January – June 2020

# Accomplishments Report Information Services



# Contents

Introduction	4
MISSION	4
VISION	4
VALUES	4
Executive Summary	6
Support Services	8
COVID-19 Response	8
Support Services – Customer Requests	11
Remote Support Metrics from January 2020 through June 2020	13
Remote Support Projects	14
Technology Management Services	28
IS Projects Update – Jan-June 2020	29
Academic Support	37
Bloch School of Management	37
School of Nursing and Health Sciences (SoNHS)	
School of Pharmacy	
Network Architecture	40
Security	40
Wired Network	40
Wireless Network	40
Servers	41
Voice	41

Registrar Services	42
Information Access	43
Database Server Design, Implementation & Administration:	43
Software Design and Development	44
UM System IT Consolidation:	45
Software Administration	45
Scanning Services	45
Exams Scanned	46
Security	47
Foundation Services	48
Server Virtualization	48
Storage/SAN/Backup	48
Cloud	48
Miscellaneous	48
Appendix A	50
Individual Project Updates – Completed Projects	50
Individual Project Updates – Implementation Phase	50
Individual Project Updates – Development Phase	54
P384 – ICN Network Upgrade <b>Error! Bookmark not define</b>	d.
Appendix B	57
Building Cable Plant Infrastructure Upgrades	57

# Introduction

# MISSION

Information Technology is a transformative tool to propel UMKC's mission and support our foundational pillars of providing exceptional student learning; a thriving discovery enterprise; dynamic engagement with our community and region; a diverse and inclusive workforce and community; a strong and resilient staff, process and physical infrastructure. IT core values include a commitment to innovation; cultivating a team environment within Information Services; a collaborative environment of respect, sharing and participation; an expectation of excellence with high standards balanced with limited resources

# VISION

Information Services will empower the UMKC community through technology that enables IT infrastructure, services, and solutions that are innovative, readily available, and utilized to provide exceptional support to students, faculty, and staff in their endeavors to uphold the UMKC mission.

# VALUES

In addition to the UMKC Campus values of Accountability, Learning, Respect, Diversity, Collaboration, and Integrity; Information services also lives by the following IT-specific values:

• User-Focused – We seek out, listen to, and respond to our users' needs

- Offering quality solutions and being accountable for follow- through
- Being pro-active, responsive, and empathetic trusted advisors o Focusing on services that are most valued by our customers
- Open We act with integrity and practice honest, and respectful two-way communication
  - Balancing speaking with active listening
  - Feeling free to speak up and contribute to discussions as a way to build mutual trust
  - Proactively giving and receiving positive and constructive feedback

• Collaborative – We work together with our colleagues in a way that leverages and values each other's expertise and insights.

- Valuing, building, and maintaining cross-functional relationships
- Being inclusive equal contributors who foster and respect new and diverse perspectives
- Sharing each other's successes while owning and learning from mistakes

• Innovative – We encourage and experiment with new ideas, both basic and cutting-edge.

- Continuously striving to improve how we work and deliver services
- Recognizing, embracing, and celebrating ideas and new technologies

• Showing curiosity and a willingness to invest in calculated risks in order to learn and evolve

# **Executive Summary**

Information Services is a strategic asset for UMKC's missions of teaching and learning, research, service and economic development. We continued to make progress toward our defined goals and this document details the progress we have made during the first half of 2020.

Information Service has released two new documents shaping the future of the division. One, a new strategic plan called the IT Transformation Plan. Second, UMKC has established "cloud first" strategy where we use Cloud services instead of on premise solutions where applicable. Details on these initiatives can be found at <u>https://www.umkc.edu/IS/policies/</u>.

The entire division and UMKC Community has been significantly impacted by the Covid-19 virus. Information Services has played a transformative role in allowing the campus to continue operating remotely and dealing with unique challenges faced by Students, Faculty, Staff, Alumni and the greater Kansas City community. The IS staff performed extraordinarily well assisting staff and faculty in the transition to working from home. IS had many divisions who were already working from home part of the time and those departments continued to thrive. The departments new to work from home options performed admirably supporting both UMKC community and UMKC IS worker needs. UMKC IS had staff on campus during the entire time campus was shut down and operating in a reduced capacity to maintain core, critical aspects of the university. TMS, Networking and Phone staff were also able to complete a number of projects with the campus in a reduced population state.

During the first 6 months of 2020, IS Support Services saw record high requests for assistance due to the changes brought on by COVID-19. The TSC received more request in the month of March than in the previous 3 years combined. Office 365 remained the top category of support requests, in part due to the System wide implementation of Microsoft MFA. Technology accommodations for faculty, staff and students totaled in the triple digits.

IS coordinated the purchase of over \$2.32M of IT hardware and software. This represented a 19% decrease from the same time last. The effect of Covid-19 on the university budget is the reason these numbers dropped from a projected increase to an overall decrease during this timeframe.

Technology Management Services (TMS) was thrown an immense, unplanned challenge with the Covid-19 virus changing every plan the department had for 2020 and beyond. The team supports over 350 ILE/AV systems including classrooms, conference rooms, performance spaces, collaboration spaces, teaching labs, and signage systems. TMS partnered with Faculty Affairs, Registrar's office, and CFM to identify classroom spaces for fall, and which non-classrooms spaces need to be renovated to support classes. They made changes to tens of classrooms to support the specific needs of individual academic units. TMS did all of this while slashing budgets as a result of the financial pressure on the entire university.

8,192 new streaming media entries (videos, images and audio clips), were added to Kaltura by faculty and/or students. 378 hours of ITV distance learning was supported during this review period.

The Project Management and Infrastructure Services departments worked a number of high profile projects including the following:

- SCE Educational and Research Center
- LENEL to CBORD transition
- Office 365
- Administrative Data Center Upgrade
- ILE Classroom Upgrades

Efforts of the Information Access (IA) Division were notable in many areas including research and software. IA spent significant amounts of time working the UM System AD projects, Oracle contracting and reviews, and rewriting upgrading custom applications for the campus with the latest technologies/frameworks.

Information Access worked on 62 unique custom web application for the campus in the current timeframe of this report.

Foundation Services hosted over 400+ servers in our local data centers or via Amazon Web Services. The same group began an upgrade of the Administrative Center Data Center. New technology will provide an advanced SmartRow solution with new cooling, fire suppression and backup UPS. This solution will save the university money compared with outdated processes for power, cooling and space management.

Looking forward, Information Services is establishing new long range staffing and budget planning processes. IS is exploring new services and offerings to streamline the service and offerings for students, faculty, staff and the entire UMKC community.

Networking and Security were involved in a number of behind the scenes projects both before and during the Covid change. Networking installed hundreds of replacement Wi-Fi access points and made numerous changes to the VOIP phone system. Security improved, expanded and offered new options for remote access to resources on campus for faculty, staff and students.

# Support Services

# COVID-19 Response

#### **Technology Accommodations**

To accommodate the immediate campus shift to remote work we purchased loaner equipment, including laptops, headsets, and microphones. New processes were created to handle the delivery and distribution of this equipment to campus Students, Faculty, and Staff. This ensured that Students, Faculty, and Staff had the technology needed to be successful in Academic and University work during campus shutdown.

This equipment included 38 computers, 15 headsets, 24 mobile hotspots, 11 USB Wi-Fi adapters, and 15 webcams deployed by TSC staff from 4825 Troost, as well as an additional 19 hotspots deployed through DoIT in Colombia.

# **RooLabs Online**

RooLabs Online provides real time information regarding capacities of student computing labs located on campus, how many machines are currently in use in each lab, and provides free remote access to lab software. This allows Students to access standard and specialized software that is normally available only on campus from anywhere and on most computing devices.

Another benefit of RooLabs Online we can fully utilize campus computer labs by offering roughly half available computers to students on-site and the other half available to students remotely over the internet.

#### **Remote Labs Expansion**

To ensure continued access to required software IS added many specialized software packages to RemoteLabs. We also increased resources of RemoteLabs across the board to account for the increased need during the campus closure. This allowed students to access much needed software from off campus on their personal computing devices.

#### **Software Deployments**

Once campus shutdown IS quickly moved to deploy key software used for remote access, including, Zoom, Teams, and VPN. This was instrumental in ensuring that Faculty and Staff would be able to successfully transition to a fully remote model.

#### Shift to providing remote technology support for campus

Expanded Call Center operations to allow all TSC staff to assist with the phone queue and trained additional TSC staff on remote support procedures. This enabled us to provide expanded support to all UMKC departments working remotely. Further redundancy and cross training in TSC roles allowed us to be flexible and meet customer needs.

We also expanded our hours of operation from 8 hours to 12 hours daily and included weekend shifts during key back to school times to better support students, faculty, and staff during these unprecedented times.

#### **Delivery Operations**

Became the central delivery hub for all technology purchases for the campus and ensured we have onsite staff throughout the campus closure. Coordinated the pickup/transfer of hundreds of IT purchases. This ensured Faculty, Staff, and Students were able to continue to get their immediate technology purchases met during a time when the rest of campus was closed to deliveries.

#### **Modify Computer Labs for Social Distancing**

IS made significant modifications to campus computer labs to ensure safe usage by students. This included removing peripherals, adding signage, expanded mobile print release, and physical relocation of workstations. This allowed us to reopen all IS managed computer labs for the Fall semester while maintaining social distancing protocols.

#### Highlights and key initiatives

#### **UM-AD** Migration

System-wide IT is currently engaged in a project to consolidate each of the University campuses user accounts into a single, shared domain. This is an effort that will reduce costs, strengthen support infrastructure, increase security, and result in a more efficient IT environment. This consolidation will ease the adoption of cloud services, off-the-shelf software, and promote the sharing of common resources system-wide. As part of this initiative Information Services played a key role in ensuring success at UMKC. A few of these activities include:

- Created over 200 Group Policy for the computer labs and ILE classrooms in UM-AD, this will enable us to migrate over 1,100 computers to UM-AD during the next refresh.
- Created test computers in UM-AD domain
- Created new OU for each department in UM-AD
- Participating in weekly System-wide calls

#### Office 365

UM System is currently migrating on premise services to Office 365. Users will then have access to all files and servers that will live in the cloud. During this review period, MFA was fully implemented for all Faculty & Staff. This increased support calls significantly and required the creation of multiple online resources.

Office 365 was fully launched, including communication and online resources for getting started. Multiple technicians were trained in O365 to ensure we can provide support to campus.

Microsoft Teams was also enabled and deployed to all Faculty and Staff, which was key during the transition to working remotely. Worked with all campuses to develop shared content and knowledge to support this new service.

#### **Rise Vision Digital Signage**

During this period IS migrated from Four Winds to Rise Vision as our campus standard for digital signage. Most of this work was done remotely during the campus closure. Migrating to Rise gives our Faculty and Staff a compelling and easy to use digital signage solution at less than ½ the software cost of our existing solution.

#### Cherwell

During this 6 month period continued work on Cherwell was made. IS created additional specifics to streamline the request process from Faculty, Students, and Staff.

IS completed the migration of the Network and Infrastructure "Moves, Adds, Changes" process, which until now has been running on custom forms. This is now fully integrated with Cherwell, including real time MoCode authorization.

