ADMINISTRATIVE SERVICES, STUDENT SERVICES AND PRESIDENT'S CLUSTER ANNUAL PROGRAM PLAN WORKSHEET

Program: Information Technology **Planning Year:** 2018-19 **Last Year CPPR Completed:** 2017-18

Unit: Information Technology   **Cluster:** Administrative Services

Please complete the following information. Please note that responses are not required for all elements of this document.

I.   **GENERAL PROGRAM INFORMATION**

   A.   Describe changes to program mission, if applicable.

   N/A

   B.   Describe any changes in primary relationships, internal and external, to the District.

   N/A

   C.   List any changes to program service, including changes and improvements, since last year, if applicable.

   In September 2017 Cuesta was notified we were awarded a Title V Developing Hispanic Serving Institutions Grant. One of the major initiatives of that grant is to provide ubiquitous wireless coverage across the San Luis Obispo and North County campuses. The grant provided funds for an additional Network and Systems Administrator position, as well as consulting services to assist with the needed construction.

   Early in the year, Information Technology was not able to replace the User Support position when the incumbent moved to the Purchasing department. The department has been less effective at answering the phone and many clerical tasks (budget tracking, purchasing, etc.) have been transferred to the management positions.

   Additionally, this past year, two new buildings have/will come online. The additional load to commission the technology in new buildings on the Computer Technicians and Network staff has been extensive.

   D.   List changes to program in the last year in reference to relevant statutory authority/program regulation and related compliance issues, if any.

   N/A

II.   **ANNUAL PROGRAM SUPPORT OF DISTRICT'S MISSION STATEMENT, INSTITUTIONAL GOALS, INSTITUTIONAL OBJECTIVES, AND/OR INSTITUTIONAL LEARNING OUTCOMES**

A. Provide updates, if any, in how your program addresses or helps to achieve the District's Mission Statement in the last year.

N/A

B. Provide updates, if any, to how your program addresses or helps to achieve the District's Institutional Goals and Objectives, and/or operational planning initiatives in the last year.

During the 2017-2018 year, the Information Technology department began the practice of sending life-cycle reports to all departments which outline the computers and Audio-Visual systems their department is responsible for. The reports also detail the age of each component and the cost to replace. The reports are designed to assist department managers with their planning for the upcoming year and also encourage the timely replacement of technology.

III. **ANNUAL MEASUREMENTS, ANALYSIS AND IMPROVEMENTS**

Programs are often impacted by institutional or other organizational change. Please review program-relevant institutional data sources, such as institutional enrollment trends, which along with some other relevant program data, is available on the SLOCCCD Institutional Research and Assessment website. Other organizational or departmental measurements may provide useful information for planning in your program; please describe those measurements and the data below.

A. Data Summary

Resolved Tickets by Calendar Year	
2012	3631
2013	3923
2014	3886
2015	3786
2016	4664
2017	4074

- Describe data collection tool(s) used.
  Information Technology uses a ticketing system to track all requests submitted to the department. In addition to IT's scheduled system maintenance, projects, and infrastructure improvements, 4074 tickets were resolved during 2017. A ticket represents anything from tracking the order of a new computer, an issue with technology in the classroom or a feature request for the ERP system.

- Include updates to program data results from the previous year, if any.
  Effective the 2017 year, the Technology Committee will begin conducting an annual survey of each group (faculty, staff and students) in order to better benchmark technology perceptions and any changes needed. The fall 2017 surveys each had some interesting results.

  On the wireless questions, students, staff and faculty indicated a desire for more wireless coverage on the athletic fields and in the parking lots. Faculty and staff have difficulties navigating the various SSIDs while students do not have the same concern.

  From students:
  - 40% of students already bringing laptops or tablets, 90% would be interested.
  - Over 75% of our students consider themselves average or above in their adoption of new technologies.

- The availability of online services and our technology lab was not widely known by students.

From faculty:
- Over 80% indicate some level of satisfaction with only 7% indicating a level of dissatisfaction.
- 17% indicated 4 or more classroom interruptions caused by technology during the year, still a fairly high number of disruptions.
- Faculty also indicated a need for more classroom AV system trainings.

