Accomplishments Report
Information Services
Information Services Current Goals and Projects

MISSION

We are a strategic asset for UMKC’s missions of
- Teaching and Learning,
- Research,
- Service, and
- Economic Development.

2017 GOALS

- Infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access
- User technologies and support that enhance and facilitate Teaching and Learning, Research, Service, and Economic Development
- Effective and efficient management of resources
- Accurate, understandable, and accessible communication, documentation and resource use
- Continuous improvement in services, facilities and professional development

2013 IS PROJECT LIST & POINT PERSON

- Campus New Construction/Renovation (MNL Classroom Addition, Bloch Hall Addition, Pharmacy MSU Expansion) – Guggenmos/Technology Management Services
- Encryption – Reisenbichler/Support Services & Malyn/Information Security
- Expansion of wireless coverage – Schonemann/Network Architecture
- ILE Classroom Lifecycle Upgrades – Guggenmos/Technology Management Services
- IPv6 Implementation – Malyn/Information Security
- VoIP rollout – Johnston/Infrastructure Services
  - 82% of phones have been replaced with IP phones in 92% of campus buildings
  - Cut over to IP trunks this year has cut cost by over 50%
  - Remaining buildings include: Medical School, 4747 Troost, University House, 4825 Troost and a number of University owned houses
  - Completion goal is by the end of the 2014 calendar year

2013 Shared Services Project List

- Accounts Management – Goodenow/Information Access
- Coordinate IT Planning & Budgeting – Carnett/Operations & Administration
- E-Portal – Goodenow/Information Access
- Establish Enterprise Architecture – Schonemann/Networking
- Establish & Empower a SPMO – Guggenmos/Technology Management Services
- Exchange 2011 Upgrade – Schonemann/Networking
- Improve Usability and Usefulness of Solution – Goodenow/Information Access
- ITSM – BMC Remedy Deployment – Reisenbichler/Support Services
- Restructure IT Across UM System – Fritts/CIO
- UM Network Architecture – Schonemann/Networking & Johnston/Infrastructure

Details on each of the above projects can be found in the individual sections for the responsible department.
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 final two quarters of FY2013.

Information Services aided in the technical design and installation of infrastructure and equipment in new campus construction projects. Nearly every division of Information Services was heavily involved in the construction of the Bloch Executive Hall and Miller Nichols Learning Center. The Technology Management Services division is currently involved in a project with the School of Pharmacy to extend their degree offerings via distance technology to Springfield, Missouri. Infrastructure Services is participating in the planning for a new dorm being built on Hospital Hill.

In support of the new Bloch Executive Hall we signed an MOU with the Bloch School to provide support for those users. We also signed an agreement with the School of Biological Sciences. Both schools will be supported via a dedicated staff member with backup and extended support provided by the call center and other IS departments.

The Technology Management Services division is currently working on several projects including Cherry Hall 4th Floor, Campus IPTV System, Law Digital Signage, Law School Classroom 2-200A, Law School Satellite Service Project and the Pharmacy program mentioned above. In addition to the special projects being undertaken the regular maintenance on the ILE classroom equipment was completed during this review period.

The Support Services (SS) division has undertaken several special projects during the review period. The Forefront Identify Manager (FIM) project will be phased in this fall and will replace our legacy system for account management. The Office 365 Project consists of a university wide committee working with Microsoft to begin planning the student e-mail migration from MS Live to Office 365. This upgrade will provide a new interface as well as decouple the SkyDrive component. Microsoft will begin the first of a two-phase update in the September timeframe.

SS continues to work on the ITSM project. Incident management was brought online in December, 2012. Numerous staff members in Information Services and Student Affairs have been trained and are currently utilizing the system to manage support requests. Additional functionality has been added so that faculty, staff or students can submit a ticket online 24/7.

The Workstation Replacement Program (WRP) is organized by SS. This period we coordinated the delivery of 650 computers and related peripherals. We have communicated with IT Liaisons, IS staff, freight companies and other stakeholders regarding delivery timetables and logistics. We also recorded and ordered off-session WRP-approved computer purchases. The purchase(s) of over $463,000 in computers, tablets, printers and peripherals were coordinated.

During the review period the campus transitioned to a cell phone stipend program. Before the cell transition process began we aided in the procurement of wireless devices and plans. Rather than directly paying for mobile devices and the related monthly service fees we have implemented a system where by employees will procure their own devices and service plans and the University will reimburse
approved users with a monthly stipend. To help facilitate this transition process we served as the institutional point-of-contact and assisted users in the legal transition of liability with their chosen cell service provider. We supplied users with detailed information about their historic data, text and voice usage rates in an effort to assist with the contract conversion. In this role we resolved issues with the four primary vendors and coordinated support requests between the IS Desktop Support Team and Infrastructure Services. Due to the transition to a stipend program we reduced the number of Blackberry users to two and we plan to retire the Blackberry Enterprise Server by August of 2013 when all users have migrated to another manufacturer’s device(s).