#### Workstation Replacement Program

Of the 408 WRP orders, 101 were delivered to School of Medicine and School of Dentistry for installation. The TSC was able to successfully deploy 168 out of its 307 WRP computers throughout campus prior to the University's closure of campus in March. Nearly half of the computers purchased by centrally supported departments this WRP cycle (134) were laptops. Deploying these laptops allowed faculty and staff to transition to remote work and remote instruction more easily during the campus closure.

WRP tracking was modified this year through changes in the Workstation Tracking Form to better integrate with the System-wide Cherwell ticketing system. All WRP deployments from the TSC were tracked within Cherwell.

#### Windows 10





Due to the campus closure we were not able to deploy Windows 10 upgrades this period. We have continued to build new images with the latest version and have been deploying this to new computers. We are planning on a major Windows 10 upgrade over the Winter Break.



#### Mac OS

The Mac Admin Team worked with the Security and Foundation Services teams to allow for JAMF to update policies and deploy applications over the Internet, allowing for UMKC owned Apple devices to receive deployments and updates while off campus. This allows faculty and staff working remotely to have the same managed support and access as if they are on campus.



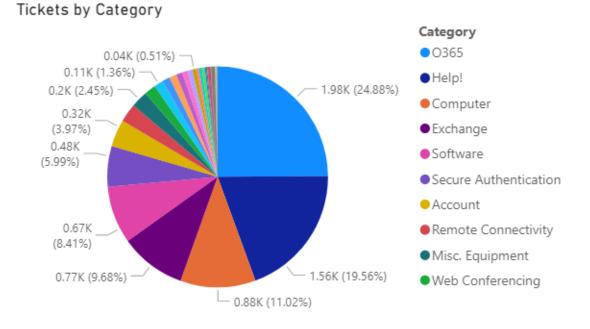
The OS of the Apple storage server **Macserv01** was updated to 10.14 to remain on an Apple supported release, and new hardware was purchased to replace **Macserv01** and its storage array in the Fall.

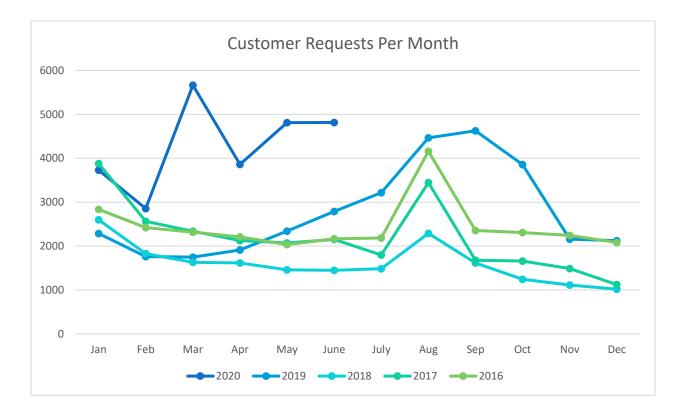
The JAMF Pro server was scheduled to be updated to the latest version of JAMF Pro, however the underlying database server was not capable of supporting the latest version of MySQL. This required a new MySQL Community Server to be built by the IA team. The upgrade is rescheduled for the Fall.

Licensing for a Dev instance of JAMF was acquired, and a new Dev server and Dev database were built. Once the configuration is complete, this will provide the Mac Admin Team an environment to develop and test application and OS deployments, JAMF policies, and potential new ways to do standard imaging.

#### Support Services – Customer Requests

During the first 6 months of 2020, IS Support Services saw record high requests for assistance due to the changes brought on by COVID-19. The TSC received more request in the month of March than in the previous 3 years combined. Office 365 remained the top category of support requests, in part due to the System wide implementation of Microsoft MFA.



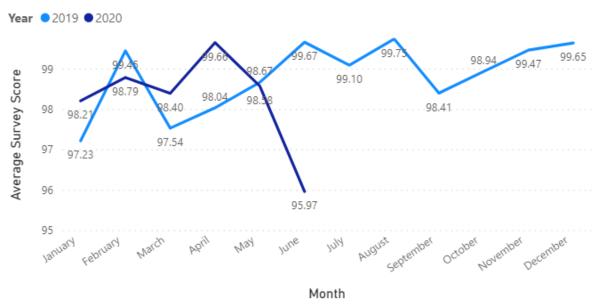


# **Customer Requests for Five Years**

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
2020	3730	2855	5663	3859	4812	4814							25,733

2019	2284	1760	1748	1909	2340	2788	3216	4466	4625	3855	2158	2123	33,272
2018	2598	1827	1629	1616	1458	1449	1485	2291	1616	1244	1111	1019	19,343
2017	3879	2562	2335	2125	2072	2152	1799	3444	1676	1658	1487	1123	26,312
2016	2837	2419	2314	2209	2034	2165	2183	4158	2354	2307	2241	2083	29,304
Total	11598	8568	8026	7859	7904	8554	8683	14359	10271	9064	6997	6348	108,231

 Customer satisfaction continues to remain extremely high. Over the last six months, Support Services has a 98.12% <u>Very Satisfied</u> rating. The following chart represents customer satisfaction data collected from 640 surveys closed by Support Services for the period of January 2020 through June 2020. The slight dip in customer satisfaction for June 2020 coincides with the System wide implementation of Microsoft MFA for O365.



Average Survey Score by Month and Year

#### Remote Support Metrics from January 2020 through June 2020

• Remote Support fielded **25,733** requests for help via phone, emails, and online web submissions.

2020	Phone Requests	Online Requests	Email Requests	Totals
Jan	2626	129	975	3730
Feb	1836	101	918	2855
March	3574	148	1941	5663
April	2028	79	1752	3859
May	2142	91	2579	4812

June	2492	108	2214	4814
Totals	14698	656	10379	25733

#### Remote Support Projects

In addition to providing remote support to Faculty, Staff, and Students this team provides significant work on accounts and other key systems. Below are a few of those key accomplishments.

#### Account Management

- Over 8,000 accounts that had both an Exchange account and an O365 account email account were modified to have one email address.
- Over 3,000 active student email accounts had their passwords changed to force MFA compliance in late February.
- Worked with Admissions, Registration and Records and various UM IT groups to address SSO account creation and maintenance issues.
- Created guest and resource accounts as requested.

AIMS – Account Management tool, which is used by UMKC, MST, MU, and UMSL

- AIMS updates that enhanced performance and efficiency were tested and approved for production only a monthly basis.
- Collaborated with UM-System IDM and UMKC IS AD Consolidation committees to revise account management policy and procedures for the AIMS system.
- The TSC tested and offered suggestions to help refine the account management tool throughout the first half of the year.

Box 2.0 – Cloud storage option for faculty and staff

- Collaborated with Foundation Services and Internal Applications to move the Box provisioning tool from ColdFusion to .NET.
- We also switched away from using the Primary Email address to the UPN value on accounts, to reduce authentication issues resulting from Faculty and Staff using email aliases.

Bomgar – UMKC-hosted remote support solution used by UMKC, MST, MU, and UMSL

- Purchased multiple sets of additional licenses for IS & Dental School in March to help support users remotely due to COVID-19.
- Performed other appliance and instance upgrades as necessary.

#### Academic Support

#### School of Computing and Engineering (SCE)

Information Services worked with the School of Computing and Engineering's IT Ops Committee Chair throughout the semseter to ensure we were effectively communicating IT changes and address the needs of faculty, staff and students. These meetings also give us an opportunity to discuss new projects and IT changes. These committee meetings are vital, particularly with SCE's continually changing lab environments and their expanding curriculum. Some of the recent projects we've worked on include.

- Worked with CFM to ensure the lab environments were maintained at an optimal level.
- Assisted with special events as needed, including facilitating communications about guest accounts, software requirements, and access.
- Worked with personnel assigned to schedule labs to assist with tracking ad hoc and recurring classes held in the SCE labs.
- Supported student printing needs by keeping supplies on hand and printers ready for use. Over 14,340 print jobs were printed in the SCE computer labs located in rooms 364, 457, 458, 460, 462, 464, and 527, totaling almost 115,000 pages.
- Supported EON Reality VR Lab by creating new login process and updating Adobe Creative Cloud 2020.
- Assist with acquisition of additional seats on Matlab Research license for SCE (usage on this license has been increasing significantly causing bottlenecks and inability of users to access the software during peak usage times).
- Assist with acquisition of and migration to new Matlab license for MIDE
- Deploy 10 Multisim licenses to users in the MIDE group.
- Provide critical on-site support during campus closure, including deployment of hardware and software for use by WFH faculty/staff (loaner laptops, Wi-Fi hotspots, webcams, etc.) Zoom, Teams, RDP and other remote technology support as needed as well.
- Prep systems and computer labs for move into Robert W Plaster Free Enterprise and Research Center opening Q3 2020.
- Configured SCE Lab 451 for 10 students to use the computers for their lab section during the shutdown.
- Research multiple 3D printers/Scanners that will be purchased for the new Robert W. Plaster Free Enterprise building.

#### **College of Arts and Sciences (CAS)**

Over the last 6-month period Information Services worked with the College of Arts and Sciences to support their technology needs and assist with many projects. A couple of these projects include:

- Convert 30 ArcGIS licenses from Named User Licenses to Concurrent Licenses for AUPD and Geosciences Labs. We installed a total of 60 concurrent licenses for both labs.
- Worked with Foreign Languages on what equipment will be needed for training and for the campus closure. After figuring what was needed it was decided instead of borrowing Information Services laptops, they would take their desktop computers home.

- Provide critical on-site support during campus closure, including deployment of hardware and software for use by WFH faculty/staff (loaner laptops, Wi-Fi hotspots, webcams, etc.) Zoom, Teams, RDP and other remote technology support as needed as well.
- Worked closely with departmental chairs on their need of Adobe software for student use.

#### University Libraries (UL)

Information services worked with the Library IT Ops Committee throughout the semester to discuss ongoing and new projects. Over the last 6 months a couple of the larger projects that were completed included:

- Replaced 27 public computers in the first-floor computer labs.
- Assisted the Law Library in migrating to main EZ Proxy server hosted by the University Libraries. This allowed the Law Library to save money on hosting their own server, and consolidated services and support between the two libraries, providing better service to patrons.
- Iliad inter library loan system updated to current version
- Assisted in writing CARES Grant proposal for student technology expansion in the libraries. Proposal includes laptop checkout for students through MNL to use with remote learning during COVID-19.
- Expanded mobile print release to match IS Labs standards and promote social distancing.

#### School of Education (SoE)

- Supported users moving to from on-campus to remote work during COVID-19 by preparing equipment for home use and offering increased remote software support.
- Provided additional training to SOE faculty and staff on how to use WebEx and Zoom video conferencing software.
- Collaborated with faculty stakeholders to maintain 38 user accounts for their Community Counseling and Assessment Services (CCAS) program.
- Worked with SOE Faculty and Staff to identify, procure, and configure many software applications.
- Supported the SOE loaner laptop program in conjunction with their IT Ops Chair
- Worked with Foundation Services to configure Titanium access for remote workers off-campus.

#### School of Biological and Chemical Sciences (SBC)

Over the last 6 months IS worked with the School of Biological Sciences and Chemistry through weekly meetings to ensure faculty and research needs are met.