From staff:
- Support satisfaction was fairly high with 72.4% with some satisfaction on ticket support and 60.9% with phone support. This is most likely a result of the loss of one of our phone support positions during the year.
- Overall staff indicate a higher level of dissatisfaction with some of the newer technologies as it relates to some of our older technologies, including those that are past their support. IT will need to work on support and training for new technologies.
- 98% of respondents indicated that technology training met their needs to some level. There were suggestions regarding improving training that should be considered as well.

B. Data Interpretation:

- Describe results from previous improvement efforts to the program based on institutional or departmental changes.

    Information Technology updated and in some cases completely replaced a number of critical systems and applications in the calendar year of 2016. These upgrades potentially caused an uptick in tickets last year. With the introduction the replacement of myCuesta, and upgrade to Banner 9 still pending completion, the number of resolved tickets this year past year is not surprising. Given some major projects and changes completing soon, the number of tickets will likely increase in 2018.

    Audio-Visual systems around campus are in need of upgrading and we are seeing more hardware failures and classroom interruptions. With the new life-cycle reports and discussion in the Planning & Budget Committee, the department is attempting to raise awareness and support for upgrading our AV systems. At the same time IT upgraded our training room (3144) to a classroom standard AV system to help support AV training needs.

- Identify areas if any that may need improvement for program quality and growth.
    Given the student survey results, the department needs to work on better support for Bring Your Own Device (BYOD) support during the upcoming year. The wireless system needs to be expanded and onboarding should be improved.

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- Recommend any changes and updates to program based on the analysis above. For elements that require funding, complete the Resource Plan Worksheets.

    With the overall satisfaction numbers for tickets resolved being higher than our phone support, we are seeing a trend where getting problems into the hands of the Technicians who provide most resolutions is an immediate need. With the loss of 1 of our 2.5 user support positions, the user support area needs to focus on quickly dispatching calls and tickets to Technicians.

    One of the results of this is an impact on the number of tickets to our Computer Technicians. Problems that were previously resolved on the user support side are being passed more frequently to Computer Technicians. This is resulting in higher satisfaction, but an increased workload on Computer Technicians. There is a definitive need for an additional Computer Technician.

IV. **ANNUAL PROGRAM OUTCOMES (ASOs AND SSOs), ASSESSMENT AND IMPROVEMENTS**
Your program has established either Administrative Service Outcomes or Student Service Outcomes. Those outcomes are assessed and tracked in the Course or Program Assessment Summary. Review CPAS documents for ASO or SSO assessment results for program outcomes.

A. Describe any results from improvement efforts arising from ASO or SSO assessment in the last year.
   i. **Information Technology will support the college department needs as it pertains to the Administrative Enterprise Resource Planning systems and maintain all necessary regulatory changes.**
      IT maintains a work order system to track departmental needs. A task is usually a problem that is affecting the production system. In most cases this takes priority over a project that the employee may be working on. Projects are larger requests for services that sometimes occur because of regulatory changes or upgrades in software. Overall IT has made progress on trimming the backlog of tasks. The project backlog continues to be an issue largely because of the Banner 9 and Luminis 4 upgrades which create many dependencies. At this time, Ellucian has not provided a release that will get us onto Banner 9. Cuesta has the technology ready once this occurs. The Luminis 4 upgrade is now starting to move forward.
   ii. **Information Technology will coordinate and implement the District's Technology Plan.**
      The District's Technology Plan ends at the end of the 2016-2017 year. The department is working with the Technology Committee

to create a new plan for 2017-2022. The new 2017-2020 Strategic Plan the District has created also includes a strategic goal directly related to progress in facilities and technology. The department also continues to refer to the bond Technology Implementation Plan which was developed during the 2015-2016 year.

iii. **Information Technology will effectively and efficiently maintain a secure network.**

This is also 2012-2017 Technology Plan Initiative # 7 and information can be found in the progress report. Information Technology has implemented the following processes:

I. Monthly patch process for Microsoft patches with a documented process.

II. Our ESET Endpoint Antivirus software is installed on all Cuesta computers and this year included a major upgrade to version 6.6.

