1. Assessment Plan - Four Column

PIE - Administrative Services: Technical Services - Presentation Services Unit

Where We Are: Analysis and Summary

2017-18

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External Conditions, Trends, or Impacts (Student Services): 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 7, 11, 26 and 61 will eventually need to be converted to this wide aspect ratio, as it is becoming increasing difficult to buy monitors and displays in the older narrow aspect ratio format. Newer buildings already support this format. 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 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. Additionally, we have received funding to implement a campus wide video server which will allow us to stream videos across the campus network. This will greatly simplify the distribution of captioned video to the classroom as we will no longer have issues with incompatible DVDs or broken VCRs. We anticipate implementation of this server technology by the end of the Summer 2019 semester.

This Unit saw the new implementation of USB-C and Thunderbolt in laptops, a new high bandwidth connection offering a single connector for all computer including connections expanded displays. This new technology will be offered when performing classroom upgrades, and will be included with new projects.

Video resolutions continue to push the boundary. Many people already have 4K in their home and bring the expectation to the classroom. While it is readily available for televisions, projector technology still has not caught up. Serious consideration and investigation is being made into projectors that emulate 4K resolution as well as waiting patiently for projector resolutions to catch up.

With the evolution of LED and laser 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 reliable and life. Manufacturers are also developing technologies that run the projector at lower output and steadily raise the output over time as the projector ages. This is typically when we would see a projector's brightness degrade. 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!

Internal Conditions, Trends, or Impacts (Student Services): With the rapid development of campus AV standards, the acquisition and deployment of centrally managed classroom systems, the deployment of a new central media server and the deployment of the Mountie Emergency Notification System (Mountie ENS), we have not been

able to keep up with new project requests and process equipment purchases. Most projects should take 4-6 months to complete, but we currently have a backlog of almost 2 years consisting of existing projects that need to be finished as well as new projects. Some of these new projects include updating the paging system as part of the Mountie ENS. Requests for projects as well as active projects have grown significantly. As of June 2018, we are managing over 45 projects.

New projects have also prevented us from performing much needed maintenance on existing systems. While we were able to catch up on needed projector lamp replacements, we have not been able to perform maintenance such as cleaning filters, which can cause early lamp failure or projectors turning off from overheating. We estimate there is currently a 1.5 year back log of AV maintenance.

There are many audio/visual systems that are now over a decade old. This includes systems in Building 26 and 28 as well as many locations not being managed by Presentation Services.   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 was instituted with great success. Presentation Services now employs 7 Workstudy students in the assistance of inventory, faster response times, and safety.   More students are needed, however, there are not enough full time staff to support more student workers. We were also informed that students who participate in the SSEED program may only be available for one year. If this happens, we will not have the resources to support such a quick turnaround of students.
Critical Decisions Made by Unit: As part of the BCT project, we needed to carefully consider out to implement Alertus voice notification. This system is capable of interrupting the audio being played into a classroom and pushing the emergency alert as a voice notification.

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.

A recent explosion has been felt with the ability to participate in web conferencing. Recently, Zoom Video Conferencing has replaced CCC Confer. Since many of these systems are directly connected to the AV system, we have begun to support the use of Zoom and now direct prospective users to create an free Pro account.

Notable Achievements for Theme A: To Advance Academic Excellence and Student Achievement: In 2017-2017 Presentation Services tracked 865 support tickets that were documented and remedied while many more were responded to in route to another call. These support tickets also include automated notifications generated by our campus management system (GVE).

Developed a standardized training curriculum as part of the preparation for BCT coming online. This training curriculum includes basic AV system operation, introduction to interactive teaching, advanced interactive teaching technologies, and digital sign content management. A special thanks to Adan San Miguel, Valerie Biller, and Serena Ott for developing and providing this training.
Notable Achievements for Theme B: To Support Student Access and Success: We continue to hire work study students for all programs. We have instituted a rotation where a student spends the first year learning and training. The second is spent responding to support calls as well as training the new batch of work study students. This training also includes professional manufacturer training from Extron (who provides our control systems).
Notable Achievements for Theme C: Secure Human, Technological, & Financial Resources: Successful implementation of collaborative teaching system using Brightlink projectors from Epson.
 Consideration included partnership with faculty and staff.

We successfully secured funding for two student workers for half of the year. This equates to one student for the year.