- Work with researchers using equipment tied to unsupported Operating Systems to upgrade systems to Windows 10, or to remove the computer from the UMKC network if legacy will not allow the OS to be upgraded. In some instances, building firewalls were utilized to allow limited network access to UMKC resources, such as Box and Research Storage.
- Provide limited on-site support during campus shutdown to ensure researchers have remote access to on campus systems

#### **Bloch School of Management**

While our partnership with the School of Management has been in place for a couple years, we still meet with their IT Ops Committee on monthly basis. This allows IS to stay updated on the IT needs for Bloch and assist on new projects. Below are a couple of the projects IS has successfully completed over the last 6 months.

- Supported users moving to from on-campus to remote work during COVID-19 by preparing and deploying remote equipment to include loaner laptops, webcams, microphones/speakers, tablets, hotspots, document cameras, and monitors.
- Assisted with installation of Adobe products, Box, Jabber, Teams, RDP client, Respondus Lockdown Browser, VPN, MS O365 and Zoom on faculty/staff personal mobile devices and personal computers.
- Provided Zoom, Canvas, and Panopto training and troubleshooting with users.
- Worked with Bloch Faculty and Staff to identify, procure, and configure many software applications.
- Assisted with the technology requirements to support Bloch's Professional MBA program, which consists of multiple methods of teaching, both in person and online.
- Provided technical support for 26 events over the first half of the year, before COVID-19, including the Lead to Read KC fundraising event. This was a very large event, hosted at Bloch Executive Hall, with over 200 participants.
- Replaced Digital Signage Software Four Winds with RiseVision.
- Supported Zoom interviews for faculty and staff.

#### The School of Law

Support Services regularly meets with the Law School to ensure service needs are being met and to stay updated on current technology needs within the Law School. There were several key projects that IS and Law collaborated on, including:



- Worked with 12 Twenty to change the authentication process from email to Student User ID for Shibboleth. This ensures that if a student changes an alias email it will not break their ability to login.
- Supported multiple computer moves in the School of Law to allow for social distancing in the various office spaces.
- Started demolition of Classrooms 2 and 5. They were old and outdated stadium type seating. They are being transformed to ADA approved classrooms that can be rearranged from small group learning to a mid-sized classroom.
- Law School has a loaner pool of 4 laptops. All 4 have been loaned out due to COVID -19 needs.

• Move the Law School instance of EZ Proxy to the Miller Nichols server that is running EZ Proxy for them. By doing this the University did not need to purchase the upgrade for the Law School and we could shut down one of the Law School servers for cost savings.

#### School of Nursing and Health Sciences and School of Pharmacy



IS continues to work with both Nursing and Pharmacy to support their IT needs, including regular meetings with the IT Ops Committees at each school. As new projects come up this allows us to provide guidance and technical resources to ensure their goals are met. Below are some of the projects IS was involved in.

- Assisted Nursing faculty's use of WebNow off campus by including it in our RemoteLabs.
- Performed an audit of the SoNHS network share, reorganized and set new permissions as needed.
- Assisted in the CCNE (Commission on Collegiate Nursing Education) accreditation site visit.
- Assisted in the HLC accreditation site visit.
- Assisted in the MO State Board of Nursing site visit.
- Made multiple office moves due to COVID-19 concerns as well as some leadership changes that require office moves as well. They are splitting up Faculty that were sharing offices.
- Imaged and shipped multiple WRP computers to Brick City since they cannot be taken there and setup.
- Assisted SoP with updating student technology requirements to allow for Proctorio support.
- Provided On-site support during the COVID-19 campus lockdown, shifting users from working on campus to remote

#### Conservatory

- Supported users moving to from on-campus to remote work during COVID-19 by preparing equipment for home use and offering increased remote software support.
- Completed the work for updating the iMpact Center lab with new hardware and software.
- Assisted with office and computer moves in July and again in December.
- Grant Hall 105A was modified to support a hybrid class environment.

#### Toy and Miniature Museum

• Worked with Executives and Staff to identify, procure, and configure many software applications.

- Provided additional training to TMM faculty and staff on how to use Box, cloud storage, and remote connection applications.
- Changed digital signage software from Four Winds changed to RiseVision.

#### KCUR

IS continues to support KCUR and their growing staff. Over the last 6 months IS has helped onboard new staff and projects, and continued its support for pledge drives.

- Amplify2020.org domain name was purchased as part of the Election2020 Project. Assisted with contract to hire external designer to build and maintain website.
- 2<sup>nd</sup> Icecast server build to allow redundancy in KCUR web stream. Includes load balancing between the two servers to optimize performance for listeners.
- Added ATT cellular carrier redundancy to internet connection at remote transmitter as backup to Spectrum and T1 connections.
- Added audio stream of new classical station to KCUR streaming servers.

#### **Administrative Affairs & Student Affairs**

- Supported users moving to from on-campus to remote work during COVID-19 by preparing equipment for home use and offering increased remote software support.
- Helped UM system remotely train multiple Student Affairs units on Brainwave software.
- Upgraded hardware and software in the Administration Center's Focus Room.
- Worked with Executives and Staff to identify, procure, and configure many software applications.
- Supported multiple personnel moves for Enrollment Management, Admissions, Human Resources, and the Chancellor's office by moving technology to new locales within the Admin Center.
- Assisted with the removal of all equipment for American Public Square as they moved off campus.
- Worked with UMKC Central to troubleshoot Nice Video Viewer on Windows 10 workstations

#### Campus Wide - Enterprise Support

#### AirWatch

Leveraged our Mobile Device Management solution, AirWatch to manage numerous mobile devices across the campus. This tool is valuable for increasing efficiencies when managing mobile devices as well as protecting University data.





Mobile projects were light during this period due to COVID-19 and we took advantage by performing cleanup on all existing mobile devices to lower our overall total license count and thus overall spend.

#### SCCM

Continue to use Microsoft's SCCM as our primary asset management tool and our preferred method of software installation. Specifically, over the last 6 months we have used SCCM to install **24,676** pieces of software across campus. **1,081** of these were initiated via our Software Deployment webpage by IS technicians and IT liaisons. An updated distribution point was configured and purchased during this period.



#### **Universal Image**

Updated Windows 10 Universal Image to support current desktop and laptop standards. This also included updated software and security patches. Work has started to revamp this process with a more streamlined deployment method.

#### **License Servers**

Updated many individual license servers with updated daemons and/or license files. This is required to keep software, both for computer labs and researchers able to run the latest version of their software. Some of the services updated include Ansys, MSC Adams, Minitab, Sonnet, FME, FEKO, MathCAD, PSCad, COMSOL, and many more.

#### Website/Reports

Performed regular website updates and maintenance, including the creation of detailed FY21 budget reports containing workstation, computer labs, mobile devices, and software for every department on campus.



Performed website cleanup for all Support Services webpages during this period.

Updated Dell Warranty API to support Dell's v5 OAUTH authentication model.

#### Lab Packaging

Over the last 6 months considerable time was spent updating all the software applications used in the computer labs. Over 115 applications were updated, packaged with SCCM, and tested to ensure

compatibility. In addition, we moved all lab computers to UM-AD, which meant every package had to be tested in this new environment.

This ensured that Faculty and Students have the latest versions of software, both in classrooms and in computer labs. While this is a significant amount of work to complete it greatly reduces the amount of time to update such a large number of computers.

#### Software

#### **Adobe Creative Cloud**

During this period we ran into significant challenges with student's inability to access Adobe software from off campus. To overcome this, we worked closely with Adobe and enabled temporary student licenses to students from March 15<sup>th</sup> through the end of the summer semester.

We created online documentation, communicated with key campus stakeholders, and trained staff on these new options for students.

Negotiations also started to obtain student licenses on a more permanent basis to ensure students had continued access to these much-needed resources.

#### Software Updates

Planned, tested, and deployed several updates to all Windows campus computers to ensure software is up-to-date. This is done to both give our customers the latest products and tools but also to limit vulnerabilities as older software is often less secure.

This included campus-wide deployments and updates of many software packages needed to work remotely.

#### Software Procurement Process

Developed new procurement/approval processes within Jira which lead to reduced time to process new software requests and enabled additional communication channels for Faculty/Staff.

IS also added Microsoft EES software, including pro-rating the costs, to the online software order page.

#### Zoom Migration

IS completed the migration from WebEx to Zoom as our standard video conference tool. This included the deployment of Zoom to all campus computers and the removal of WebEx.







Continued website updates to reflect the changing security concerns with Zoom to ensure Faculty and Staff had the needed information to securely use Zoom.

#### **Student Computing Facilities**



We had **9,036** distinct individuals use computing sites between 1/1/20 and 6/30/20. This is a decrease of nearly 30% due to the campus closure in March. While a substantial decrease this still represents a very large percentage of our student base and exemplifies the usefulness and importance of these student computing facilities.

In addition to the physical computer sites, we had **1,325** distinct individuals who logged into RemoteLabs **11,614** 

times. This is a 22% increase over the last 6-month period and is attributed to the additional need to access software remotely during the campus closure.

The Lab Management Office maintained operations in five IS-managed general use student computer labs, six restricted access labs, and supplied one associated computer classroom. Specific accomplishments include:

- Expanded select lab hours during peak usage periods, including over midterms and finals, to give students greater access to computing resources when they needed them.
- Worked with CFM and other groups to ensure lab security and make sure that labs were accessible during regular hours and secured when not in use.
- Continued work moving internal training materials to Canvas.
- Provided multiple detailed reports on equipment and operation costs for general use labs.
- Conducted 5 new hire orientations to train new staff.
- Ensured that all Student Assistants completed Title IX and other required training.
- Processed over 2,425 shifts and supervised over 6,730 Student Assistant man-hours.
- Maintained sufficient student employees to staff labs by processing over 65 applications for Student Assistant positions, conducting 42 computer skills tests, interviewing 17 prospective new hires, and hiring 10 new Student Assistants for IS-managed labs.
- Completed reviews for 20 Student Assistants to keep employee performance at optimal levels.
- Staffed registration sessions during 13 new student orientations, including providing printing and guest account resources.
- Addressed need to shut down labs due to inclement weather.
- Created multiple reports on Miller Nichols Library extended hours.
- Assisted Miller Nichols Library staff on poster-printer project.
- Created new method for tracking budget impacts of lab hour changes.
- Prepared multiple reports on possible changes to lab operations to meet with budgetary constraints.

- Updated applications process.
- Updated Computer Skills tests.
- Worked with hiring committee to ensure enough Student Assistants could be hired to staff labs for Fall semester.
- Assisted SCE with EON AR/VR lab inquiries.
- Processed payroll related to FFCRA impacts.
- Increased frequency of lab cleaning procedures leading up to campus closure due to COVID-19.
- Set up social distancing in labs before campus closure due to COVID-19.
- Updated Web Print information to include expanded availability.
- Continually checked on availability of cleaning supplies for computer lab sites.
- Shut down labs due to COVID-19, including communicating with students and Student Assistant staff.
- Completed multiple reports on budget impacts of COVID-19.
- Set up remote work for eligible staff.
- Created Canvas training for onboarding new IS staff.
- Researched new Teams tool and prepared for implementation with Student Assistant staff.
- Assisted multiple groups managing computer lab sites to collaborate on best practices regarding COVID-19.
- Created lab-focused plan for repopulating campus with COVID-19 protocols in place.

## Lab Printing

Performed application upgrades on PaperCut across the student computer labs. This adds additional functionality to students and ensures we are up-to-date from a security perspective.



Supported student printing needs in computer labs with network printers and keeping supplies on hand and printers ready for use. Over 121,000 print jobs were printed in these sites, totaling over 890,000 pages.