IS Staff served on numerous University committees including the UM Standards Committee, VPA Committee, Document Lifecycle, ITSM Steering Committee, Sustainability Committee, Staff Council and the Pathway Leads Committee.

IS actively participates in the system-wide Shared Services Initiative. This initiative includes projects that span multiple campuses and are designed to cut costs. Specifically, we participate in the Data Center Strategy Project. The goal of this project is to enhance the University’s intercampus data network as a shared service. A committee has been formed with representatives from each campus, the Hospital and MOREnet to work with Cisco and move this project forward.

The Information Security division is working with Support Services and Pricewaterhouse Coopers to audit our mobile and portable devices. An upgrade to the campus firewall is also in the works.

The Instructional Technology Services (ITS) team took over the support of the UMKC Calendar application which is found on the main UMKC website. It is a heavily used application as can be seen by the number of events that are posted to the various departmental calendars each month. The ITS team assumed responsibility for the support of the UMKC WordPress application. ITS coordinates with both Foundation Services and Internal Applications when a UMKC WordPress site is requested.

The IS Data Warehouse completed several major projects during the reporting period. They completed the Spring Semester 2013 Census Process and Reporting, Automated the BuffaloCody Daily Import/Export Process, Fiscal Year 2013 HR Census Process and Reporting and Complete College America 2013.

During the review period we maintained operations in six IS-managed general use student computer labs, twelve restricted access labs and supplied one associated computer classroom. 9,523 people used these sites. We continued to collaborate with various schools and departments to ensure student computing needs are met and the labs are available during the hours when students most need them.

IS staffed the Miller Nichols Library and the School of Computing and Engineering computer labs for extended hours during spring semester finals. The lab management team provided staffing and support for seven special events in the Health Sciences Building room 3304 computer lab. IS supported student printing needs by keeping supplies on hand and printers maintained and ready for use. Over 277,000 print jobs were printed in IS-managed general use student computer labs totaling over 1.6 million pages.
Technology Management Services (TMS)

Establish & Empower a Strategic Project Management Office

*Shared Services Project*

During this review period, several notable accomplishments were made toward this initiative. John Nemec was selected as the SPMO Director and Tshibanda’s involvement in the planning process was phased out. A small team was identified to evaluate and make recommendations on a Project Portfolio Management tools for UM System, campus site visits were completed and each campus had a chance to meet with John and learn the overall purpose/drive of the SPMO and how they can leverage this resources going forward. The list of OEI approved projects was established in February then reviewed by the SPMO and several meeting sessions were dedicated to discussing and planning for how governance, change management and resource availability will be managed going forward.

**TMS System Support Pool**

The number of systems supported by TMS grows steadily every year. During this review period we have increased the number of supported systems to 262 by adding 2 new systems. See the table below for a detailed breakdown by system type.

<table>
<thead>
<tr>
<th>System Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full ILE Classrooms</td>
<td>76</td>
</tr>
<tr>
<td>Partial ILE Classrooms</td>
<td>1</td>
</tr>
<tr>
<td>Hybrid ILE Classrooms</td>
<td>73</td>
</tr>
<tr>
<td>ILE - Conference, Seminar &amp; Training Rooms</td>
<td>6</td>
</tr>
<tr>
<td>Departmental ILE (class &amp; conference rooms)</td>
<td>35</td>
</tr>
<tr>
<td>Departmental AV Systems (Digital signage, recording systems, observation systems, portable carts)</td>
<td>71</td>
</tr>
<tr>
<td><strong>Total Systems Supported</strong></td>
<td><strong>262</strong></td>
</tr>
</tbody>
</table>

Also during this period, design has been finalized and equipment ordered for five additional classroom spaces in the New Miller Nichols Learning Center and thirty six new spaces (a mix of classrooms, seminar, study rooms, signage systems and lab spaces) in the new Bloch Executive Hall. These 41 new spaces will be active by the start of fall classes this year and added to our support pool during the next review period.