This year, Presentation Services performed the following services:

Serviced and resolved (882) Support Requests
Replaced (66) lamps
Replaced (4) HD and (10) SD Projectors,
Replaced (3) Document cameras
Added (2) Document cameras and installed (3) user provided document cameras,
Addressed (43) automated notifications from GVE

Managed the installation of the following projects:

Contributors to the Report: Chris Rodriguez

Unit Goals	*Resources Needed*	*Where We Make an Impact: Closing the Loop on Goals and Plans*
Process 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 **Goal Entered:** 07/31/2017	**In Progress -** Meet the demand to process proposals, documentation, requisitions, and tracking for current and new projects. **Describe Plans & Activities Supported:** New AV Project Coordinator position **Lead:** Manager, Technical Services Engineering **On-Going Funding Requested (if applicable):** 93097 **Type of Request:** Staffing **Planning Unit Priority:** High	
Audio and Visual maintenance and support - Provide Audio and Visual support to faculty 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 **Goal Entered:** 08/04/2017	**In Progress -** Meet the current demand of additional projects and support for a growing number of systems. **Describe Plans & Activities Supported:** New AV Coordinator, Audio Visual Systems **Lead:** Manager, Technical Services Engineering **On-Going Funding Requested (if applicable):** 103515 **Type of Request:** Staffing **Planning Unit Priority:** High **What would success look like and**	

Unit Goals	Resources Needed	Where We Make an Impact: Closing the Loop on Goals and Plans

how would you measure it?: This will give us the ability to manage the high volume of projects to install.

In Progress - Meet the expected demand of additional projects and support for a growing number of systems.

Describe Plans & Activities Supported: Add New AV Technology Specialist position

Lead: Manager, Technical Services Engineering

On-Going Funding Requested (if applicable): 93097

Type of Request: Staffing

Planning Unit Priority: High

What would success look like and how would you measure it?: This will give us the ability to resolve outstanding support issues in a more timely manner.

In Progress - Provide maintenance and troubleshooting on systems when the facility is unoccupied.

Describe Plans & Activities Supported: Funding for overtime

Lead: Manager, Technical Services Engineering

On-Going Funding Requested (if applicable): 8500

Type of Request: Human Resources

Planning Unit Priority: High

In Progress - Generate source for equipment maintenance and replacement.

Describe Plans & Activities Supported: Funding for Maintenance Budget:
(12) Projectors $25,712 (actual 2016-2017)

(10) Document Cameras $19,800 (repaired and/or replaced 2016-2017)
(6) Video Switchers $11,880 (repaired and/or replaced 2016-2017)
(18) Existing manual Projector screens $7,400 (actual 2016-2017)
Miscellaneous AV supplies/equipment $8,000 (estimated actual 2016-2017)

Lead: Manager, Technical Services Engineering
One-Time Funding Requested (if applicable): 72792
On-Going Funding Requested (if applicable): 72792
Type of Request: Technology Equipment - replacement/upgrade
Planning Unit Priority: High
In Progress - Add part time student worker morning position
Describe Plans & Activities Supported: Student Worker IV position - $15,200
Lead: Manager, Technical Services Engineering
One-Time Funding Requested (if applicable): 7600
On-Going Funding Requested (if applicable): 15200
Type of Request: Human Resources, Student Services
Planning Unit Priority: High

Full Funding Requested - Increase to Project lamp Maintenance
Describe Plans & Activities Supported: As the number of AV systems grow across campus, so do

Unit Goals	Resources Needed	Where We Make an Impact: Closing the Loop on Goals and Plans
	the number of projectors and the number of projector lamp replacements. Our current funding is not sufficient to cover the number of lamps needed to replace in a school year. This request is to increase the existing projector lamp budget from $24,000 to $34,000. **Lead:** Manager, Technical Services Engineering **On-Going Funding Requested (if applicable):** 10000 **Type of Request:** Instructional Supplies, Non-Instructional Supplies **Planning Unit Priority:** High	
Professional Development - Provide opportunities for training and education to keep up with technology and trends. **Status:** Active **Goal Year(s):** 2017-18, 2018-19, 2019-20 **Goal Entered:** 08/16/2017		
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 **Status:** Active **Goal Year(s):** 2017-18, 2018-19, 2019-20 **Goal Entered:** 08/16/2017	**Full Funding Requested -** Secure additional licensing for D-Tools AV System Design Server **Describe Plans & Activities Supported:** With the increasing load of projects, we need the ability to add more users the the AV Design Server. **Lead:** Manager, Technical Services Engineering **One-Time Funding Requested (if applicable):** 1800 **On-Going Funding Requested (if applicable):** 5800 **Type of Request:** Non-Instructional Equipment	

Unit Goals	Resources Needed	Where We Make an Impact: Closing the Loop on Goals and Plans
	Planning Unit Priority: High **What would success look like and how would you measure it?:** This will allow us to apply more resources towards projects.	
Operate within clearly defined unit structure - Operate independently to expedite AV support and services. Clearly define and/or identify responsibilities unique to other department's similar work. Secure specific resources to address/meet campus need, increase efficiency, and delineate/delegate assigned work. **Status:** Active **Goal Year(s):** 2018-19 **Goal Entered:** 06/14/2018	**No Funding Requested -** Create distinct unit structure between Presentation Services and Broadcast Services. **Describe Plans & Activities Supported:** Presentation Services is currently attached to Broadcast Services for funding resources in particular. There also exists a Manager of Broadcast Services currently under higher. To clear up the resources for each unit, we need to separate them with the associated funding resources/requests. **Lead:** Manager, Technical Services Engineering **Type of Request:** Staffing, Instructional Equipment, Instructional Supplies, Non-Instructional Equipment, Non-Instructional Supplies, Professional Development **Planning Unit Priority:** High	
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 **Goal Entered:** 06/15/2018	**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:** 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	

