1. Assessment Plan - Three Column

PIE - Administrative Services: Technical Services - Presentation Services Unit

2. Where We Are Now: Year at a Glance

2019-20
Contact Person: Chris Rodriguez
Email/Extension: acrodriguez@mtsac.edu, 5693
Summary of Notable Achievements: We were successful in securing an on-going fund for software support which includes the Alertus Notification server, Carousel Digital Sign Server, D-Tools database server, and several design support softwares requiring annual renewals for support.

We were successful in securing funds for a Technical Designer to support several large construction projects. Production Access Group has been identified as a reputable and knowledgeable firm that can assist with providing high quality system designs that have been thoroughly planned.

In addition to the training introduced last year, we have started regular training for utilizing Zoom. This has had a significant impact with the transition to working from home.

In conjunction with facilities, we made significant completion to the Athletics Stadium Complex.

Continued collaboration on several large scale construction projects including the Student Center, Gym and Aquatics Center, Campus Store/Instruction Offices, and Heritage Hall.

Began collaboration on many rooms, several with unique needs, for the Humanities and Arts Divisions. This includes our first 4K video compatible classrooms.

We continued to hire work study students for all programs up until the stay at home order. In addition to the industry specific training from Extron, we have also given access to our work study students to learn installation audio theory through QSC training.

We began implementation of an internal campus IPTV Network in conjunction with IT. This system will allow us to utilize central video distribution for campus starting with the new Hilmer Lodge Stadium.

Program Planning (Equity, Retention and Success): Provided several regular training through POD that allow faculty and staff to better prepare and teach our students and community: Audio Visual Basics - Touch Panel Systems; Audio Visual Basics - Legacy Systems; Dynamic Presentations Using an Interactive Whiteboard ; Carousel Digital Signage; Zoom for Beginners; Intermediate Zoom Training; Break-out Rooms Zoom Training; Zoom Open Office Hours
External and Internal Conditions Analysis: With the uncharted landscape ahead of us due to the challenges of the "Stay-At-Home" order, we have developed a campus standard for online environments. Such environments include Zoom meetings and webinars, which are now being used to host various events for the campus. Our campus standard follows ADA requirements to better facilitate those in need for online learning and participation.

The implementation of the "Analog Sunset", as required by the license granted to content producers of protected high definition video content, has accelerated our move to wide aspect ratio digital video as an evolving standard for classroom media systems. Many of our older analog controlled systems need to be converted to this wide aspect ratio, as most manufacturers have discontinued these products. The most affected are the projectors which are significantly beyond their lifespan and no longer have bulb replacements available. This affects 173 existing projectors on campus in analog systems. Newer installations already support this format. Considerable time is now dedicated to support these rooms. Many of these new laptops are made without the ability to turn off "Digital Right Media" (DRM) and will not support connecting to an analog system. Due to the elimination of analog video signals under the Analog Sunset requirement, the current gap in regulations regarding closed captions for digital video formats is causing considerable difficulty in implementing ADA captioning requirements in the digital classroom. We have developed a technology life cycle replacement plan that will address these issues.

Many people already have 4K in their home and bring that expectation to the classroom. While they are not budget conscious, 4K projectors are starting to become more apparent in the audio visual industry. This has made 4K equivalent technologies more affordable allowing us to work with the Arts Division to install two of these systems for animation and design classes. These systems will help build an overall system that can be utilized where needed.

All future projects that use a projection system will use a laser projector moving forward. With the evolution of AV technology, laser projectors are becoming more readily available in usable formats on campus.This technology also brings with it a major improvement to the contrast ratio of lamp style projectors. Laser projectors also do not need lamp replacement which will significantly help with projector reliability and life. It may be possible to buy a slightly higher output projector and configure it to have the same brightness over a period of 8 years.