**ILE Lifecycle/Maintenance & Repair Investments**

During this review period $98,816.00 was invested in equipment and parts to keep the campus ILE classrooms and teaching environments up and running. This cost includes proactive lifecycle initiatives such as the work station replacement project designed to replace aging ILE computers as well as reactive maintenance and repair initiatives such as replacing defective equipment, projector bulbs, batteries, damaged cabling, etc.
ILE Classroom Lifecycle/Upgrades Projects

During this review period new lifecycle initiatives were identified, researched and prioritized in the table below. Approvals for Work Station Replacement and document camera upgrades were received for FY 13/14. There are five other initiatives pending funding approval.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Item Description/Justification</th>
<th>Qty</th>
<th>Cost</th>
<th>Total</th>
<th>FY</th>
<th>Initiative Description/Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPROVED &amp; FUNDED</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>Workstation replacement for PCs in ILE rooms</td>
<td>87</td>
<td>$710.00</td>
<td>$61,770.00</td>
<td>FY13</td>
<td>This project includes replacing outdated PCs in a large number of ILE classrooms. This project is broken into three phases and is currently under way.</td>
</tr>
<tr>
<td>Active</td>
<td>Document cameras upgrades</td>
<td>170</td>
<td>$870.00</td>
<td>$147,900.00</td>
<td>FY13/FY14</td>
<td>There are a number of ILE Hybrid rooms that do not have document cameras - this would make these rooms more similar to full ILE rooms regarding feature set. The project also includes updating existing ILE rooms with document cameras that are capable of being captured via Tegrity</td>
</tr>
<tr>
<td>FUTURE PENDING FUNDING</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Digital signal transport in ILE classrooms</td>
<td>170</td>
<td>$700.00</td>
<td>$119,000.00</td>
<td>FY13/FY14</td>
<td>The upgrade is required to make the conversion to complete digital. Though we are not ready to make the full conversion, this upgrade would give users a way to connect digital-only devices (laptops and tablets) in ILE classrooms. Once we make the full transition to completely digital, we would use this transport to feed all sources from the ILE desk to the projection system</td>
</tr>
<tr>
<td>2</td>
<td>Wide screen Everywhere</td>
<td>170</td>
<td>$5,500.00</td>
<td>$935,000.00</td>
<td>FY13/FY14</td>
<td>The upgrade project would include upgrading all ILE spaces with widescreen projection systems and projection screens to align with where the industry already is. This would eliminate odd scaling that occurs now when users try to use 16:9 content in 4:3 rooms</td>
</tr>
</tbody>
</table>
Professional Development for Staff

During this review period the following professional development sessions were completed.

- All technical staff continues progressing on the Certified Technology Specialist (CTS) tracks through InfoComm. A majority of the technicians have completed the first phase and are preparing to start phase 2.
- All staff completed FERPA training in March
- All technical staff completed Belden Low Voltage Termination/Installation training in May
- Supervisor Training: “Strengths – A Teamwork Approach” – Terry Easley and Rudi Plattner
- Contract Process Seminar – Justin Guggenmos and Bruce Waggoner (session with Colin Gage covering the key points to UMKC and UM System contracts)
- System Designer Scott Duncan attended CES 2013 (Consumer Electronics Show)
- System Designers, AV Technicians and AV Supervisors attended the Crestron Technical Institute in March
- Several staff members attended an updated version of the Sexual Harassment Training
- System Designer Scott Duncan attended the Digital Signage Expo in March
- System Designer Scott Duncan attended NAB 2013 (National Association of Broadcasters) in April
- System Designer Jamie Rinehart attended InfoComm Training and Tradeshows in June
Provide IT Project Management Services and IT/AV System Design Services for Campus New Construction/Renovation

During this review period we spent a significant amount of time on the design, planning and procurement processes for the MNL Classroom Addition, Bloch Hall Addition and Pharmacy MSU Expansion. These projects have aggressive timelines which have and will continue to touch many IT departments requiring an intense amount of coordination and they leave little tolerance for not being completed on time. These projects include very complex IT, AV and computing systems that will ultimately be supported by IT going forward. During the next review period, we will oversee the installation, programming and testing of all of these projects in preparation for the start of fall classes.

- MNL Learning Center - AV system design and installation work has continued on the MNL Classroom Addition project. There have been several design revisions impacting the planned integration schedule. Overall project completion was approximately 30% complete on June 30th. During this review period 95% of equipment has been ordered and received ($817,231 value) and planning completed for installation, programming and testing.