III. Oracle upgrades are done in order to keep Banner on most current versions. The latest version of Oracle has many security enhancements.

IV. On-going user training by Technology Trainer. Regular information about how to spot phishing email attempts.

V. On-going conversion to role based access control on Cuesta's Windows domain.

The data center facilities on the San Luis Obispo campus are not adequate. Currently 2 rooms are used in the 3300/3400 building. One room is on the first floor and one is on the second floor. The cooling and power infrastructure in that building has been problematic. Information Technology is working with the Cuesta bond team to plan the construction of a new data center on campus. Frequent power outages lasting more than an hour have highlighted the need to have a generator supplemented backup power system. The generator will prevent extended downtimes related to bringing the entire system down and up cleanly when UPS battery runtime is exceeded during an outage.

iv. **Information Technology will effectively and efficiently install and maintain network infrastructure (servers, storage and data communication) for the District.**

During the 2017 calendar year, IT has begun evaluation of new fiber plant, core switch and firewall systems. The upgrade of those systems will be partially dependent on the new data center building. IT also added infrastructure to support the two new buildings funded by Measure L.

v. **Information Technology will effectively and efficiently install and maintain desktop computing environment (PCs and peripherals) for instructional and non-instructional use for the District.**
In addition to the many resolved cases for 2017, IT has begun the process of upgrading our users to Windows 10. To date almost half of the non-instructional computers are now running Windows 10.

IT has an employee on campus at the North County Campus four days per week. The department also responds to issues at the South County Center. For this purpose, the department has two vehicles. One of the vehicles is near the end of its useful life. It also has many occasions to transport laptop carts, larger AV equipment and podiums and a larger vehicle would be appropriate.

vi. **Information Technology provides technology training on new and existing technology to all Cuesta employees.**
Several trainings were offered including sessions on the following subjects:
- Office 365
- Office 2016
- PowerPoint
- Excel
- Managing Email
- Calendars, Meetings & More
- Communicating with Students
- Omni Update Campus
- OneDrive
- Canvas for non-Distance Education
- Intro to Acrobat DC

In total over 200 faculty and staff attended formal technology classes provided by the Information Technology department. The Technology Trainer and other IT staff members also provided many informal sessions to faculty and staff. With the addition of an Instructional Designer who provides training to faculty members, the role of the Technology Trainer in faculty trainings is being reevaluated and may change next year.

vii. **Information Technology maintain current, functional and appropriate web programs and applications to support all areas of the College.**
Canvas is fully adopted by our faculty. Moodle has been decommissioned and nearly all content on the academic server has been removed. The Web Committee recommended a replacement for the portal platform to replace the existing Luminis 4 portal which

is past its end of support. In addition, a new section of the website will support academic program information in preparation for the upcoming Guided Pathways project.

B. Recommend changes and updates to program based on assessment of program outcomes. For elements that require funding, complete the Resource Plan Worksheets and review the Resource Allocation Rubric.

The Computer Services Technicians currently support more devices per employee than the recommended ratio. Also, with the college using new devices such as Chrome Books and iPads, the specialization of the technicians is becoming a support issue. An additional staff member in this area would enhance IT's ability to maintain security, desktop computing and support the technology plan. Two additional technicians would bring us close to the proper ratio with other organizations of similar size.

Now that the department structure is more well-defined as Technology Services, Information Services and User Support, it has become clear the Information Services staff would benefit from a Supervisor position as well. This Supervisor position would assist in reducing the bottlenecks that occur when the Executive Director is not available. This would enhance our ability to deliver on the ERP and web support outcomes. The Supervisor would also increase the department's ability to coordinate and implement the Technology Plan.

The college's ticketing systems and inventory systems needs to be enhanced. Fixing these two systems would enhance our ability to deliver service and ensure up to date systems.

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V. ANTICIPATED SERVICE CHALLENGES/CHANGES

Provide a brief description of challenges or changes anticipated in the next year and any needs that have emerged as a consequence.