The implementation of the "Analog Sunset", as required by the license granted to content producers of protected high definition video content, has accelerated our move to wide aspect ratio digital video as an evolving standard for classroom media systems. Many of our older analog controlled systems such as those in Buildings 6, 7, 11, 26, 28, 60, 61, and 80 (more than 170 classrooms) need to be converted to this wide aspect ratio, as most manufacturers have discontinued these products. Considerable time is now dedicated to support professors who bring new laptops into these older classrooms. Many of these new laptops are made without the ability to turn off "Digital Right Media" (DRM) and will not support connecting to an analog system. A larger challenge is that most of the classroom systems do not support digital video and many professors cannot use their own devices to present material/content in the classroom. This has become significant in classes teaching visual information such as Art History or Animation. Departments are purchasing computer equipment using much higher resolutions than the projector can support. This is reflected in poor image quality on the projector screen.

The Student Workstudy program continues to be a great success. Presentation Services now employs up to 7 Work study students in the assistance of inventory, faster support response times, and safety. Our program is most effective over the course of two years, and received unique approval to retain students in the SSEED program for two years. Unfortunately due to the Stay-At-Home Order we will have to review this program upon returning to campus.

We received a significant initiative to proceed with the Alertus project for the entire campus. This will be the most significant and important project that Technical Services will face. This project is estimated to install more than 900 Beacons and various equipment totaling over $2.6M. With an effort to have the equipment installed over the course of a semester, to be performed in the evening, the labor and installation support is expected to exceed $3.5M.

Critical Decisions Made by Unit: Serious consideration is being made on the feasibility of integrating Alertus with the fire alarm system. All new building projects will now include voice notification in response to the growing cases of active shooters situations. It may be possible to tie the Alertus into the fire alarm as a cost saving measure as well as making the Alertus notifications more reliable.

We worked with vendors to purchase a stock of older lamps that have been discontinued in older projectors. This is our final stock that should allow us to upgrade existing systems to newer laser projectors within proposed timelines.

The decision was made to utilize WellAV's scalable option after reviewing many satellite and IPTV solutions. This will allow us flexibility on receiving and distributing television, which will first be implemented with the new Hilmer Lodge Stadium.

The Q-SYS audio platform has proven successful, leading to a full scale implementation in conjunction with the upcoming Alertus project for both classroom audio distribution and emergency audio prioritization. A unique complex wide system is utilized in the new stadium complex, allowing paging and audio playback from multiple locations including the Athletics Division Office in Building 45.

Developed a system to manage and support Video Wall installations. The Athletics Complex introduced an LED video wall to be used for the scoreboard system. This is uniquely different from previous video walls installed, so we have curated a system to allow users and technicians to use and support the system easily. File management and content creation solutions have also been implemented to further allow users of the system to keep a consistent and streamlined workflow. Advanced support has allowed remote assistance for the quickest possible response in the event of an emergency.

Due to our previous move to CCC Confer Zoom, this team was prepared for leading the campus to online work through POD training. In addition to campus wide Zoom accounts, we are assisting in peripherals that connect Zoom, plugins to coincide with Outlook, touring the differences between the downloadable application and online platform, and the webinar version for a larger audience.

Cindy Parks has continued with the team to take the lead with hosting Zoom training and provide support for Zoom's webinar feature.

With the recommendation of several external sources, Ben Frederick of Production Access Group, was recruited to assist with design for larger scale construction projects including Student Center and ACE.

Contributors to the Report: Chris Rodriguez

Unit Goals	Resources Needed	1. Where We Make an Impact: Closing the Loop on Goals and Resources
Process Audio/Visual and Notification projects in an efficient and timely manner - Provide timely, effective, and efficient responses to new project requests for new AV systems, paging systems, digital signs, and mass notifications systems. **Status:** Active **Goal Year(s):** 2017-18, 2018-19, 2019-20 **Goal Entered:** 07/31/2017	Report directly on Goal	**Reporting Year:** 2019-20 **% Completed:** 25 We were successful in securing funds for a Technical Designer to support several large construction projects. Production Access Group has been identified as a reputable and knowledgeable firm that can assist with providing high quality system designs that have been thoroughly planned. (08/03/2020)
Audio/Visual and Notification maintenance and support - Provide Audio and Visual support to faculty	**In Progress -** Provide maintenance and troubleshooting on systems when the facility is unoccupied.	