The new classroom building will include: one 300 seat auditorium, two 200 seat classrooms that can be combined into one 402 seat space, and two 106 seat classrooms. Initial estimates are valued at approximately $1,300,000. CTS have made considerable contributions to this project thus far.
• Bloch Executive Hall - Design and customer advocate roles continue for the new Bloch School Addition (~$2,800,000). This new facility will have an intense amount of new technology that includes a behavioral lab, a large auditorium, several tiered classrooms, five active learning classrooms, 14 student study rooms, 38 portable LCD carts, a video conferencing room, a two story media wall and a Finance Lab all of which will be equipped with the latest technology. We have been heavily involved in the programming and design for this project for over two years now and design is currently 100% complete. Key accomplishments during this review period include 75%-100% AV and IT design completion, an extensive value engendering exercise to get the project within budget, procurement of all AV and IT equipment and countless planning and design meetings. Also during this review period IS was successful in securing a signed MOU with Bloch for ongoing building support. The MOU includes two new full time IS positions and part time/student backstopping, office space in the new building and a new support processed for Bloch that mirrors how IS typically supports campus AV/IT environments.

• School of Pharmacy Pharm D Program - Design continues for the School of Pharmacy (SOP) and Missouri State University (MSU) Pharm D Distance Education Project which is still approximately 20% complete. During this period there were substantial layout changes requested by the SOP to some of the key distance education classrooms (see below). These changes included shifting the layout to be center facing and retooling the required AV and IT infrastructure. Also during this review period a significant amount of time went into researching the best distance codec platform,
identifying ongoing support requirements for this site and modifying drawings/construction documents to reflect recent changes. During the next review period design will be finalized, hardware will be ordered and installation will begin. A support MOU with MSU will be drafted then signed and support staff will be hired to support this site.

Provide Advanced Technical Expertise and Services to UMKC Academic Units and UMKC Departments

We have worked with several academic units and departments to design, install and, in most cases, provide ongoing support for several complex AV and ILE systems. During this review period we have completed two projects valued at $10,812.41. We currently have three AV projects valued at approximately $3,900,000 in the implementation phase and seven additional AV projects in the design phase valued at approximately $1.7 million (see tables below for details).
## Completed Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Project Details</th>
<th>Est. Lifecycle Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOM Hybrid Renovations</td>
<td>Update one Hybrid room and Installation of one new Hybrid</td>
<td>$9,756.00</td>
</tr>
<tr>
<td>PAC 418 Conference Room</td>
<td>70&quot; Interactive LCD with AV inputs</td>
<td>$10,156.41</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$10,812.41</strong></td>
</tr>
</tbody>
</table>

## Current Projects – Implementation Phase

<table>
<thead>
<tr>
<th>Project</th>
<th>Project Details</th>
<th>Est. Lifecycle Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bloch School Building Addition</td>
<td>Design and procurement management, and AV Design Consultation for (36) new teaching and student spaces</td>
<td>$2,800,000.00</td>
</tr>
<tr>
<td>FA 105 Renovation</td>
<td>ILE Partial and Space Renovation</td>
<td>$7,886.65</td>
</tr>
<tr>
<td>Miller Nichols Learning Center</td>
<td>(5) new large format classroom spaces</td>
<td>$1,122,400.80</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$3,930,287.40</strong></td>
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</tbody>
</table>

## Current Projects - Design/Planning Phase

<table>
<thead>
<tr>
<th>Project</th>
<th>Project Details</th>
<th>Est. Lifecycle Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cherry Hall 4th Floor</td>
<td>(3) Conference Rooms and Scala Digital Signage</td>
<td>$52,500.00</td>
</tr>
<tr>
<td>Campus IPTV System</td>
<td>UMKC Cable-Digital Signage Distribution System</td>
<td>$60,000.00</td>
</tr>
<tr>
<td>Law Digital Signage</td>
<td>Multiple Signage Displays</td>
<td>$TBD</td>
</tr>
<tr>
<td>Law School 2-200A Classroom Upgrades</td>
<td>Conference Room w/ LCD Confidence Monitors</td>
<td>$21,050.00</td>
</tr>
<tr>
<td>Law School Satellite Service Project</td>
<td>Satellite Service Installation (4 Locations)</td>
<td>$TBD</td>
</tr>
<tr>
<td>Pharmacy Program</td>
<td>SOP Distance Education Program Lifecycle Upgrades</td>
<td>$375,837.36</td>
</tr>
<tr>
<td>Pharmacy Program MSU Campus</td>
<td>(3) DE/ILE Classrooms, (2) Conference rooms, (6) Collaboration Systems</td>
<td>$1,260,707.75</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$1,770,095.11</strong></td>
</tr>
</tbody>
</table>

Also, during this review period we provided AV consulting and system design guidance to ten different schools and departments on 19 potential projects:

- School of Education (2)
- School of Biological Science (2)
- Chemistry Department (4)
- Law School (4)
- IS Desktop Support (1)
Research and Development (Video)

- Video Services conducted research in support of two key services that they provide: video conferencing and digital video streaming.