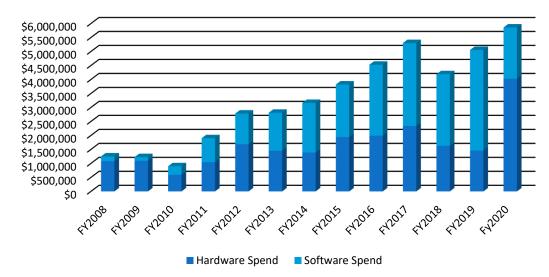
## **Totals and Trends in IT Procurement**

- Purchased roughly \$2,312,000 worth of IT hardware and software, including computers, tablets, printers, peripherals, specialty systems, software, web services, subscriptions, service warranties, and maintenance agreements
  - This represents a 19% decrease in total spend over the same period last year
  - This primary driver behind this was the shutdown imposed by the COVID-19 pandemic
    - The break in traditional business practice coupled with budget tightening and an uncertain forecast for the upcoming fiscal year had a chilling effect on spending
    - This was somewhat countered by an uptick in IT spending related to COVID-19 mitigation and response efforts aimed at preparation for remote work and learning scenarios in the period April through June

• Total spend on hardware was about \$776,000 and the software totaled almost \$1,540,000

#### Trends by Fiscal Year

- IS Procurement processed almost \$5,900,000 worth of IT purchases during the last fiscal year ending June 30, 2020
  - This is the highest spend per fiscal year in the last 20 years
  - This total represents an increase in spend of nearly 16% from the previous fiscal year



# IT Procurement Spend by Fiscal Year (2008-2020)

#### IT Procurement: Distribution by Vendors

- The distribution of IT Hardware spending over primary vendors continues to demonstrate support for standards at UMKC
  - Dell is the preferred computer provider for which UMKC has large-scale Volume Purchase Agreements and account for roughly 75% of the total IT hardware spend
  - IT Procurement had developed a strong relationship with MU Bookstore for the acquisition of Apple products saving departments money due to special rebates and reducing some administrative overhead in the process
    - This partnership was disrupted by two factors
      - Due to business-related changes within the Bookstore, these rebates were ended during this fiscal year

- In response to the COVID-19 pandemic, the Bookstore was closed for business for a few months and most employees were furloughed
- Most orders were processed directly with Apple at a net increase in cost and time
- The following table lists the Top 10 IT Hardware Vendors by total spend for the period and demonstrates the current mix of standard versus specialty vendors

IT Hardware Vendor	Spend
Dell	\$600,497.71
Connection	\$32,538.90
Apple	\$30,981.79
Depco	\$20,750.00
MU Bookstore	\$20,125.00
Scantron	\$19,692.00
Amazon	\$19,269.14
B&H Photo	\$11,377.93
<b>RF</b> Specialties	\$9 <i>,</i> 995.50
CDW	\$3,024.12

- The distribution of IT Software spending over primary vendors continues to demonstrate the diversity of the market with many more different types of vendors with significant expenditures
  - This six-month period introduced 69 new product titles to our software environment
  - The following table lists the Top 10 IT Software Vendors by total spend

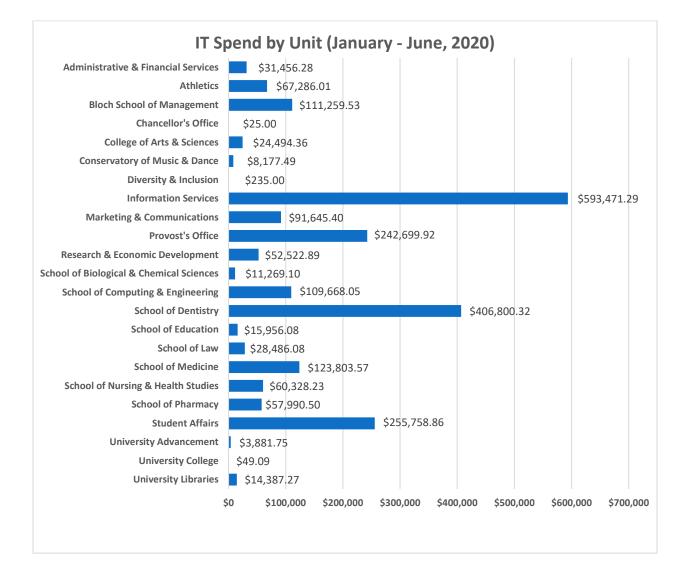
IT Software Vendor	Spend
Oracle	\$247,050.00
Academic Analytics	\$75,500.00
Examsoft	\$67,247.75
New Innovations	\$54,131.00
SLATE	\$50,000.00
Blackboard	\$47,250.00
Blackbaud	\$45,090.00
University of Texas - SA	\$35,000.00
Ruffalo Noel Levitz	\$34,500.00
Bloomberg	\$34,389.66

- Managing the dramatic growth of IT Software spending is a difficult challenge
  - In response to the diversity and increasingly complex nature of software acquisition, IT Procurement has implemented JIRA to track all facets of software requests
  - Continued to improve and expand the Software Database to include the following records
    - Vendors 826, an increase of 7.1%

- Product Titles 1540, an increase of 4.7%
- Licenses 14,775, an increase of 13.0%

#### IT Procurement: Distribution by Unit

- IT spending by division and academic unit provides a glimpse into the scope of the value IT equipment offers these units and the investment committed to lifecycle replacement and sustainability
- These totals represent unit spending on hardware and software acquisition throughout the period, including UMKC's contribution toward campus and multi-campus agreements for hardware infrastructure and software site licenses



#### **Other Notable Activities**

- Provided IT hardware and software product selection and configuration consultation in response to a myriad of different request scenarios in accordance with UMKC and UM standards, contracts, and approved processes
- Worked with vendors to create customized price quotes for multiple products and configurations
- Reviewed and provided IT approval for eProcurement orders input by other departments
- Worked with UM Supply Chain and fiscal officers to ensure IT and Procurement approval policies are followed, resolve budget errors and direct expense transfers as necessary
- Reconciled OneCard orders providing written IT and fiscal approval statements from authorized personnel, invoice/receipt documentation, MOCode and PeopleSoft account code assignments for all transactions
- Served as primary point of contact for cellular service and mobile device consultation and acquisition for all UMKC corporate accounts and lines of service
- Communicated with IT and client constituents to provide information on software product updates, license expirations, device models, configurations, and pricing for a range of UMKC standards on numerous site-licensed pieces of software, computers, tablets, printers and other IT-related items

# **Technology Management Services**

# TMS Administrative

- Developed 90 & 180 Base Operations Plans to meet unique needs/challenges of COVID and the shift to telework
- Successfully transitioned to 100% Telework for all of TMS with no impact to base services offered
  - New equipment procured to support staff working remotely (laptops, web cameras, etc.)
- Modified campus IT shipping and receiving processes to accommodate skeleton crew on campus
- Developed a plan for continued TMS operations with reduced staff and anticipated FY21 COVID related budget cuts
  - The plan included shifting roles and responsibilities around where possible, mandatory campus pay cuts, TMS FTE reductions
- Repopulated campus in a phased approach with a limited staff to support Summer classes, Fall class prep, and projects during COVID
- Tracked all COVID related purchases and costs and submitted to Admin and Finance for reimbursement

## Summer Classes Preparation

- Partnered with Faculty Affairs, Registrar's office, and CFM to identify classroom spaces for fall, and which non-classrooms spaces need to be renovated to support classes.
  - Designed technology updates for all rooms to be used, ordered and installed equipment before Summer classes
    - Used FY20 M & R budget to procure needed equipment.
  - Updated technology and prepared spaces for mixed modality delivery.

## Academic Enhancement – COVID Related

- Ramped up free Academic Enhancement services for Faculty (to support the explosive growth in the need for academic content/videos for faculty to effectively teach from home) and marketing. Examples include:
  - Bloch Idea Bar Marketing, Salon, and Leadership Today Events
  - Conservatory Living Room Performances Donor event production
  - Continuing Education Hamilton Cockefair Lecture Event (Virtual)
  - Education SOE Dean Farewell Event Production (Virtual)
  - Arts and Sciences Ripping Services provided DVD ripping for non-copyrighted content to be used online
  - $\circ$   $\;$  Provost's Office Video production for a virtual orientation
- Partnered with campus leadership, special events, and Show Me Productions to shoot and produce a 100% virtual Spring Commencement for the campus The overall production effort was led by senior TMS leadership
  - $\circ$   $\,$  Over 200 hours of logistics, content creation, and editing were provided

#### Campus COVID Planning Team

 Represented IT and related support, logistics, and involvement on the Campus COVID Planning Team efforts

- Provided Expert IT project management services to coordinate and manage efforts of the Campus COVID Planning Team
- Partnered with the UM Logistics team and UMKC CFM to identify, order, and distribute COVID cleaning & face-covering supplies for all of IT
- Developed, deployed, and managed the Campus Repopulation Survey for all UMKC Faculty and Staff
- Updated campus phone greetings in support of the changing levels of campus population and service availability
- Developed and deployed a Campus COVID Hotline (816-235-COVI) in preparation for campus repopulation
- Evaluated various COVID symptom tracking apps for possible Campus adoption

# IS Projects Update – Jan-June 2020

As a division, we have worked with several academic and business units to renovate, design, install, and provide ongoing support for multi-faceted information technology (IT) and audiovisual (AV) systems. The following sections discuss the key IT/AV projects, by phase, that consumed a significant amount of IS resources' time during this last review period (January - June 2020).

# **Completed Projects**



IS completed (4) IT/AV projects. The following projects were the most significant and timeconsuming. See Appendix "A" for individual project detail.

#### • P248 – Lenel to CBORD Transition

This project replaced the existing Lenel Card Assess system in 11 buildings with CBord Card Access. Buildings include 4747 Troost, Cherry Street Garage – Mail Room, Cherry Street Garage – Police, School of Education, Flarsheim Hall, General Services Building, Hospital Hill Annex, Administrative Center, Building #71, Cherry Street Hall, and Health Science Building. During this review period, we scheduled and completed all conversions for those departments that opted-in. We worked closely with the vendor, CBORD, and the UMKC PD to design and purchase a new camera for their interrogation room. We decommissioned and powered down the final server to complete the project.

#### • P362 – IS Work Order Form

This project created a service request tool for Networking and Telecom in Cherwell to replace the previous MACS tool which was running on unsupported code. During this review period, we completed developing Cherwell specifics, tested and trained on the new tool, as well as exporting all previous data from the former tool, MACS, and decommissioned the MACS and PHP servers.

#### • P364 – Durwood AP Installation

Chancellor Agrawal requested that the wireless connectivity be improved at Durwood Soccer Stadium. This project assessed the environment to determine the best wireless solution and then implemented that solution. During this review period, IT installed conduit and mounting hardware at Durwood Stadium to accommodate networking gear, and Wi-Fi access points were installed at key locations throughout the area to complete the project.

#### • P378 – AIMS Parking Cloud

To mitigate PCI compliance issues, UM System recommended UMKC Parking consider moving their on premise AIMS Parking software to the AIMS Parking Cloud-hosted version. As a result, this project tracked IT items as they related to the successful completion of this project, including procurement, SSO integration, database export, DNS changes, and hardware and software configurations. During this review period, the software was installed and configured, mobile devices were deployed, and the project was completed.