and staff in a timely and efficient manner. Provide maintenance on existing systems to insure reliable operation by faculty and staff.
Status: Active
Goal Year(s): 2017-18, 2018-19, 2019-20
Goal Entered: 08/04/2017

Describe Plans & Activities Supported (Justification of Need): Funding for overtime
Lead: Chris Rodriguez
What would success look like and how would you measure it?: Identify overtime funding to support evening or weekend access to repairs AV systems.
Type of Request: STAFFING: Requests for permanent employee positions or temporary/hourly employees.
Planning Unit Priority: Medium
On-Going Funding Requested (if applicable): 8500
Total Funding Requested: 8500
In Progress - Establish funded operating budget.
Describe Plans & Activities Supported (Justification of Need): Funding for operating budget to repair or replace projectors, document cameras, video switchers, existing manual projector screens, and miscellaneous AV supplies/equipment, small parts, labor, software, etc. When the department was created, a commensurate budget was not simultaneously created.

Lead: Chris Rodriguez
What would success look like and how would you measure it?: Able to provide support for repairs for all AV systems on campus.
Type of Request: NON INSTRUCTIONAL EQUIPMENT: Tangible property with useful life of more than one year, other than land

or buildings improvements, equal and over $500 per individual item. Used for administrative or non-instructional purposes.
Planning Unit Priority: High
On-Going Funding Requested (if applicable): 75000
Total Funding Requested: 75000
In Progress - Add part time student worker morning position
Describe Plans & Activities Supported (Justification of Need): Student Worker IV position - $15,200

Lead: Chris Rodriguez
What would success look like and how would you measure it?: Increase safety for staff working alone. Provide work experience to students interested in AV technology.
Type of Request: STAFFING: Requests for permanent employee positions or temporary/hourly employees.
Planning Unit Priority: Low
On-Going Funding Requested (if applicable): 15200
Total Funding Requested: 15200

Request - Full Funding Requested - Establish Project lamp Maintenance
Describe Plans & Activities Supported (Justification of Need): The request is to establish an ongoing fund for projector lamps to support all campus projectors.
Lead: Chris Rodriguez
What would success look like and how would you measure it?: Provide reliabe support for projectors throughout campus.
Type of Request: INSTRUCTIONAL

	EQUIPMENT: Equipment, library material, or technology for classroom instruction, student instruction or demonstration, or in preparation of learning materials in an instructional program, equal or over $500. **Planning Unit Priority:** High **On-Going Funding Requested (if applicable):** 34000 **Total Funding Requested:** 34000 **Request - Full Funding Requested -** Lead Technician for Audio/Visual and Notification System **Describe Plans & Activities Supported (Justification of Need):** With the initiative of the campus wide deployment of the Alertus System, we will need a person to manage equipment deployed into every space on campus as well as maintaining the service and connected systems. **Lead:** Chris Rodriguez **What would success look like and how would you measure it?:** Additional classified staff **Type of Request:** STAFFING: Requests for permanent employee positions or temporary/hourly employees. **Planning Unit Priority:** High **On-Going Funding Requested (if applicable):** 118348 **Total Funding Requested:** 118,348	
Professional Development - Provide opportunities for training and education to keep up with technology and trends. **Status:** Active **Goal Year(s):** 2017-18, 2018-19,	**Request - Full Funding Requested -** Provide Funding to support staff technical training **Describe Plans & Activities Supported (Justification of Need):** With the rapid development of	