Digital Video Streaming Research Events

January
- Haivision Visit to UMKC

February
- Haivision Webinar
- VBrick Webinar

March
- VBrick Visit to UMKC

May
- Visits to Haivision and VBrick demo Centers

These events, combined with ~30 hours of staff research time, provided insights into digital streaming solutions. Seeking ideas for process improvements, both portal and media engine platforms were considered for demo. Both offer features not present on our current system:

- GUI portal (providing point and click operations to ingest and provide links)
- Automated file management
- Automated transcoding and adaptive-bitrate operation
- Mobile live video encoders capable of streaming dual video sources simultaneously
- Reporting functionality from mobile device players
- Ability to join SIP based video conferences and record them to a network location
- Included Content Delivery services (Haivision) or facilitation with Akami’s CDN (VBrick)

Key findings from the process were an increased understanding of the multipoint IPTV streaming protocol, understanding of the importance of edge caching on content delivery networks, and ideal data rate and resolution configurations to optimize quality and reception of wide area video streams.
Video Conferencing Research Events

In addition to these activities, we conducted roughly 60 hours of staff research time to evaluate the offerings of the two largest providers of hardware based h.323/SIP videoconferencing equipment. Determining a preference was driven by a design choice deadline related to the School of Pharmacy’s satellite program expansion project. A decision was made to invest in Polycom based on the following factors:

- Comparable feature sets and I/O on both platforms
- Price per properly equipped endpoint $20,000 cheaper with Polycom
- MOREnet more invested in Polycom infrastructure
- Polycom has better developed recording functionality with ready Bb integration
- Integration easier with Polycom

Other Notable Accomplishments

During the summer and fall semesters of 2012 utilization of full ILE classrooms was roughly 30% higher than Non-ILE classrooms. Hybrid ILE classrooms utilization was 21% higher than a non-ILE classrooms.
Classroom Technology Services provided maintenance and support for ILE and AV systems on the Volker and a portion of the Hospital Hill campuses. 83% of all support tickets assigned to Classroom Technology Services were resolved within a 24 hour period. Out of this 83%, 40% were resolved in less than 1 hour.
- Video Services provided maintenance and first-tier technical support for all ILE and AV equipment in the Health Sciences Building. During this period Video Services responded to 20 incident reports, all of which were resolved within 1 hour. The average resolution time was 26 minutes.

- We have provided technicians to support ITV Distance Education programs for a number of academic units with a majority of the support load dedicated to the School of Pharmacy and the School of Nursing. During this review period we provided 1,401 hours of ITV Room distance learning support.
• We provided technical support for videoconferencing meetings on both the Volker and Hospital Hill Campuses. During this review period we have also set up and supported 285 hours of videoconference meetings.

• The Performing Arts Center 418 conference room was completed for The Conservatory of Music. This system included a 70” interactive monitor (multi-finger touch enabled), Mac Mini, amplified audio, auxiliary inputs, and a simplified system controller.

• Video Production Projects
  o Produced an updated “Aseptic Technique” for Pharmacy (a 29 hour project)
  o Provided technical support to live stream of “KC Negro Leagues” interview
  o Provided technical support and videography to live stream of “Strategic Plan Listening session”
  o Provided technical support to live stream of “Athletic Press Conference”

### Videoconferencing Set Up & Support Hours

- ROTC: 10%
- Missouri Library Association: 3%
- School of Pharmacy: 61%
- Nursing: 26%
- Produced a Pharmacotherapy lab video for Dr. Graham (an 8 hour project)
- Provided technical support and videography to live stream “Finale at the Kauffman Center for Performing Arts”
- Produced 3 of 58 requested Nursing lab vignettes

- We provided programming and scheduling for UMKC PEG cable channels which consisted of ingesting 246 new video programs for broadcast
- Collaborated with UMKC’s Department of Communication Studies on an MOU detailing the transfer of ownership and administration of the Educational Access Channel for Higher Education from Information Services to Communication Studies. This MOU was signed in May of this year.
- Collaborated with the Kansas City Missouri School District (KCMSD) on a plan to transfer of ownership and administration of the Educational Access Channel for K-12 from Information Services to KCPS. At the end of this review period KCMSD had begun a construction project with Time Warner Cable to install the necessary infrastructure to maintain this channel. We anticipate that this project will be completed and ownership transferred to KCMSD in Q4 of 2013.
- Successfully transitioned all TMS staff over to the new UMKC cell phone stipend plan
- We added and provided links to 194 on-demand videos. We have now developed the support roles for live streamed events and are the “go-to” unit for this type of support.
- We have provided technical support and/or equipment to support 20 different academic and administrative special events during this review period.
- We completed ILE Classroom system maintenance in all ILE Classrooms during break.
Support Services

