, 4 and 5.

Strategic Plan 2022 Objective

4:1

4:3

5:1

If the position is not approved, what is your plan?

Without filling this position, institutional spending for consulting support will continue to increase. Workload will be spread among existing Systems and Programming staff, slowing progress on projects, system enhancements, workflow automation, error correction, reporting and other key institutional systems and programming efforts.

Staff, CAST, AA request 2

Title of position

Technical Services Systems Administrator - position # 6767, plus a second new position

Is this request for a full-time or part-time position?

Full Time

How does the position fill a critical need for current, future, or critical operations? e.g. accreditation, health and safety, regulatory, legal mandates, institutional priorities, program trend analyses of growth/stability.

Over 160 different software systems and applications are used by the District. Most are implemented, configured and managed by Information Services, however there is only one Technical Services System Administrator position. This is an untenable burden for one individual. Given increasing numbers and complexity of computer lab and employee computer software and configurations, along with management of software license keys and access, it is critical to fill the vacant Technical Services Systems Administrator position and to add a third Technical Services Systems Administrator position to handle the expanded workload.

**Does the position assist in establishing more efficient District Operations through either of the following:
reorganization/restructuring OR use of technology?**

If Systems Administrators in departments outside Information Services are underutilized, such as the CSIT Systems Administrator or the Academic Technology Systems Administrators, these employees could be moved to IS as part of reorganization for efficiency and to avoid reduction in force in those other departments.

In addition, District operations are improved by adding one or more Technical Services Systems Administrator positions in IS. The workload is too large for one employee so systems are not as fully managed as they should be. Adding at least one position protects against a single point of failure in software system administration for mission critical operational and academic software systems, should the one current Technical Services System Administrator become unavailable.

Is there funding that can help support the position outside of general funds?

No

Describe how this position helps implement or support your three-year PRP plan.

This position directly supports PRP Goals 1, 2 and 3.

Strategic Plan 2022 Objective

1:5

5:1

If the position is not approved, what is your plan?

Offer a 100% out of class assignment institution-wide to hopefully attract an employee with requisite skills who is minimally utilized in their current position or seeking an opportunity to use their technical expertise to support critical operational and academic systems.

Staff, CAST, AA request 3

Title of position

Technical Support Specialist - position # 5816

Is this request for a full-time or part-time position?

Full Time

How does the position fill a critical need for current, future, or critical operations? e.g. accreditation, health and safety, regulatory, legal mandates, institutional priorities, program trend analyses of growth/stability.

Position is part of the Information Services Help Desk team and provides critical Tier 1 technical support to employees and students. [Position was formerly filled by recent retiree Kathy Davis.]

**Does the position assist in establishing more efficient District Operations through either of the following:
reorganization/restructuring OR use of technology?**

This position is key to providing District-wide technical support to all employees and students, and serves as a primary point of contact for information and other services to the District and community.. This position also supports user account access changes, and facilitates technical support work order administration for the IS department as well as for Business Systems Analysts in other departments.

Is there funding that can help support the position outside of general funds?

No

Describe how this position helps implement or support your three-year PRP plan.

This position directly supports PRP Goals 1 and 5.

Strategic Plan 2022 Objective

1:1

4:3

5:1

If the position is not approved, what is your plan?

Currently using a 100% out of class assignment to fill this critical vacancy (which has caused a vacancy elsewhere in the IS department and is valid only through the end of June 2021). After June 2021 will have to explore offering another out of class opportunity - either 100% for a different employee or expanded duties (partial out of class assignment) for another employee. Another option would be to hire short term hourly or student employee support, but these options are limiting since many regular duties would not be assigned to a short term or student employee in this position.

Staff, CAST, AA request 4**Title of position**

Infrastructure Systems Administrator - position # 6766

Is this request for a full-time or part-time position?

Full Time

How does the position fill a critical need for current, future, or critical operations? e.g. accreditation, health and safety, regulatory, legal mandates, institutional priorities, program trend analyses of growth/stability.

Provides critical technical infrastructure systems support, including configuration/administration of virtual machines for remote operations and network systems/server/switch administration.

Does the position assist in establishing more efficient District Operations through either of the following: reorganization/restructuring OR use of technology?