Unit Goals	Resources Needed	1. Where We Make an Impact: Closing the Loop on Goals and Resources
2019-20 **Goal Entered:** 08/16/2017	technology , technicians need to receive ongoing training to keep abreast of technology trends. As providers of technical support, we are regularly sought to provide direction on new technologies. In order to receive generalized training without manufacturer hyperbole, technicians need to receive training through fee based programs and seminars. As these offerings can vary in cost, this initial request is for $500 per employee in the Presentation Services unit. **Lead:** Chris Rodriguez **What would success look like and how would you measure it?:** Provide knowledgable technicians who can keep up with changing technologies and support faculty and staff who have innovative technology requests. **Type of Request:** PROFESSIONAL & ORGANIZATION DEVELOPMENT (POD): Requests that provide professional learning opportunities for Mt. SAC employees. **Planning Unit Priority:** Medium **On-Going Funding Requested (if applicable):** 2000 **Total Funding Requested:** 2000	
Audio/Visual and Notification System Design - Participate in the design of projects to ensure proper application of presentation technology including Student Access requirements, appropriate use of technology, and ensuring the communication of mass notification messages	**Request - Full Funding Requested -** Secure additional licensing for D-Tools AV System Design Server **Describe Plans & Activities Supported (Justification of Need):** With the increasing load of projects, we need the ability to add more users the the AV Design Server. **Lead:** Chris Rodriguez	

Unit Goals	Resources Needed	1. Where We Make an Impact: Closing the Loop on Goals and Resources
Status: Active **Goal Year(s):** 2017-18, 2018-19, 2019-20 **Goal Entered:** 08/16/2017	**What would success look like and how would you measure it?:** This will allow us to apply more resources towards projects. **Type of Request:** OTHER OPERATING EXPENSES AND SERVICES: Requests for contracted, legal/ audit, personal/ consultant, rent/ leases, repairs/ maintenance, and other misc. services. May also include request for travel and conference that does not require the assistance of POD. **Planning Unit Priority:** High **One-Time Funding Requested (if applicable):** 1800 **On-Going Funding Requested (if applicable):** 5800	
Student Engagement and work experience - Provide opportunities for students to receive work experience and technical training. **Status:** Active **Goal Year(s):** 2017-18, 2018-19, 2019-20 **Goal Entered:** 06/15/2018	**Report directly on Goal** **Request - Full Funding Requested -** Funding for work study students during breaks in the calendar year when they do not receive work study aid. **Describe Plans & Activities Supported (Justification of Need):** Certain work study programs only provide funding for work experience during the Fall and Spring Semester. This funding request is to provide a resource to support student workers during these periods when the workload shifts to projects that can only be completed during the academic breaks. **Lead:** Chris Rodriguez	**Reporting Year:** 2018-19 **% Completed:** 100 We worked with 5 workstudy students this year and were able elevate a student to a paid student position. (06/27/2019)

Unit Goals	Resources Needed	1. Where We Make an Impact: Closing the Loop on Goals and Resources
	What would success look like and how would you measure it?: This funding will allow students to have a consistent source of work if they participate in any of the work study programs which could prevent them from returning to find a reliable source of income elsewhere. **Type of Request:** STAFFING: Requests for permanent employee positions or temporary/hourly employees. **Planning Unit Priority:** Medium **On-Going Funding Requested (if applicable):** 4000	
Provide solutions for adequate and modern audio visual equipment - Provide modern audio visual systems and resources which interface with technologies used regularly by faculty and staff. Evaluate antiquated systems to suggest paths for renovation/modernization. Evaluate emerging technologies to determine appropriate use and application for instruction. **Status:** Active **Goal Year(s):** 2017-18, 2019-20 **Goal Entered:** 08/15/2017	**Request - Full Funding Requested -** Updated AV systems for Building 11 **Describe Plans & Activities Supported (Justification of Need):** The AV systems in this building have fallen significantly behind in the ability to support digital video technology. The high definition computer systems have out-paced the AV technology , which does not support digital high definition video. The projectors have also outlast their expected lifetime and display dim images compared to when they were new. These AV systems also display a video format that was antiquated more than 5 years ago. Therefore the projector screens will also need to be replaced. **Lead:** Chris Rodriguez **What would success look like and how would you measure it?:** This update will allow instructors to display content in HD digital format and bring renewed brightness for	