Key Initiatives

Bloch School of Management Memorandum of Understanding
Information Services signed an agreement with the Bloch School of Management for technical support in May, 2013. This agreement allows IS and Bloch to synchronize support efforts and create an agile technical team with the necessary skills and knowledge to support both the state-of-the-art equipment in the new Bloch Executive Hall (BEH) as well as the current systems in place at Bloch. This support team will provide the expertise to manage a new 32-station Finance Lab, more than 40 mobile carts, several new technology-equipped student study areas as well as the new tools and systems that comprise this new interactive learning environment.

School of Biological Sciences Memorandum of Understanding
The MOU for technical support services for the School of Biological Sciences was completed in January, 2013. Numerous technology initiatives have been accomplished since the agreement was signed including the recruitment, hiring and training of a new technician. A comprehensive inventory of computing equipment in Biology has also been completed. The Macintosh computer classroom was reconfigured so that students could more easily use the resources available. Planning efforts were completed this spring so that another Biology computing lab could be updated over the summer months. An aging web server was retired after the data was migrated to a new virtualized system. Another project still in the planning stages this spring includes an initiative to help address the rising cost of printing in the School of Biology.

Multi-Campus Initiatives
There are several university-wide committees and strategic initiatives in which Support Services has participated during the last six months. They include

- Forefront Identify Manager (FIM) project – FIM will be phased in this fall and will replace our legacy system for account management.
- Office 365 Project – A u-wide committee worked with Microsoft to begin planning the student e-mail migration from MS Live to Office 365. This upgrade will provide a new interface as well as decouple the SkyDrive component. Microsoft will begin the first of a two-phase update in the September timeframe.
• ITSM – Incident management was brought online in December, 2012. Numerous staff members in Information Services and Student Affairs have been trained and are currently utilizing the system to manage support requests. Additional functionality has been added so that faculty, staff or students can submit a ticket online 24/7. The ITSM committee began planning for the upgrade from 7.6.04 to 8.1, while working to formulate a roadmap for future ITSM initiatives.

The Move to Windows 64-bit
During the spring, desktop support teams conducted extensive testing and research in order to prepare for the migration of over 1,000 computers to the Windows 7, 64-bit architecture. This particular group of computers is located in the student computing labs, ILE classrooms and departmental labs. Over 180 applications were successfully tested on the new platform as well as extensive device driver testing. The migration of these systems to the new platform aligns the labs and ILE classrooms with the 64-bit standard that’s currently in place for faculty and staff machines. The 64-bit architecture allows the computer to address more memory and fully use the 8GB of RAM that is now standard on university computers. The x64 platform also provides for increased computer performance and security.

MS Window 8 and Office 2013 Planning
Support Services evaluated Microsoft’s new Office 2013 productivity suite during the spring in preparation for a summer deployment to student computing labs and ILE classrooms. Technicians successfully worked through compatibility issues while others coordinated the upgrade with faculty who use MS Office as part of their curriculum. While Office 2013 is not dramatically different than previous versions, it does offer a sleeker interface, improved PDF editing, better charting and picture management, etc.

In a similar fashion, Windows 8 testing was also underway this spring. The new operating system can be especially useful when paired with touch-compatible mobile devices. On the downside, the touch-based system can be awkward for the traditional user who needs to use a keyboard and mouse for their daily work. The significant interface changes in Windows 8 may require training. In addition, there are some security concerns with the operating system’s close ties to cloud storage. UMKC will continue to evaluate this new OS for security issues and compatibility with university hardware and software.
Customer Requests

- Over the last five years, the support volume in Support Services has remained steady.

- Customer satisfaction continues to remain high. The following chart represents customer satisfaction data collected from surveys closed by IS Support Services for the period of January 2013 through June 2013.
Call Center Projects

- The Call Center responded to 11,272 support requests, resolving 8,951 requests and escalating 2,321 requests.
- The Call Center’s first-call resolution rate was 79%

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Total Number of Call Center Support Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3 &amp; Q4 2010</td>
<td>14,499</td>
</tr>
<tr>
<td>Q1 &amp; Q2 2011</td>
<td>14,328</td>
</tr>
<tr>
<td>Q3 &amp; Q4 2011</td>
<td>11,661</td>
</tr>
<tr>
<td>Q1 &amp; Q2 2012</td>
<td>12,084</td>
</tr>
<tr>
<td>Q3 &amp; Q4 2012</td>
<td>14,461</td>
</tr>
<tr>
<td>Q1 &amp; Q2 2013</td>
<td>11,272</td>
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</tbody>
</table>