# **Current Projects – Implementation Phase**



IS progressed in implementing (22) IT/AV projects during this review period. The following projects were the most significant and time-consuming. *See Appendix "A" for individual project detail.* 

#### • P174 – SCE Educational and Research Center

This is a project to build a new multi-story building in addition to our existing Computer Science & Engineering building, Flarsheim Hall. The IT/AV scope includes building-wide network infrastructure, IT closets, a VR showroom and computer lab, a high-performance computing teaching data center and computer lab, a motion capture lab, and unmanned systems lab, and renewable energy lab, and several smart classrooms and collaboration spaces, building-wide digital signage, and a new CBORD access and surveillance system along with the conversion of existing Lenel systems to CBORD in Flarsheim Hall before construction. During this review period, we finalized the IS budget for AV equipment and labor, coordinated with distribution vendors for equipment prices, and submitted POs for all equipment. During the next review period, IS expects to complete the equipment install and complete the project.

#### • P273 – AD/365/GSuite

This project, originally only tracking activities related to Office 365 implementation, was expanded to include the project to track Active Directory (P305 was closed and merged into this one) and GSuite activities. During this review period, we decommissioned Skype in favor of Microsoft Teams; changed student logins for email to use @umsystem.edu; launched Microsoft 365 as a service to all students, faculty, and staff; and enabled Multi-Factor Authentication (MFA) for faculty and staff accounts. We also began planning for a launch of GSuite to the campus community.

#### • P346 – AC Data Center Cooling System

This project is to alleviate temperature control issues in the Administrative Center data center on the UMKC campus. The scope of this project includes developing and implementing both long- and short-term solutions for cooling the data center. Additional scope was added this review period to include networking work to connect a new room to the existing data center and to plan and track server moves from one data center space to another. During this review period, we developed a plan to implement a permanent cooling solution. After reviewing several options, we decided to implement a SmartRow cooling system in a space separate from the existing data center. The equipment was ordered, and construction work to accommodate the new equipment began in the new data center space.

#### • P381 – Digital Signage Solution

In an effort to reduce cost to the budget due the Covid-19, this project is to identify and implement a permanent solution to replace the current Four Winds Signage Software that the UMKC campus is using. During this review period, we weighed the pros and cons of the 5 potential replacement products that were identified, made a final decision on new signage software (Rise Soft), communicated with end users of the upcoming change to signage systems, created a new costing model for the replacement solution, provided a narrative on "Getting started" to use the new solution and began imaging and updating display content on the 23 existing signage locations. During the next review period, we will complete the imaging of machines and content updates to the remaining signage locations to complete the project.

#### • P385 – UMKC Forward

In response to the budget challenges posed by the Coronavirus pandemic, UMKC Chancellor Agrawal asked the UMKC community to think about how to best address these challenges going forward: "In this time of crisis, UMKC has an opportunity to fundamentally reimagine its mission as a public research university serving Greater Kansas City and beyond." A PM was requested to support this initiative by providing organizational guidance, technology support, meeting scheduling and attendance, meeting minutes, tracking action items, and other PM functions. During this period, we created a robust Teams space for documents and discussion for each subcommittee in Teams A and B, provided technical support for the Teams space and Zoom, and attended and took minutes for several meetings.

#### **Current Projects – Development Phase**



IS has made good progress working with units to plan (10) IT/AV projects during this review period. The following projects were the most significate and time-consuming. *See Appendix "A" for individual project detail*.

#### • P366 – 4825 Troost Security Enhancements

As a follow-up to the security work performed at 4747 Troost, a project was set up to perform similar enhancements to the 4825 Troost building that would restrict building access to only those with legitimate business at the facility. During this review period, IT prepared hardware and labor quotes for the necessary equipment and work and shared the estimates with CFM.

#### • P370 – NextGen Data Analytics

A grant proposal was submitted to implement a "Hyperconverged Infrastructure with GPU Acceleration for Establishing the Kansas City Data Science Hub." Per the grant, "this project will support a "community-scale" research computing approach that will advance system wide research and education collaborations and seamlessly integrate local and remote resources, directly supporting the NextGen Precision Health Initiative in addition to many other research collaborations across the UM System." A project manager was assigned to track UMKC's IT portion of this project. During this review period, there was little movement on this project. Budget constraints related to Coronavirus have placed the future of this project in jeopardy.

#### • P373 – CBORD/Mobile Pay Upgrades

This project is to work with various UMKC units to determine card reader inventory, work with vendor to determine the cost to replace all mag stripe card readers across campus with proximity cards/Mobile ID, and plan/coordinate a phased migration. During this review period, IS and the UMKC Building Security Committee worked with the OneCard Office and the vendor to get a final quote for conversion. We compiled total costs and sent our recommendation to senior leadership to request funding.

#### • P375 – Panic Buttons Conversion

This project involves compiling inventory all existing panic buttons on campus, verify they are still needed, and develop a campus-wide cost to convert them from non-standard systems to the CBORD Platform. During this review period, we completed the inventory process and compiled costs to convert all needed panic buttons. The UMKC Building Security Committee send our recommendation to senior leadership to request funding.

#### • P384 – ICN Network Upgrade

## **UMKC Building Security Committee**



The UMKC Building Security Committee is comprised of representatives from IT, Student Affairs, Police and CFM focused on developing campus security standards, ensuring campus-wide involvement on security issues/requests, and developing recommendations to UMKC senior leadership on the same. See the following projects/initiatives for this

period.

#### Lenel to CBORD Transition

• Scope: Replace existing Lenel Card Access, Alarms, and Surveillance Systems with CBORD System and decommission Lenel System. Lenel systems are end of life and run on outdated software which has to be upgraded by Jan 2020. Most new buildings have been brought online with the new CBORD security system and it doesn't make sense to invest in Lenel going forward. The goal is to migrate the 10+ existing Lenel buildings over to CBORD and decommission the Lenel system on Sept of 19

- Summary of Accomplishments: Conversions and all outstanding migration issues resolved and all servers decommissioned.
- Completion: April 2020

#### Qognify/VisionHub Upgrade

- Scope: Determine the cost for Qognify to move UMKC's cameras (422 as of 11/14/19), including a phased-approach recommendation, migration, and training to migrate to the latest version (from Qognify to VisionHub). Additionally, convert all remaining cameras to this system, including the dorms, Animal Lab, and Bookstore.
- Summary of Accomplishments: IS completed several site visits, totaled all costs to upgrade the UMKC campus to Qognify/Vision Hub to meet the storage needs of our campus, and sent our recommendation to senior leadership to request funding.
- Completion: Unknown waiting on funding approval.

#### CBORD/Mobile Pay Upgrades

- Scope: Work with various UMKC units to determine card reader inventory, work with vendor to determine the cost to replace all mag stripe card readers across campus with proximity cards/Mobile ID and plan/coordinate a phased migration.
- Summary of Accomplishments: IS and the UMKC Building Security Committee worked with the OneCard Office and the vendor to get a final quote for conversion. We compiled total costs and sent our recommendation to senior leadership to request funding.
- Completion: Unknown waiting on funding approval.

#### Panic Buttons Conversion

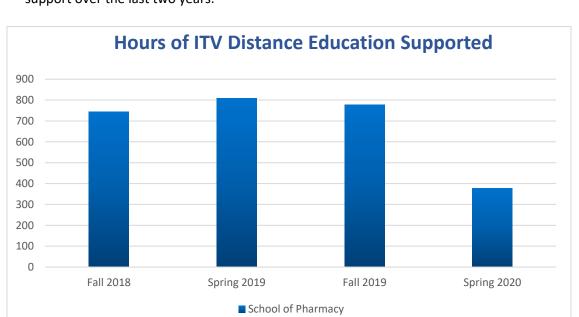
- Scope: Compile inventory of all existing panic buttons on campus, verify they are still needed, and develop a campus-wide cost to convert them from non-standard systems to the CBORD Platform.
- Summary of Accomplishments: IS, CFM, and the OneCard Office completed the inventory process and compiled costs to convert all needed panic buttons. The UMKC Building Security Committee send our recommendation to senior leadership to request funding.
- Completion: Unknown waiting on funding approval.

# ILE Classrooms, Conferencing, Distance Ed, and On-Demand Video



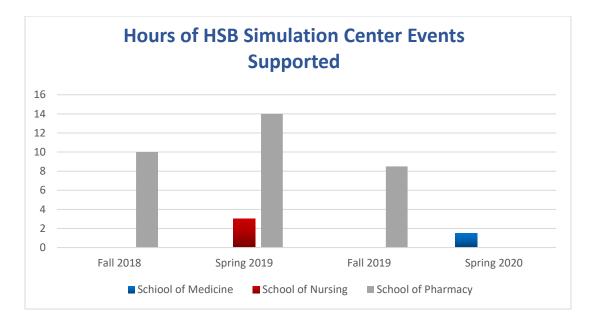
Information Services continued to support the hardware and software necessary to facilitate classes onsite as well as online (synchronously and asynchronously) while maintaining efficient issue resolution times, minimizing downtime, and the subsequent impact on students, faculty, and staff. Highlights are outlined below.

- TMS successfully supported and maintained well over 350 ILE/AV systems. These systems
  include classrooms, conference rooms, performance spaces, collaboration spaces, teaching labs,
  and signage systems.
- 8,192 new streaming media entries (videos, images, and audio clips), were added to Kaltura by faculty and/or students.



 378 hours of ITV distance learning was supported during this review period. Campus closed and classes moved to an online format on March 13<sup>th</sup> due to Covid-19. The chart below tracks support over the last two years.

• During this review period, TMS provided support for 1.5 hours of recorded HSB Simulation Center events. Support hours for these events were also influenced by the shelter-in-place efforts to contain Covid 19. The chart below tracks support since the Assessment Lab over the past two years.



# **Building Network Infrastructure**



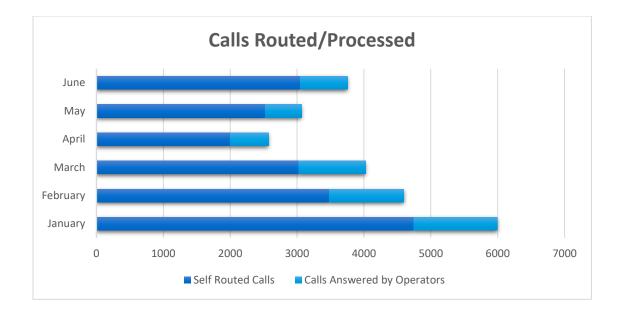
IS continued to support phone and data related add, move and change requests, a large number of buried cable marking requests, and support tickets. The highlights are summarized below.

- Infrastructure Services staff attended over fiber optics training.
- Infrastructure Services staff attended over 40 hours of BICSI training.
- All Technology and Infrastructure Services staff completed OSHA 10 training.
- Completed >200 adds, moves and changes in voice jacks, data jacks, and phones.
- Marked University buried cable plant locations as required by Missouri Law for One Call services 298 times.

# **UMKC Operators**



The UMKC Operator number (ext. 1000) handled 24,020 phone calls during this review period. Of those ~24K calls, users were able to self-route approximately 72% of the calls using our automated call routing tree. 28% of the calls required human interaction from campus operators



# **Academic Enhancement**



The UMKC Academic Enhancement Department provided video production and streaming services for (19) different academic and administrative projects during this reporting period ranging from individual course materials to producing Spring Commencement, Virtual Orientation and many other UMKC pieces.