Suggested Elements:

A. Regulatory changes
B. Internal and external organizational changes
C. Student and staff demographic changes
D. Community economic changes – workforce demands
E. Role of technology for information, service delivery and data retrieval
F. Providing service to multiple off-campus sites
G. Anticipated staffing changes/retirements

Early this year, the bond funding for the second issuance begins. The first issuance was a $1.5 million over 3 years and created bottlenecks with our networking team regarding implementation. The second issuance has $6 million. While a large amount of that money will be allocated to the construction of a new Data Center, there will still be a large amount for our networks staff to implement. Therefore, standardization and ease of maintenance are imperative.

Cuesta College recently commissioned its first bond funded building and has another that is almost complete. There are several buildings that are planned for the next few bond issuances. Included in those buildings are additional computers, classrooms and offices that IT will need to support. In particular, the campus center at North County will add more than two new lab areas to their campus. These labs and classrooms require additional staff to ensure their quality and reliability. While most of the work of commissioning new buildings is taken care of by the bond, Technology Services teams are greatly impacted during and after the final stages of construction.

Another key trend in technology is the proliferation of cloud technologies. The department is prepared for the eventuality that many of our systems will transition to cloud based. However, the funding of cloud-based services requires ongoing funds that can be relied on well into the future. Many of the funding sources available to the college are one time or capital funds that do not lend to implementing cloud services.

New technologies in the portal and Banner areas will require increased professional development for our IT staff. Also, Ellucian has begun to emphasize that colleges need to reduce or eliminate the customizations to their Banner systems. Cloud hosting and making the increasingly frequent upgrades easier are being given as reasons to attempt to reduce custom programming.

VI. OVERALL BUDGET IMPLICATIONS

Provide a brief description of the immediate budget request(s) made in your Resource Plan

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(formerly called the Unit Plan). These elements will be reflected in the District planning and budget process.

Elements:

A. Personnel
B. Equipment/furniture (other than technology)
C. Technology
D. Facilities

Information Technology's program development is closely tied to the Technology Implementation Plan. This plan was co-developed with the input of many of the stakeholders in the district, including students, faculty, administration and the IT department. Development of the plan involved the Technology Committee acting as the steering group, which chose an extremely high level of infrastructure resiliency and a "primarily wireless" network design. Over the past three years we have begun the implementation of this plan, beginning with the deployment of a new virtual server farm and major upgrades to wireless infrastructure.

The next steps for technology upgrades at Cuesta College revolve around building a new data center, which will be the new physical and logical core for IT infrastructure, and replacing the outside plant (OSP), inside plant (ISP) cabling, and renovating our telecommunications rooms. This will allow us to build on a solid foundation as we move forward with the refreshment of the remainder of our depreciated systems. During this physical infrastructure replacement, IT will proceed with the upgrade and replacement of several of its aging and past end of life enterprise applications. Planning the upgrade of Banner (our ERP system) from version 8 to version 9 and the replacement Luminis (our web portal platform) have highlighted the need for a more robust Identity Management system. The implementation of an identity management system will streamline the processes around account administration in both internal and external systems. We have made significant progress developing standards and completing foundational work in support of our infrastructure refreshment.

These improvements will help ensure reliable and up to date facilities to support student learning which indirectly supports Institutional Goals 1, 2, 3, and 5 and directly supports Institutional Goal 4. Specifically, system reliability and uptime will increase dramatically.

The Technology Implementation Plan process culminated in a set of recommendations for SLOCCCD to follow. We have adopted and completed a number of these recommendations, including implementing our new virtual server infrastructure (completed a year early) and accelerating our WiFi replacement and expansion projects.

With the implementation of many new systems and the upgrade of others, employees in the department will have to be retrained to administer and efficiently maintain our new infrastructure. Conferences and offsite training at specialized facilities will ensure that these changes are as cost effective as possible.

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SIGNATURE PAGE

Director(s), Manager(s), and/or Staff Associated with the Program

Student Services and Administrative Services Programs: All full-time director(s), managers, faculty and/or classified staff in the program must sign this form.

Division Chair/Director Name	Signature	Date

Name	Signature	Date

Name	Signature	Date

Name	Signature	Date

Name	Signature	Date

Name	Signature	Date

Name	Signature	Date

Name	Signature	Date

Name	Signature	Date

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