- Support requests generated though our online problem report tool decreased during this period. We implemented a login requirement when the ITSM system came online in late December, 2012. The reduction in numbers is attributable to the lack of password problem reports. This tool allows users to submit requests 24 hours a day, 7 days a week, and the requests are generally addressed during business hours. However, we are able to spot trends in off-hours reports when multiple users report problems with the same services.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Total Number of Web Submission Requests</th>
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<tbody>
<tr>
<td>Q1 &amp; Q2 2011</td>
<td>528</td>
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<td>Q3 &amp; Q4 2011</td>
<td>506</td>
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<td>517</td>
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<td>Q3 &amp; Q4 2012</td>
<td>560</td>
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<tr>
<td>Q1 &amp; Q2 2013</td>
<td>344</td>
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</table>

- ITSM Planning and Implementation
  - Brought UMKC Central team online in February 2013
  - Participated in planning and roadmap discussions
  - Continued to update documentation and conduct training sessions for ITSM as necessary

- Helped test and coordinate the transition of accounts to use Lync
- Participated in planning discussions for Office 365 conversion
- Participated in planning discussions for FIM implementation
- Staffed seven New Student Orientation sessions
- Worked with Operations and Administration to set up guest accounts for 248 guests, resulting in billing of $18,450
• Worked with Admissions, Registration and Records and various UM IT groups to address SSO account creation and maintenance issues.

**Desktop Support**

• Responded to and resolved 2,159 desktop support requests
• Desktop Support responded to and resolved 421 Student Assistant Problem Reports

**Number of Student Accessible Computers**

![Graph showing the number of student accessible computers from 2009 to 2013.](image)

**Tickets Closed by Academic Units**

*(Directly Supported by IS)*

![Pie chart showing the tickets closed by academic units.](image)
We have also had 13,167 distinct individuals use the public computing sites between 1/1/2013 and 06/30/2013. This 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 labs we also had 1,485 distinct individuals using our Remote Labs over the same time period.
Windows 7 continues to be the most popular operating system. We have seen a decrease of 275 Windows XP/Windows Vista computers in the last 6 months as we get closer to eliminating these out-of-date, and soon unsupported, operating systems.

- Updated Windows 7 Universal images to support new computer models and updated software versions.
- Updated Windows 8/Windows 8.1 Universal images to increase preparation to support this operating system. This includes the creation of several “beta” images, driver management and overcoming some of Windows 8’s new consumer focused features to ensure success in our environment. We currently have around 65 pilot users of Windows 8/Windows 8.1.
- Expanded use of our Mobile Device Management solution, AirWatch, allows us to efficiently secure and configure cell phones and tablet devices. At this time we have over 100 tablets being managed by AirWatch, including “labs” of iPads. Also, we have upgraded to AirWatch 6.4 and setup a DEV environment for testing purposes.
- Updated PaperCut on primary print servers
- Updated EMAS Computer Lab with new computers, keyboards and mice