#### ADMISSIONS/SPECIAL EVENTS

Roo Services Orientation video

#### ARTS AND SCIENCES

• DVD Ripping Services

#### **BLOCH SCHOOL**

- EMBA Speaker Series
- First Wednesdays
- Idea Bar
- Salon
- Leadership Today
- Real Estate Professionals Symposium
- EOY
- KC Scholars

#### CHANCELLOR'S OFFICE

- Spring Commencement
- CONSERVATORY
  - Living Room Performances

# CONTINUING EDUCATION

- Hamilton Cockefair Lecture Event
  DENTAL
  - Demonstration Videos

# SCHOOL OF EDUCATION

• SOE Dean Farewell

FACET

• Bandwidth Recovery

NURSING

• SBIRT

ONLINE

Chancellor Intro

**PROVOST'S OFFICE** 

• Virtual Orientation

# Academic Support

# Bloch School of Management

Information Services provides IT support and specialized services for the Bloch School of Management. Below is an overview of the services provided to Bloch over the last 6 months.

- Information Services worked closely with Bloch and CFM on preparations for a reduced classroom capacity fall semester. This included:
  - Procurement and installation of a laser projector to be installed in BEH 330, with 330's existing projector earmarked for use as a replacement.
  - Installation of countrymen microphones in all BEH classrooms.
  - Procurement and replacement of microphone kits for BEH (600MHZ 5G conflict)
  - Procurement of a replacement projector for BEH 218.
  - Combining 330 and 331 into one large room to accommodate capacity needs.
  - Calibration of all audio systems to allow for Zoom use in the classroom.
  - Installation of power and laptop connections at every student table location in Bloch's ALCs.
  - Temporary Roo-Flex installations in BEH 324 and 414.
- Information Services worked closely with Bloch and UMKC Online on the transition to all online education in the spring as well as the PMBA program.
  - IS provided both on premise and remote support for Bloch instructors facilitating synchronous and asynchronous online sessions in dedicated classroom spaces, Faculty offices and remotely.
  - IS provided individual training sessions for faculty and staff to ensure comfort with the tools associated with synchronous and asynchronous online education.
  - IS continued to maintain two "ZOOM" rooms with equipment and software to facilitate synchronous online sessions and asynchronous recordings.
- Providing technical support for special events, conferences, career fairs, etc. Was a primary function of full-time dedicated Bloch IS and student staff during the time period.
  - Bloch Executive Hall hosted >50 events from January to July.
- Information Services continues to facilitate a projector lamp cost reduction plan on behalf of Bloch.

- 100% of lamp assemblies in Executive Hall classrooms are replaced with rebuilt assemblies upon failure.
  - OEM raw lamps were ordered, and failed lamp assemblies are rebuilt.
    - Rebuilt assemblies are currently yielding longer lamp lives than OEM assemblies.
- Lamp cost has been reduced by \$700 per replaced pair, per projector.
- Information Services worked closely with Bloch and related groups for all of Bloch's signage displays.
  - IS dedicated >40 hours of labor to these efforts from January to July.
  - IS managed all components of a platform shift from Four Winds Interactive to Rise Display, including hardware/software design, deployment, and maintenance.
- Information Services was responsible for the following:
  - Daily preventive maintenance checks in all Bloch classroom spaces prior to the start of morning classes (daily) to minimize disruptions.
  - Scheduling of Technicians in both buildings based on the class schedule, ensuring Client support expectations were met.
  - Weekend and evening class/event support as needed.

# School of Nursing and Health Sciences (SoNHS)

IS continues to work with Nursing to support their IT needs, including regular meetings with the IT Ops Committee. As new projects come up, this allows us to provide guidance and technical resources to ensure their goals are met. Below are some of the projects IS was involved in.



- IS met with SoNHS administration to review services portfolio and consider adjustments for the following FY.
- IS assisted evaluation of systems to replace Laerdal SimView and AV in the Assessment Lab space shared by SoM and SoP.
- IS helped represent the Collaborative and UMKC from a technical resource standpoint in pursuit of a grant for an HIV prevention program.
- IS provided technical support to the Collaborative and SoNHS faculty in the Project Echo "hub" collaborative space, both in issue resolution and 1-on-1 coaching capacities
- IS continued assisting faculty with new distance teaching tool (Zoom). Liaised with IA when appropriate.
- IS has provided daily room checks and as-needed technical assistance via ITSM, phone and direct reports in ILE spaces.
- IS provided on call technical support for the 4th Floor "Dispensing & Simulation Lab", a non-ILE standard space, including first-tier troubleshooting, network support and liaison with vendor support when required.
- IS assisted with the distribution of batteries for wireless microphones and input devices, as well as dry erase supplies.
- IS assisted with reporting facilities issues within the building.

# School of Pharmacy

IS continues to work with Pharmacy to support their IT needs, including regular meetings with the IT Ops Committee. As new projects come up, this allows us to provide guidance and technical resources to ensure their goals are met. Below are some of the projects IS was involved in.

- IS installed sophisticated new overhead microphone systems as part of Proj 318, to redesign and enhance video distance learning classrooms
- IS met with SoP administration to review services portfolio and consider adjustments for the following FY.
- IS supported connections between Zoom and standards-based room video conferencing systems.
- IS began an online wiki project for both faculty and staff on the operation of programspecific classroom hardware.
- IS liaised with UMKC Online to provide support to faculty on issues with online teaching tools.
- IS has provided daily room checks and as-needed technical assistance via ITSM, phone and direct reports in ILE spaces.
- IS assisted with the distribution of batteries for wireless microphones and input devices, as well as dry erase supplies.
- IS assisted with reporting facilities issues within the building.
- IS provided operational and immediate-response technical support for the School of Pharmacy's video distance learning program in HSB classrooms
- IS coordinated technical support of the SoP's video distance learning program with teams at the MU and MSU locations.

# **Network Architecture**

# Security

Network Architecture is responsible for the installation and maintenance of departmental level firewalls. These firewalls protect specialized hardware or data (HIPPA, PCI, etc.) in specific locations across on the UMKC network. Activities include maintaining appliance firmware and security rules.

- Equipment managed
  - Cisco physical firewalls = 16
  - Cisco virtual firewalls = 16
  - Fortigate physical firewalls = 12

# Wired Network

Network Architecture is responsible for installation and maintenance of UMKC's wired network switches & routers and their physical connections to our remote offices, Internet service providers, & research networks.

- Equipment managed
  - o Routers
    - Internet Edge routers = 2
    - Core Network routers = 2
  - o Switches
    - Building Network switches = 402
    - Data Center switches = 12

# Highlights and key initiatives

- Replaced Internet edge router with Cisco ASR router to increase performance
- Added a 2<sup>nd</sup> Cisco ASR router to Internet edge for increased network resiliency
- Removed network equipment from Oak Place Apartments to prepare for demolition
- Developed co-location options for SCE high performance server computing cluster

# Wireless Network

Network Architecture is responsible for the installation and maintenance of UMKC's wireless networks. These networks include the UMKCWPA, EDUroam, UMKC Media in the residence halls and a few other specialized networks for Internet of Things (IOT) devices.

- Equipment managed
  - Wireless Controllers = 2
  - Access Points = 1316

# Highlights and key initiatives

 Upgraded the software on the wireless controllers and 1300+ access points to improve performance

# Servers

Network Architecture operates physical and virtual servers to host the applications used to provide network, voice and monitoring services. These servers run both Linux and Windows operating systems and are hosted on equipment maintained by Network Architecture as well as equipment maintained by IS: Foundation Services.

- Equipment managed
  - Cisco UCS blade servers = 4
  - Cisco UCS rack mount servers = 1
  - VMware ESXi Virtual Servers
    - Voice VMs = 15
    - Infrastructure VMs = 14

# Highlights and key initiatives

- Migrated older Windows server operating systems to Windows Server 2019
- Upgraded Intermapper monitoring server to latest version
- Upgraded Cisco Data Center Network Manager software to latest release

# Voice

Network Architecture is responsible for installation and maintenance of UMKC's voice network. This includes the servers, routers, and gateways and their physical connections to the public telephone & long distance service providers.

- Equipment managed
  - Voice routers = 2
  - Analog voice gateways = 6
  - Voice Applications
    - Cisco Unified Communications Manager = 2
      - Physical phones = 2680
      - Analog lines = 596
      - Cisco Unity Connection Voicemail = 2
        - Voicemail boxes = 2242
        - Call handlers = 233
    - Cisco Unified Contact Center = 2
      - Queues = 12
      - Agents = 75
    - Cisco Unified IM & Presence = 2
      - Jabber Softphones = 1702

Verba call recording = 1

# Highlights and key initiatives

- Upgraded Cisco Unity Connection voicemail servers to version 12.5.1
- Upgraded software on Voice routers
- Installed Cisco Expressway voice gateways to improve softphone and off-campus voice services
- Configured Cisco Unity server to support voicemail integration with Office365 mailboxes
- Upgraded Cisco Unified Contact Center servers to version 12.0.1
- Upgraded Cisco Unified IM & Presence servers to version 12.5

# **Registrar Services**

Network Architecture is responsible maintaining UMKC's consolidated domain name registration service. This includes registering and renewing .com, .org. net, etc. domain names, SSL certificates & DNS records and other services for these domains.

• Domains managed = 145

# Highlights and key initiatives

- 46 domain names registered or renewed for 12 departments
- Total registration duration = 118 years

# **Information Access**

Database Server Design, Implementation & Administration:

- Administration and support of all central campus Oracle servers
  - Oracle Enterprise Manager Cloud Control monitoring text and email alert notifications for server outages to DBA staff.
- Administration and support of all central campus MySQL servers
  - Completed implementation of MySQL monitoring tool using Oracle Enterprise Manager Cloud Control on all MySQL servers allowing for more timely and robust outage notifications of out critical campus servers
- Administration and support of all central campus MS SQL servers
  - Migrated several applications from Oracle to SQL Server
  - Administration and support of all central campus FileMaker serve
    - Continual support and maintenance of the Office of Research Services lab application
    - Implementation of School of Pharmacy, Drug Information database

Administration and support of the central campus secured external facing Oracle server for third party vendor data collaboration

Continual support for third party vendor, Civitas to enable required access to campus resources

UMKC Center for Economic Insight (CEI) Health Care Foundation Grant

Worked with several departments in IS and CEI to start implementation on the third phase (Year 3) goals establishing the front end and loading data into the new data warehouse.

Loaded hundreds of data sets into the data warehouse for this initiative.