Unit Goals	Resources Needed	Where We Make an Impact: Closing the Loop on Goals and Plans
	support student workers during these periods when the workload shifts to projects that can only be completed during the academic breaks. **Lead:** Manager, Technical Services Engineering **On-Going Funding Requested (if applicable):** 4000 **Type of Request:** Staffing **Planning Unit Priority:** Medium **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.	
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 **Goal Entered:** 08/15/2017	**Full Funding Requested -** 13 Updated AV systems for Building 11 **Describe Plans & Activities Supported:** 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:** Manager, Technical Services	

Unit Goals	Resources Needed	Where We Make an Impact: Closing the Loop on Goals and Plans
	Engineering **One-Time Funding Requested (if applicable):** 430000 **Type of Request:** Facilities , Instructional Equipment **Planning Unit Priority:** Medium **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. **Full Funding Requested -** Updated AV systems for Building 7 **Describe Plans & Activities Supported:** 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:** Manager, Technical Services Engineering **Type of Request:** Facilities , Instructional Equipment **Planning Unit Priority:** Medium **What would success look like and how would you measure it?:** This update will allow instructors to display content in HD digital format	

Unit Goals	Resources Needed	Where We Make an Impact: Closing the Loop on Goals and Plans

and bring renewed brightness for classroom viewing.

Full Funding Requested - Updated AV systems for Building 28B

Describe Plans & Activities Supported: 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: Manager, Technical Services Engineering

Type of Request: Facilities , Instructional Equipment

Planning Unit Priority: Medium

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.

Full Funding Requested - Updated AV systems for Building 61

Describe Plans & Activities Supported: 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: Manager, Technical Services Engineering

Type of Request: Facilities , Instructional Equipment

Planning Unit Priority: Medium

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.

Full Funding Requested - Updated AV systems for Building 27

Describe Plans & Activities Supported: 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: Manager, Technical Services Engineering

Type of Request: Facilities , Instructional Equipment

Planning Unit Priority: Medium

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.

Full Funding Requested - Updated AV systems for Building 26A

Describe Plans & Activities Supported: 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: Manager, Technical Services Engineering

Type of Request: Facilities , Instructional Equipment

Planning Unit Priority: Medium

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.

Full Funding Requested - Updated AV systems for Building 26B

Describe Plans & Activities Supported: 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: Manager, Technical Services Engineering

Type of Request: Facilities , Instructional Equipment

Planning Unit Priority: Medium

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.

Full Funding Requested - Updated AV systems for Building 26D

Describe Plans & Activities Supported: 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: Manager, Technical Services Engineering

Type of Request: Facilities , Instructional Equipment

Planning Unit Priority: Medium

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.

Full Funding Requested - Gradual replacement of presentation technology.

Describe Plans & Activities Supported: Presentation services manages over 400 AV systems that become antiquated after 3-4 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 equipment every 6-8 years.

Lead: Manager, Technical Services Engineering

On-Going Funding Requested (if applicable): 500000

Type of Request: Facilities , Instructional Equipment, Instructional Supplies, Non-Instructional Equipment, Non-Instructional Supplies

Planning Unit Priority: Medium

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.

Full Funding Requested - Provide modern video equipment for the Clarke Theater.

Describe Plans & Activities Supported: Update the Video switching equipment in the theater to support digital high definition video.

Lead: Manager, Tech Services Engineering

One-Time Funding Requested (if applicable): 40000

Type of Request: Non-Instructional Equipment

Planning Unit Priority: Medium

Unit Goals	Resources Needed	Where We Make an Impact: Closing the Loop on Goals and Plans
	Full Funding Requested - Provide modern video equipment for the Musical Recital Hall. **Describe Plans & Activities Supported:** Update the Video switching equipment in the Recital Hall to support digital high definition video. **Lead:** Manager, Tech Services Engineering **One-Time Funding Requested (if applicable):** 30000 **Type of Request:** Non-Instructional Equipment **Planning Unit Priority:** Medium **Full Funding Requested -** Provide an engineered and installed projection system for the Clarke Theater. **Describe Plans & Activities Supported:** 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:** Manager, Tech Services Engineering **One-Time Funding Requested (if applicable):** 25000 **Type of Request:** Instructional Equipment, Non-Instructional Equipment **Planning Unit Priority:** Medium	