classroom viewing.
Type of Request: INSTRUCTIONAL EQUIPMENT: Equipment, library material, or technology for classroom instruction, student instruction or demonstration, or in preparation of learning materials in an instructional program, equal or over $500.
Planning Unit Priority: Medium
One-Time Funding Requested (if applicable): 430000
Total Funding Requested: 430000
Request - Full Funding Requested - Updated AV systems for Building 7
Describe Plans & Activities Supported (Justification of Need): The AV systems in this building have fallen significantly behind in the ability to support digital video technology. The high definition computer systems have out-paced the AV technology , which does not support digital high definition video. The projectors have also outlast their expected lifetime and display dim images compared to when they were new. These AV systems also display a video format that was antiquated more than 5 years ago. Therefore the projector screens will also need to be replaced.
Lead: Chris Rodriguez
What would success look like and how would you measure it?: This update will allow instructors to display content in HD digital format and bring renewed brightness for classroom viewing.
Type of Request: INSTRUCTIONAL EQUIPMENT: Equipment, library

material, or technology for classroom instruction, student instruction or demonstration, or in preparation of learning materials in an instructional program, equal or over $500.

Planning Unit Priority: Medium

One-Time Funding Requested (if applicable): 480000

Total Funding Requested: 480000

Request - Full Funding Requested - Updated AV systems for Building 28B

Describe Plans & Activities Supported (Justification of Need): The AV systems in this building have fallen significantly behind in the ability to support digital video technology. The high definition computer systems have out-paced the AV technology , which does not support digital high definition video. The projectors have also outlast their expected lifetime and display dim images compared to when they were new. These AV systems also display a video format that was antiquated more than 5 years ago. Therefore the projector screens will also need to be replaced.

Lead: Chris Rodriguez

What would success look like and how would you measure it?: This update will allow instructors to display content in HD digital format and bring renewed brightness for classroom viewing.

Type of Request: INSTRUCTIONAL EQUIPMENT: Equipment, library material, or technology for classroom instruction, student instruction or demonstration, or in preparation of

| | learning materials in an instructional program, equal or over $500.
Planning Unit Priority: Medium
One-Time Funding Requested (if applicable): 850000
Total Funding Requested: 850,000
Request - Full Funding Requested - Updated AV systems for Building 61
Describe Plans & Activities Supported (Justification of Need): The AV systems in this building have fallen significantly behind in the ability to support digital video technology. The high definition computer systems have out-paced the AV technology , which does not support digital high definition video. The projectors have also outlast their expected lifetime and display dim images compared to when they were new. These AV systems also display a video format that was antiquated more than 5 years ago. Therefore the projector screens will also need to be replaced.
Lead: Chris Rodriguez
What would success look like and how would you measure it?: This update will allow instructors to display content in HD digital format and bring renewed brightness for classroom viewing.
Type of Request: INSTRUCTIONAL EQUIPMENT: Equipment, library material, or technology for classroom instruction, student instruction or demonstration, or in preparation of learning materials in an instructional program, equal or over $500.
Planning Unit Priority: Medium | |

One-Time Funding Requested (if applicable): 1200000
Total Funding Requested: 1,200,000
Request - Full Funding Requested - Updated AV systems for Building 26A
Describe Plans & Activities Supported (Justification of Need): The AV systems in this building have fallen significantly behind in the ability to support digital video technology. The high definition computer systems have out-paced the AV technology , which does not support digital high definition video. The projectors have also outlast their expected lifetime and display dim images compared to when they were new. These AV systems also display a video format that was antiquated more than 5 years ago. Therefore the projector screens will also need to be replaced.
Lead: Chris Rodriguez
What would success look like and how would you measure it?: This update will allow instructors to display content in HD digital format and bring renewed brightness for classroom viewing.
Type of Request: INSTRUCTIONAL EQUIPMENT: Equipment, library material, or technology for classroom instruction, student instruction or demonstration, or in preparation of learning materials in an instructional program, equal or over $500.
Planning Unit Priority: Medium
One-Time Funding Requested (if applicable): 1100000

Total Funding Requested: 1,100,000

Request - Full Funding Requested - Updated AV systems for Building 26B

Describe Plans & Activities Supported (Justification of Need): The AV systems in this building have fallen significantly behind in the ability to support digital video technology. The high definition computer systems have out-paced the AV technology , which does not support digital high definition video. The projectors have also outlast their expected lifetime and display dim images compared to when they were new. These AV systems also display a video format that was antiquated more than 5 years ago. Therefore the projector screens will also need to be replaced.