Administration and support of all CHI/HealthFacts and RedCap database servers

Continual performance tweaks and SQL query tuning tasks for the HealthFacts research database

Administration and support of all School of Dentistry Axium and auxiliary database servers. Worked with dental researchers on developing PowerBI Reports

- Administration and support of all UMKC Data Warehouse Oracle servers
   Continual work with Data Warehouse staff on enhancements to DW data availability and reliability
- Administration and support of all UMKC OneCard Office's CBORD Gold Application Oracle server instances
- Administration and support of all UMKC Police Department database server instances
- Administration and support of the UMKC Center for Economic Insights database server instance which is the backend for their CityScope/MetroScope application
- Administration and support of the UMKC Counseling, Health, Testing & Disability Services SQL Server
- Administration and support of the School of Computing and Engineering MySQL Server Created student MySQL user accounts for Spring semester SCE classes

# Software Design and Development

Maintenance & Support was provided for the following software applications & websites during this period:

- 1. Canvas Gradebook Export
- 2. Exam Scheduler
- 3. Kasey-Kudos
- 4. UMKC Lookup
- 5. Bloch Appointment Scheduler
- 6. TerraDotta Billing Administration
- 7. IAP Terms of Use
- 8. IS LabTime
- 9. UMKC Box Provisioning
- 10. Commencement CMS
- 11. Commencement RSVP
- 12. MACS/IS Work Orders
- 13. Bloch Regnier Hatchery
- 14. Writing Studio Appointment Request Form
- 15. IS Change Management & Outages
- 16. Diversity Event Registration
- 17. UR-Links
- 18. ALEKS Exam Site
- 19. Bloch Event Request
- 20. Cashiers Service Request
- 21. Civics Exam Data Feed into UMDW Multi-Campus Feed
- 22. dbTracker
- 23. DL Metadata
- 24. Exit Exams
- 25. Foundation Service Request
- 26. HLC Directory
- 27. IA Schedule
- 28. IS Retiree Email
- 29. IS Service Orders
- 30. LMS Access Checker (LACH)
- 31. Property Registration
- 32. QR Scanner Kiosk
- 33. RooRequest
- 34. Scantron Orders
- 35. SEARCH & SUROP
- 36. Special Accounts
- 37. Studio Logs
- 38. Business Travel Request
- 39. Zabbix
- 40. UMKC QR
- 41. Canvas Data Feed
- 42. Starfish Data Feed

- 43. Digital ID Feed to CBORD & AWS
- 44. Civitas Illume PS Views
- 45. CourseLeaf Catalog Data Feed
- 46. ALEKS Data Feed
- 47. TerraDotta Data Feed
- 48. TerraDotta Billing Feed
- 49. RooWriter Score Feed
- 50. RooWriter Billing Feed
- 51. RooEval
- 52. RooWriter
- 53. Canvas Request System
- 54. eLearning Tracker
- 55. Faculty Credentialing Database
- 56. IS Shift Tracking System
- 57. UMKC Attendance
- 58. UM System IT Inventory Database
- 59. CBORD data feed for Library and Swinney Rec Center
- 60. Grade Pass Back Tool Data Feed
- 61. Chatbot Q&A Administration and Reporting
- 62. RadioGoldin

# UM System IT Consolidation:

- An Information Access representative serves on the Applications & Development committee.
- Provided campus representation on the following working groups:
  - UMS IT Custom Applications working group

# Software Administration

- WordPress management, setup and administration
- Trumba Calendar management, setup and administration and migration to LiveWhale
- CVENT eCommerce Event management and migration to TouchNet
- Weekly termination reports processing

# Scanning Services

Generated several detailed reports for departments based on their evaluation scan data.

Note: the last exam for this semester was scanned on March 18 due to shut-down of campus. These numbers reflect a fairly normal number of exam scanned through the first/second midterm of a spring semester. No further exams were scanned for Spring Semester 2020 and none for Summer Semester 2020 due to COIVD-19 policies in place at the time.

# Exams Scanned

College of Arts and Sciences - 54 Henry W. Bloch School of Management - 21 Conservatory of Music and Dance - 1 School of Law - 3 School of Biological and Chemical Sciences – 41

**Total Exams Scanned: 120** 

# Security

Completion of enabling multi-factor email logons for all Students, Alumni, Faculty, and Staff. Previously, we had multiple compromises per week due to users re-using a password both inside and outside the University. Once this change was in, we have seen less than one compromise per week at UMKC due to credential reuse.

Completion of consolidation of all users to a single mailbox. This is a major change in preparation to migrating all mailboxes to the same consolidated system. This simplifies email access for people who are both students and have a faculty/staff role as there is now only a single mailbox to check. This also simplifies people who change campuses, their mailbox no longer moves, and no longer needs to have the logon address changed with a campus change.

A project has been started to migrate logon pages to use AzureAD with MFA for logon. This will eventually replace SecureAuth. This will allow all web sites that we integrate with use MFA, and will reduce the excessive costs on the older SecureAuth product we had in place.

A new VPN firewall has been installed, and initial testing started with campus IT staff. This will better enable the types of VPN users we can handle, such as phone and tablet VPN users, and provide a single VPN method that works for both Windows and Mac users.

Initial groundwork has completed to support AWS virtual machines with a campus firewall managed in AWS.

# **Foundation Services**

IS Foundation Services (ISFS) provides secure, professionally managed data centers to meet the growing information technology (IT) needs of academic and administrative units at UMKC. ISFS serves as the primary system administrators for 400+ servers, providing assistance and technical support for campus IT Liaisons, as well as supporting research computing needs.

# Server Virtualization

- Provisioned approximately 14 new virtual servers
- Preparation/plan/design of new SmartRow data center
- Added additional temperature sensors in Administrative Center data center for better coverage and notifications

# Storage/SAN/Backup

• Deployed new CommVault Media agent in our backup environment allowing for quicker browsing/restoring of files

# Cloud

- Developed UMKC Cloud Computing Strategy document
- Deployed VPN tunnel and Shared VPC in Google Cloud for cloud-to-campus resource access
- Deployment of GCP cloud and storage resources for Dr. Cox's genomics research lab
- Deployment of cloud computing and storage resources in GCP for IS Information Access database testing

# Miscellaneous

- Remedied and closed 511+ support tickets. Ticket completion times continue to be held low, and customer surveys results show very high satisfaction
- Multiple application upgrades
  - L-Soft Listserv
  - o REDCap
  - o Omeka-S
  - o PHP
  - o Cadence

- o Synopsys
- o Redcap
- o Bitbucket
- Confluence
- o JIRA
- Shibbolized multiple websites and new services allowing single sign-on
- Migrated NewLetters.org to UMKC hosting
- Enhanced SLEDS (Simple Linux Enterprise Deployment System) allowing it to pull from a new locally hosted Linux repository saving significant time during new OS deployments and patching
- SCE Tux Cluster
  - Developed CentOS 7 node image for Tux
  - Developed Synopsys Q-2020.03 upgrade for Tux
- Created prototype Linux Python web server and Visual Studio development environment for the IS Information Access team
- Deployed redundant IceCast streaming server setup for KCUR allowing for a more reliable streaming experience for listeners
- Updated all Ubuntu web servers to use TLSv1.3 for enhanced security
- Setup GitLab server for IS Information Access team
- Isolated ColdFusion to a single set of servers in preparation for decommissioning in January 2021
- Installed new programming frameworks on CHI Insights platform: Anaconda Python, Strawberry Perl, Java JDK
- Deployment of RStudio Server and JupyterHub/JupyterLabs web apps on Sirius research server
- Deployed new SUMA web application for the Library
- Continued cleanup of Active Directory legacy domain for UMAD migration

# Appendix A

# Individual Project Updates - Completed Projects

## P248 – Lenel to CBORD Transition

This project replaced the existing Lenel Card Assess system in 11 buildings with CBord Card Access. Buildings include 4747 Troost, Cherry Street Garage – Mail Room, Cherry Street Garage – Police, School of Education, Flarsheim Hall, General Services Building, Hospital Hill Annex, Administrative Center, Building #71, Cherry Street Hall, and Health Science Building. During this review period, we scheduled and completed all conversions for those department that opted-in. We worked closely with the vendor, CBORD, and the UMKC PD to design and purchase a new camera for their interrogation room. We decommissioned and powered down the final server to complete the project.

### P362 – IS Work Order Form

This project created a service request tool for Networking and Telecom in Cherwell to replace the previous MACS tool which was running on unsupported code. During this review period, we completed developing Cherwell specifics, tested and trained on the new tool, as well as exporting all previous data from the former tool, MACS, and decommissioned the MACS and PHP servers.

## P364 – Durwood AP Installation

Chancellor Agrawal requested that the wireless connectivity be improved at Durwood Soccer Stadium. This project assessed the environment to determine the best wireless solution and then implemented that solution. During this review period, IT installed conduit and mounting hardware at Durwood Stadium to accommodate networking gear, and Wi-Fi access points were installed at key locations throughout the area to complete the project.

### P378 – AIMS Parking Cloud

To mitigate PCI compliance issues, UM System recommended UMKC Parking consider moving their on premise AIMS Parking software to the AIMS Parking Cloud-hosted version. As a result, this project tracked IT items as they related to the successful completion of this project, including procurement, SSO integration, database export, DNS changes, and hardware and software configurations. During this review period, the software was installed and configured, mobile devices were deployed, and the project was completed.

# Individual Project Updates - Implementation Phase

### P174 – SCE Educational and Research Center

This is a project to build a new multi-story building in addition to our existing Computer Science & Engineering building, Flarsheim Hall. The IT/AV scope includes building-wide network infrastructure, IT closets, a VR showroom and computer lab, a high-performance computing teaching data center and computer lab, a motion capture lab, and unmanned systems lab, and renewable energy lab and several smart classrooms and collaboration spaces, building-wide digital signage, and a new CBORD access and surveillance system along with the conversion of existing Lenel systems to CBORD in Flarsheim Hall prior

to construction. During this review period, we finalized the IS budget for AV equipment and labor, coordinated with distribution vendors for equipment prices and submitted POs for all equipment. During the next review period, IS expects to complete the equipment install and complete the project.

### P273 - AD/365/GSuite

This project, originally only tracking activities related to Office 365 implementation, was expanded to include the project to track Active Directory (P305 was closed and merged into this one) and GSuite activities. During this review period, we decommissioned Skype in favor of Microsoft Teams; changed student logins for email to use @umsystem.edu; launched Microsoft 365 as a service to all students, faculty, and staff; and enabled Multi-Factor Authentication (MFA) for faculty and staff accounts. We also began planning for a launch of GSuite to the campus community.

#### P300 – Oak Place Demolition

This is a project to remove IT Networking & Telecommunications equipment and pull cable plant back to the outside box so the buildings can be demolished. The scope includes removing all in-room access points from students' rooms, removing all equipment in IT closets, pulling fiber and copper outside plant back to external pull box. During this review period, we pulled all the IT gear and building demolition has started.

### P318 – School of Pharmacy Video Distance Classrooms Upgrade

This project is the redesign and update of current video classrooms to reduce overall operating costs while maintaining current functionality and support levels. This project is being executed in 3 phases: Phase 1 involves upgrading conference rooms (HSB2300, BC400, BC416) with the ability to run a software-based conferencing system. (Zoom, Webex, etc.). Phase 2 involves updating the microphones in the larger spaces (HSB3301, HSB5301, HSB5309). This will require significant software changes and possible 3rd party vendor partnership. Phase 3 is the final phase to tie in all the spaces and complete the upgrade. Will be able to eliminate Codecs, improved audio/video quality, improve control of the system and reduce dependency on products that require ongoing maintenance. IS plans to retain as much existing as possible to keep current functionality same. IS will upgrade the needed equipment to add the functionality of software-based conferencing systems. This will include HSB3301, HSB5301, HSB5309, BC401, and BC411/412). Plans include strategic investments in spare equipment. As well as equipment guidance for Columbia's campus. This also will require 3rd party programming (SKC). During this review period, we completed the installation of the microphones, speakers and display for phase 1 and 2 of the project. We presented a finalized estimate for phase 3 of the project and submitted POs with vendors to order A/V and networking equipment. During the next review period, we plan to complete the switch install for phase 1 and begin equipment installation for Phase 3.