With the network infrastructure expanded to additional locations, infrastructure components added (e.g., virtual machines, wireless access, new buildings), and network configuration complexity increased, this position in the Network and Data Center is critical to ensure reliable operations and support.

If Systems Administrators in departments outside Information Services are underutilized, such as the CSIT Systems Administrator or the Academic Technology Systems Administrators, these employees could be moved to IS as part of reorganization for efficiency and to avoid reduction in force in those other departments.

Is there funding that can help support the position outside of general funds?

No

Describe how this position helps implement or support your three-year PRP plan.

This position directly supports PRP Goals 1, 2 and 6.

Strategic Plan 2022 Objective

3:5

5:1

If the position is not approved, what is your plan?

Without filling this position, institutional spending for consulting support and third party network services will continue to increase. Workload will be spread among existing Network and Data Center staff, slowing progress on infrastructure projects, security reviews and protective measure enhancements, error correction and other key institutional infrastructure support efforts.

Staff, CAST, AA request 5**Title of position**

Technology Security Analyst

Is this request for a full-time or part-time position?

Full Time

How does the position fill a critical need for current, future, or critical operations? e.g. accreditation, health and safety, regulatory, legal mandates, institutional priorities, program trend analyses of growth/stability.

Provides critical technology systems security support, including account and access design and configuration, and security system and data protection monitoring and analysis.

Does the position assist in establishing more efficient District Operations through either of the following: reorganization/restructuring OR use of technology?

This position is critical to safe use of technology since the District currently has no one attending to security analysis and data protection as a focused job function. Data security and analysis is the responsibility of IS leadership, among many other critical responsibilities.

Is there funding that can help support the position outside of general funds?

No

Describe how this position helps implement or support your three-year PRP plan.

This position directly supports PRP Goals 1, 2, 3 and 6.

Strategic Plan 2022 Objective

4:3

5:1

If the position is not approved, what is your plan?

Without a dedicated position to focus on technology and data security, these duties will continue to receive only partial attention given all the other responsibilities of IS leadership. In addition, institutional expense for third party security analyst services is likely to increase, particularly if any security incident occurs that places data or institutional systems at risk for data loss (such as through attacks such as ransomware).

PART 2: BUDGET REVIEW

Review your Budget/Expenditure reports for 2018, 2019, 2020. Consider your three-year PRP plan.

Click on the link below to access directions to the *Available Budget Report* to complete this section.

How to Request the Available Budget Report

Reflecting on your three-year PRP plan, are there any budget considerations you would like your dean/supervisor to be aware of for the upcoming year?

Yes

What budget considerations would you like your dean/supervisor to be aware of or to consider? Please be as specific as possible. For example, if you need an increase in the 40000 account and a decrease in the 23000 account, describe what increase your department needs, how much, and a description of why the department needs the adjustment.

The Information Services Director oversees and manages not only the IS Department budget (department 561100), but the institutional technology budget as well (department 761100).

1. In department 561100, increase the 600010 budget from \$10,000 to a minimum of \$14,000 and possibly up to \$34,000.

Rationale:

In the IS department budget, (department 561100), funds will be needed to provide equipment for any positions that are filled. This is estimated to cost \$4,000 per position. Therefore, depending on the number of requested IS positions that are approved to be filled, the 600010 budget in department 561100 will require an increase of \$4,000 to \$24,000.

(Although there are 5 positions listed in the PRP, a second Technical Services Support Specialist position is a part of the request for position #2 in the list.)

2. In department 761100, increase the 500010 budget from \$1,628,897 to \$1,760,390 for software and hardware maintenance.

Rationale:

Procurement of institutional remote access software, data protection software, infrastructure equipment and upgraded Microsoft 365 licenses (to include advanced features required for remote services and collaboration), along with the annual contractual increases for software and hardware maintenance result in an expected cost increase of \$131,493.

Reminder: Data does not autosave. Save this content before moving to the next section or closing form.

NOTE: PARTS 3 and 4 – TECHNOLOGY, FACILITIES AND OTHER NEEDS

This year the College is implementing two new processes related to resource needs coming from the PRP process.

1. One-Time Fund Requests. The college is implementing a process for prioritizing and allocating funds for one-time needs/requests tied to Program Review and Planning. Prioritization will take place through participatory governance in planning councils and the Budget Committee. Then, a recommendation will be made to Exec for funding of request utilizing various funding sources.