Lead: Chris Rodriguez

What would success look like and how would you measure it?: This update will allow instructors to display content in HD digital format and bring renewed brightness for classroom viewing.

Type of Request: INSTRUCTIONAL EQUIPMENT: Equipment, library material, or technology for classroom instruction, student instruction or demonstration, or in preparation of learning materials in an instructional program, equal or over $500.

Planning Unit Priority: Medium

One-Time Funding Requested (if applicable): 250000

Total Funding Requested: 250,000

Request - Full Funding Requested - Updated AV systems for Building

26D

Describe Plans & Activities Supported (Justification of Need): The AV systems in this building have fallen significantly behind in the ability to support digital video technology. The high definition computer systems have out-paced the AV technology , which does not support digital high definition video. The projectors have also outlast their expected lifetime and display dim images compared to when they were new. These AV systems also display a video format that was antiquated more than 5 years ago. Therefore the projector screens will also need to be replaced.

Lead: Chris Rodriguez

What would success look like and how would you measure it?: This update will allow instructors to display content in HD digital format and bring renewed brightness for classroom viewing.

Type of Request: INSTRUCTIONAL EQUIPMENT: Equipment, library material, or technology for classroom instruction, student instruction or demonstration, or in preparation of learning materials in an instructional program, equal or over $500.

Planning Unit Priority: Medium

One-Time Funding Requested (if applicable): 1100000

Total Funding Requested: 1,100,000

Request - Full Funding Requested - Gradual replacement of presentation technology.

Describe Plans & Activities

Supported (Justification of Need): Presentation services manages over 500 AV systems that become antiquated after 5 years. Moreover, computers are also replaced about every 3 years. The computer replacement program and Instruction has outpaced the AV technology supported in the classroom. In order to keep pace with developing computer technologies, Presentation Services needs the ability and resource to update AV systems to support higher definition display systems. This funding request is to support display technology to replace projectors, video switchers, and laptop video connections as they become antiquated or computers in the classroom are improved and replaced. The proposed funding request will allow us to replace the necessary display equipment every 5 years and the control system every 10 years.

Lead: Chris Rodriguez

What would success look like and how would you measure it?: This will help presentation technologies keep pace with higher definition computers as they are replaced.

Type of Request: INSTRUCTIONAL EQUIPMENT: Equipment, library material, or technology for classroom instruction, student instruction or demonstration, or in preparation of learning materials in an instructional program, equal or over $500.

Planning Unit Priority: Medium

Unit Goals	Resources Needed	1. Where We Make an Impact: Closing the Loop on Goals and Resources
	On-Going Funding Requested (if applicable): 700000 **Total Funding Requested:** 700,000 **Request - Full Funding Requested -** Provide modern video equipment for the Musical Recital Hall. **Describe Plans & Activities Supported (Justification of Need):** Update the Video switching equipment in the Recital Hall to support digital high definition video. **Lead:** Chris Rodriguez **What would success look like and how would you measure it?:** Provide digital video support for users. **Type of Request:** NON INSTRUCTIONAL EQUIPMENT: Tangible property with useful life of more than one year, other than land or buildings improvements, equal and over $500 per individual item. Used for administrative or non-instructional purposes. **Planning Unit Priority:** Low **One-Time Funding Requested (if applicable):** 30000 **Total Funding Requested:** 30,000	
	Request - Full Funding Requested - Provide an engineered and installed projection lift system for the Clarke Theater. **Describe Plans & Activities Supported (Justification of Need):** Provide an engineered solution for installing existing projectors to facilitate safety and maintenance. This will also reduce the personnel resources for hanging projectors in support of many production held in the theater.	

	Lead: Chris Rodriguez **What would success look like and how would you measure it?:** Provide a safe location to mount projectors over the head of patrons. **Type of Request:** FACILITIES: This section includes minor building improvement projects and alterations to specific rooms or operational areas. **Planning Unit Priority:** Low **One-Time Funding Requested (if applicable):** 25000 **Total Funding Requested:** 25,000