#### P336 - AchievelT

UM System has mandated that all campus partners author strategic plans for 2018-2028. The PM is the point of contact between UMKC and System regarding Achievelt, the system that tracks progress related to strategic plan goals and metrics. The PM also updates the metrics as indicated and ensures all other data input occurs in a timely manner. During this review period, in addition to attending Pillar meetings and sharing information across Pillar groups, and facilitating timely updates, we coordinated a campus site visit with UM Achievelt coordinators and UMKC Pillar representatives to discuss best practices and share experiences with the project.

#### P337 – OCR Brainware

UM System has purchased a new product, Brainware OCR, for all four campuses. It will initially be used for transcript processing. This product will be supported centrally by the Perceptive Content (Image Now) Team. During this review period, we had onsite training sessions, began testing the software, trouble-shooting issues and preparing for deployment. We also reviewed internal work flow and processes to take advantage of the new software features.

# P346 – AC Data Center Cooling System

This project is to alleviate temperature control issues in the Administrative Center data center on the UMKC campus. The scope of this project includes developing and implementing both long- and short-term solutions for cooling the data center. Additional scope was added this review period to include networking work to connect a new room to the existing data center, and to plan and track server moves from one data center space to another. During this review period, we developed a plan to implement a permanent cooling solution. After reviewing several options, we decided to implement a SmartRow cooling system in a space separate from the existing data center. The equipment was ordered, and construction work to accommodate the new equipment began in the new data center space.

# P348 – Building Switch Refresh

This project involves replacing old network switches in IT rooms around campus. Five buildings will be upgraded on this project. This keeps the network up to current standards, provides greater bandwidth and more reliable end-user network connections. During this review period, we installed switches in the IT rooms in 4 buildings including Katz Hall, Student Union, Johnson Hall and Miller Nichols Library.

# P354 – School of Med 3rd Floor Addition

This project is adding ILE classroom-type technology to a newly renovated space on the 3rd floor of the School of Medicine. During this review period, we started the equipment installation of microphones, speakers and displays. During the next review period, we will complete the installation of all equipment, program equipment, train the client to use the new equipment and complete the project.

# P355 – InnoSoft Fusion

UMKC's Swinney Recreation Center is replacing their current recreation management system (RecTrac) with a new product, InnoSoft. As the product contains student data, the project works with teams from IT, Registration & Records, Security, and others as they are identified to implement the software for a July 2020 launch. During this review period, we assembled a project team and developed timelines. We had frequent meetings with the Fusion team to determine hardware needs and IT requirements.

# P363 – Union Station AV Upgrade

This project is to upgrade and add new audio-visual gear to 5 rooms at Union Station for training and distance learning. This included 5 large displays, sound and video systems for each of these spaces. During this review period, equipment was ordered, received and 90% of the install was completed.

# P369 – Cliff Benefit Tool

This project is a prototype online calculation tool for low-income families to understand the effects of wages on their government benefits has been developed as part of a hackathon sponsored by Commerce Bank. IS will assist in deployment of this tool in two phases. Phase I will be to get the tool up and running with current data. Phase II will involve expanding data and rolling out to a larger audience. During this review period, the PM facilitated several meetings between the client and various IT departments. Unfortunately, this project was put on hold in March due to resource constraints and a focus on COVID-related projects. During the next review period, we plan to resume work on Phase 2.

### P372 – Bloch School of Business Rm 8 AV Upgrade

This project is to upgrade the audio-visual gear in this room for distance educations. This includes new large screen displays, sound and video systems. During this review period equipment was ordered, received and 95% of the install was completed.

## P374 – Starfish Analytics

The University of Missouri-System purchased Starfish Analytics for use by all system campuses. As described on the Starfish website: "Starfish Analytics is a cohesive suite of tools and services designed to transform campus-wide Student Success using data, analytics and intervention management. Starfish Analytics is fully integrated into the Starfish application, driving tactical action and enabling strategic planning views of student success." This project will work with cross-functional teams to implement Starfish Analytics at the UMKC campus. During this review period, we assembled a project team and developed timelines. We also met frequently with the Starfish technical team to determine how best to implement the product in our environment.

### P376 – Igate Upgrade

UMKCnet technicians will replace the UMKC Edge router due to outdated gear that is failing and unreliable. The UMKC Edge router provides connectivity to the Internet, and services like PeopleSoft, Canvas, Pathway & Email. Outages will be temporary and communicated to campus as needed and will take place over the winter break before classes resume for the semester. Post-cutover planning includes adding redundancy with a second ASR and adding a redundant route between 1102 Grand and the Med School. During this review period, we configured a specific UMKC configuration for replacement hardware, physically installed the equipment and successfully cutover with MOREnet during a maintenance window.

### P377 – Law School 02 & 05 Renovations

This project primary goal is to make room's 02 & 05 ADA compliant by leveling floors, installing handrails and ramps. The IT scope of the project will be to upgrade the audio-visual gear and provide distance education/learning options in these spaces. During this review period, we provided some designs for cost estimates, ordered equipment and removed the old AV gear from the rooms.

### P381 – Digital Signage Solution

In an effort to reduce cost to the budget due the Covid-19, this project is to identify and implement a permanent solution to replace the current Four Winds Signage Software that the UMKC campus is using. During this review period, we weighed the pros and cons of the 5 potential replacement products that were identified, made a final decision on new signage software (Rise Soft), communicated with end users of the upcoming change to signage systems, created a new costing model for the replacement solution, provided a narrative on "Getting started" to use the new solution and began imaging and updating display content on the 23 existing signage locations. During the next review period, we will complete the imaging of machines and content updates to the remaining signage locations to complete the project.

### P382 – DSMS Implementation

The Office of Disability Services has purchased a software product, DSMS AIM, to help track student accommodation requests. This project will coordinate IT and other campus efforts to deploy the software. During this review period, the product was run through security checks and procured.

#### P385 - UMKC Forward

In response to the budget challenges posed by the Coronavirus pandemic, UMKC Chancellor Agrawal asked the UMKC community to think about how to best address these challenges going forward: "In this time of crisis, UMKC has an opportunity to fundamentally reimagine its mission as a public research university serving Greater Kansas City and beyond." A PM was requested to support this initiative by providing organizational guidance, technology support, meeting scheduling and attendance, meeting minutes, tracking action items, and other PM functions. During this period, we created a robust Teams space for documents and discussion for each subcommittee in Teams A and B, provided technical support for the Teams space and Zoom, and attended and took minutes for several meetings.

## P386 – SRC Video Replay

UMKC Athletics will be rejoining the Summit League effective July 1, 2020. The summit league has a partnership with DVSport Replay provider for basketball and volleyball. This project is to install 2 new cameras in Swinney Recreation Center that are provided by DVSport and run cabling (CAT and Coax) from closets to cameras. During this review period, we met with Athletic Department to discuss expectations and timelines and prepared final IS estimate. During the next review period, we will obtain project approval, complete cable installation and install cameras to complete the project.

## P387 – CBORD Website Updates

This project is to expand functionality of the CBORD website, allowing students to submit photos, government documents and other forms of identification as well as other options related to ID cards, allowing more contactless interaction. During this review period, we set up dual authentication, created a student query, set up the SSO import and set up a script to import data nightly.

### P388 – SCE Dean's Suite Renovation

This is a project to upgrade the existing A/V in the dean's suite meeting room, dean's office and student space that are being redesigned. During this review period, we participated in meetings to coordinate A/V requirements and review design drawings with Dean Truman and design vendors. During the next review period, we expect to finalize A/V design, prepare final IS estimate, procure equipment and begin equipment installation.

# Individual Project Updates - Development Phase

# P356 – SRC Video Production Upgrade

This project is to upgrade the video production infrastructure of Swinney Recreation Center to allow for more seamless production and transmission of athletics events. IS worked with Niles Media to estimate equipment and labor needs in the space, and to estimate costs related to the project. The project costs proved too great and University Athletics decided not to move forward with the project at this time.

### P360 – Miller Nichols Library 114 AV Upgrade

This project is to upgrade the audio video gear and provide distance education/learning options in this space. During this review period we provided designs, cost estimates and room layout options. We also brought in CFM to provide a furniture cost estimate.

### P366 – 4825 Troost Security Enhancements

As a follow-up to the security work performed at 4747 Troost, a project was set up to perform similar enhancements to the 4825 Troost building that would restrict building access to only those with legitimate business at the facility. During this review period, IT prepared hardware and labor quotes for the necessary equipment and work, and shared the estimates with CFM.

## P370 – NextGen Data Analytics

A grant proposal was submitted to implement a "Hyperconverged Infrastructure with GPU Acceleration for Establishing the Kansas City Data Science Hub." Per the grant, "this project will support a "community-scale" research computing approach that will advance system wide research and education collaborations and seamlessly integrate local and remote resources, directly supporting the NextGen Precision Health Initiative in addition to many other research collaborations across the UM System." A project manager was assigned to track UMKC's IT portion of this project. During this review period, there was little movement on this project. Budget constraints related to Coronavirus have placed the future of this project in jeopardy.

## P371 – Qognify Camera Conversions

This project is to determine the cost for Qognify to move UMKC's cameras (422 as of 11/14/19), including a phased-approach recommendation, migration and training in order to migrate to the latest version (from Qognify to VisionHub). Additionally, converting all remaining cameras to this system, including the dorms, Animal Labs and Bookstore. During this review period, IS completed quoting the systems for the dorms, Animal Labs and Bookstore. IS, as part of the UMKC Building Security Committee, totaled all costs to upgrade the UMKC campus to Qognify/Vision Hub to meet the storage needs of our campus and sent our recommendation to senior leadership to request funding.

## P373 – CBORD/Mobile Pay Upgrades

This project is to work with various UMKC units to determine card reader inventory, work with vendor to determine the cost to replace all mag stripe card readers across campus with proximity cards/Mobile ID and plan/coordinate a phased migration. During this review period, IS and the UMKC Building Security Committee worked with the OneCard Office and the vendor to get a final quote for conversion. We compiled total costs and sent our recommendation to senior leadership to request funding.

### P375 – Panic Buttons Conversion

This project involves compiling inventory all existing panic buttons on campus, verify they are still needed, and develop a campus-wide cost to convert them from non-standard systems to the CBORD Platform. During this review period, we completed the inventory process and compiled costs to convert all needed panic buttons. The UMKC Building Security Committee send our recommendation to senior leadership to request funding.

### P380 – Bloch Heritage Hall Renovation

This is a grant funded project to completely renovate Bloch Heritage Hall. The IT/AV scope includes an upgrade of the network infrastructure of the building, IT closet builds and ILE technology updates to the classroom and spaces in the building. During this review period, we have participated in schematic design meetings and drawing reviews to provide guidance and feedback. During the next review period, we will continue to participate in drawing reviews, finalize IT/AV scope requirements and begin building IT/AV design.

### P383 – 3rd Floor MNL Addition

MNL has received a grant to create a new Digital and Public Humanities Center and update SHSMO space on the 3rd floor. The IT/AV scope hasn't been finalized but plans call for new signage locations and A/V technology upgrades. During this review period, we have participated in plan concept meetings. During the next review period, we will participate in final design reviews, finalize IT/AV scope and begin IT/AV design drawings and preliminary IS estimate.

# Appendix B

# Building Cable Plant Infrastructure Upgrades