For more information about funding sources available, see [IELM BLOCK GRANT, LOTTERY, PERKINS AND STRONG WORKFORCE GUIDELINES](#) (on the left menu of the web page).

Consider submitting one-time requests only if you have verified that you cannot fund the request using your general discretionary funds or other funds.

2. Technology and Facilities Review. From now on, ALL requests for technology will go through an institutional process. If you request technology here, you will see a description of the process below.

PART 3: TECHNOLOGY

Will you be requesting any technology (hardware/software) this upcoming year?

Yes

Technology Request

Technology Request 1

What are you requesting?

Infrastructure Upgrades in the following buildings:

AA/ST

SU

Escondido Data Center and wireless infrastructure

Provide a detailed description of the technology item requested. What is it, and why do you need it? Please be as descriptive as possible. Include in your description how the requested item aligns with your discipline's PRP goals, analysis of PRP data, SLO/SAOs.

Routers, switches and other critical infrastructure components are at or past end-of-life and require upgrades. Capital Outlay (Fund 41) budget has been allocated for information technology infrastructure upgrades in prior years, based on equipment age and expiration of available maintenance services.

A summarized 3 year plan is available at this location: https://palomar0.sharepoint.com/:x:/s/ISER2022/EUG9Vss3qfdFqVGUydh1fGMBU4H7orZo5_cBcgWSSNqDOA?e=Ev4nzW The buildings listed are prioritized for replacement/upgrade in FY 2020-2021.

Detailed equipment lists with expiration dates and estimated costs can be found in this location:

https://palomar0.sharepoint.com/:x:/s/ISER2022/Eftw4v2CmnpKpcraOYm7Y-0BQ8J9PrI-TGHQjH6wHWfa_w?e=JXOtWd

Estimated Amount of Request.

\$581,000.00

Will you fund the request through your budget or other sources?

Existing Budget, One Time Request

What PRP plan goal/objective does this request align with?

This request for technology infrastructure upgrades directly aligns with the IS PRP Goals 1 and 6.

What Strategic Plan 2022 Goal/Objective does this request align with?

1:5

5:1

5:2

If you have multiple requests for technology and had to prioritize, what number would give this? (1 = Highest)

1

Do you think that your request for technology will require changes to a facility?

No

Technology Request 2

What are you requesting?

Upgrade the software system and associated database that provides Help Desk service and work order tracking to improve service request communications and status update management, and extend use of this system to other service/support areas such as ATRC and Enrollment Services where appropriate, as well as to service requestors.

Provide a detailed description of the technology item requested. What is it, and why do you need it? Please be as descriptive as possible. Include in your description how the requested item aligns with your discipline's PRP goals, analysis of PRP data, SLO/SAOs.

The current system (BMC Remedy) used to track work orders for Information Services and Facilities is out of date. In addition, ATRC uses a separate work order system (Kayako). Often, technical work is assigned to Business Systems Analysts (BSA) in other departments but the BSAs do not have direct access to the current system due to license limitations so effectiveness is limited, communication is inefficient, and work order status updates are cumbersome using the current system.

A new system that could be used by all District service areas, and with improved communication, work order queuing and routing automation, as well as a user-accessible knowledge-base, would enhance service and support provided to all constituents.

This aligns with SAOs for Help Desk Services, Technical Services, Systems and Programming Services, and Network and Data Center Services, since all areas in IS would utilize this system to improve customer service and satisfaction.

Estimated Amount of Request.

\$80,000.00

Will you fund the request through your budget or other sources?

One Time Request

What PRP plan goal/objective does this request align with?

This request aligns with and supports all of the IS PRP Goals 1, 2, 3, 4, 5 and 6.

What Strategic Plan 2022 Goal/Objective does this request align with?

1:2

1:5

3:5

5:1

If you have multiple requests for technology and had to prioritize, what number would give this? (1 = Highest)

2

Do you think that your request for technology will require changes to a facility?

No

Note about technology requests:

All technology requests will now go through a review process before prioritization.

- *Your director will send you a Technology Request Checklist (aka Technology Proposal Analysis Checklist).*
 - *You must complete this checklist and return it to your director no later than 10/30/2020.*
 - *Once the director approves the form and the request, the director will send the document to the Technology Review Committee to determine IS resources needed, any integration issues, and/or potential overlap with existing technology.*
 - *The results of the review will be sent to the director with feedback.*
 - *The director will determine whether or not the request moves forward for prioritization and/or implementation.*
 - *Requests for one-time funding will move forward for prioritization.*
 - *Requests that use funding from your department budget may move forward for purchase.*

PART 3: FACILITIES NEEDS

Do you have resource needs that require physical space or modification to physical space?

Yes

Facilities Requests

Facility Request 1

What are you requesting?

Space for technical equipment storage and staging

What discipline PRP plan goal/objective does this request align with?

This request directly aligns with the IS PRP Goals 1 and 6.

What Strategic Plan 2022 Goal/Objective does this request align with?

1:5

5:1

5:2

Provide a detailed description of the facilities item or space requested. What is it, and why do you need it? Please be as descriptive as possible. Include in your description how the requested item aligns with your discipline's PRP goals, analysis of PRP data, SLO/SAOs.

If the LL building is being repurposed, space will be needed by IS to store and stage equipment (that is currently stored and staged in the LL building).

If the Technical Trailer, adjacent to the C building and the ST/AA building, will be removed, space will be needed by IS to store and stage equipment (that is currently stored and staged in the Technical Trailer).

If these spaces will continue to be allocated for IS purposes, then no other space is currently needed.

Is there an associated cost with this request?

No

What impacts will this request have on the facilities/institution (e.g., water/electrical/ADA compliance)?

Unknown. Cost and impacts will depend on plans for the LL building and Technical Trailer, along with other potential locations for storing and staging equipment.

Facility Request 2

What are you requesting?

Redundant HVAC in the Data Center at Rancho Bernardo

What discipline PRP plan goal/objective does this request align with?

This request directly aligns with the IS PRP Goals 1 and 6.

What Strategic Plan 2022 Goal/Objective does this request align with?

1:5

5:1

5:2

Provide a detailed description of the facilities item or space requested. What is it, and why do you need it? Please be as descriptive as possible. Include in your description how the requested item aligns with your discipline's PRP goals, analysis of PRP data, SLO/SAOs.

The current HVAC configuration for cooling the Data Center at Rancho Bernardo does not have redundancy and is therefore considered a single point of failure. The District has already experienced failures of this single cooling system, placing the institutional system back-up processes and data, and some primary institutional systems, at risk. (The Rancho Bernardo Data Center serves as the back-up, disaster recovery and business continuity site for the institutional Data Center located at San Marcos.)

Is there an associated cost with this request?

Yes

Will you fund the request through your budget or other sources?

One Time Request

What impacts will this request have on the facilities/institution (e.g., water/electrical/ADA compliance)?

\$75,000 cost estimate for new system.

An additional 60 amp generator circuit will be needed to support this system.

PART 4: ONE TIME NEEDS

For more information about funding sources available, see [IELM BLOCK GRANT, LOTTERY, PERKINS AND STRONG WORKFORCE GUIDELINES](#) (on the left menu of the web page under "Instructional Funding Sources").

Do you have one-time requests for other items (e.g., Non-Technology Equipment, Supplies, Operating Expenses, Travel) that your budget or other funding sources will NOT cover?

No

Reminder: Data does not autosave. Save this content before moving to the next section or closing form.

FEEDBACK AND FOLLOW-UP

Once your Program/Unit PRP is completed, your division or planning council should review and discuss based on your Vice President's planning process. This area is intended for summary feedback and recommendations from the divisional review.

Confirmation of Review by Division / Planning Council

Person/Group/Council who reviewed PRP:

Date Reviewed

FEEDBACK

Strengths and successes of the program/unit as evidenced by the data, analysis, and assessments:

Areas of Concern, if any:

Recommendations for improvement:

Enter your email address to receive a copy of the PRP to keep for your records.

cmoise@palomar.edu

I confirm that the Program Review is complete and ready to be submitted.

Yes

Vice President Review

Strengths and successes of of the discipline as evidenced by the data and analysis:

Areas of concern, if any:

None noted.

Recommendations for improvement:

Work with Facilities/Measure M bond team to see what equipment/systems resources are bond eligible and could be funded through small project bond funds.

VP Name:

Yulian Ligioso

Signature Date:

1/5/2021