- Updated HSB 3304 Computer Lab with new computers, keyboards, mice and monitors
- Created new Windows 7 x 64 OSD Task Sequence for imaging all IS/UL/SCE/ILE/Kiosk computers
  - This allows us to support modern computing equipment and maintain better parity with the Faculty/Staff images.
- Updated Remote Labs to maintain parity with physical computer labs
- Installed and configured analytical SQL instance to improve reporting capabilities
- Migrated Shoutcast live stream for KCUR from a physical to a virtual server using Icecast
- Worked with new IHD IT Liaison to explain procedures and configured required security settings
• Worked with Columbia to find ideal solution for Hyperion. We created a dedicated, portable, version of Firefox that meets most Hyperion needs. We have a Remote Lab setup for outliers.
• Updated PXE menu to reflect new computer labs and provide more advanced options
• Created Office 2013 SCCM packages and completed significant compatibility testing with large Faculty/Staff deployments planned for the fall. The IS/UL/SCE computer labs & ILE have already been successfully upgraded to Office 2013.
• Created Lync 2013 SCCM package and have large Faculty/Staff deployments planned for the fall
  o The IS/UL/SCE computer labs & ILE have already been successfully upgraded to Lync 2013.
• Created many custom reports for ITSM (both for IS and UMKC Central)
• Updated the following license servers:
  o GeoMagic
  o MiniTab
  o SPSS
  o AMOS
  o ERDAS
  o Microstation
  o SAP2000
  o AutoCAD
  o SketchUp 2013
  o ETAP
  o Risa3D
  o Maple 17
• Continually updated the following applications across campus to reduce security vulnerabilities and ensure our customers are kept up-to-date
  o Firefox
  o Java
  o Flash/Shockwave
  o Adobe Reader/Acrobat
• Configured test platform for SCCM 2012 in preparation for a campus-wide migration
• Provided backstop support for the School of Biological Sciences as we worked toward an MOU
• Completed manual computer & printer inventory for the School of Biological Sciences
• Migrated 400GB of data from failing Biology server to new virtual server
• Hired and trained new Desktop Support Technician
• Support Services has expanded support of additional computer labs across campus. This includes providing images to outside departments to ensure a consistent and stable computing environment for our students. We have also started to manage additional computing sites as our support base continues to expand, including:
  o Public kiosks in Royall Hall (3 computers)
  o Bloch Executive Hall (130+ lab/student computers)
  o School of Biological Sciences (33 computers)
• Workstation Replacement Program
  o Imaged and installed 397 WRP computers
• We also worked with Bloch faculty and other IS groups in preparation of the opening of the new Bloch Executive Hall. This included the configuration and procurement of 130+ new computers, creation and configuration of TideBreak, and the hiring of a Desktop Support Technician to support this new building.
• Relocated about 40 computers in the AC due to construction
• Hired new technician and provisioned office space in RH 313
• Transitioned to Academic Desktop Team support oversight for Psychology, Social Work, Networking/Telecom, Toy & Miniature Museum and SPARK
• Met with Xerox representatives to discuss better communication plan between their techs and ours. We developed appropriate signage for MFDs to direct Xerox technicians to liaise with IS on service calls involving network-related operations.
• SOE iPad project
  ▪ Prepared 12 new iPads for special education fieldwork project
  ▪ Conducted in-service for stakeholders on securing the devices
• We applied software image updates to departmental labs. All Windows instances are now Windows 7 x64.
  ▪ AUPD – KH 007, 202
  ▪ Geosciences – Cartography, GIS
  ▪ Conservatory – GH 221, 222
  ▪ SOE – 34, TLL
  ▪ SCE – RHFH 451, 457
• Updated list of software in departmental labs for updated lab software page
• Updated Filemaker Pro clients to v. 12 and liaised with stakeholders in Conservatory and SOE as their databases were transitioned to the new FMP server hosted by IS
• Provisioned lab access for the High Aspirations youth mentoring group
• Implemented multi-client Procare billing solution in Berkeley Center
- Apple support
  - Confirmed renewal of AppleCare Select agreement
  - Standard Mac images certified for Retina Display MacBook Pro
  - Extended Deploy Studio server access to BIO, SCB, and KH
  - Certified Mac technicians for servicing the newest generation of iMacs
  - Tested MS Lync for Mac and integrated into standard Mac software image. We also replaced iMacs in RHFH 463 lab.
  - Upgraded Remote Labs Xserve OS and applied Xcode and iRAPP updates
- Created and deployed custom software images for BIO 009 and 317 labs
- Standardized desktop PC BIOS setup procedure to ensure more robust power recovery options across the user base
- Updated Sibelius software clients and license server for the Conservatory
- Provisioned guest accounts for multiple summer events in SCE labs
- Updated door security on RHFH 458 and 459 offices to allow for logged card swipe entry
- Began demoing various Dell Ultrabook laptops and noted especially the XPS 13 had been very well received
- Consulted with Chemistry Department to implement Lanschool in SCB 110 lab
- Coordinated decommission of KC-SCE-BIT with SCE faculty and Foundation Services
- Created/Updated 177 SCCM packages for Labs, ILE and campus wide use.

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<tr>
<th>Software</th>
<th>Version</th>
<th>Description</th>
</tr>
</thead>
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<td>Alice 3.1</td>
<td>11.0.426.0</td>
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### UMKC IT Hardware Procurement

- Purchased over $463,000 worth of IT hardware. These purchases included computers, tablets, printers, peripherals and related service warranties.
- The distribution of spending over primary vendors was as follows
  - Dell and Apple both remain our primary computer vendors representing nearly 92% of the total hardware spend
    - Expenditures on Dell and Apple are down by a substantial 53% from the previous six-month period
      - This decrease is primarily due to the large Workstation Replacement Program (WRP) purchase in the previous period where Dell and Apple are most visibly highlighted as the standards for campus computing
    - Apple hardware purchases accounted for about 26% of the spending
      - This represents a tremendous 73% increase in spending on Apple hardware over the previous period
    - The popularity of Mac and iOS products continues to be strong
      - These trends are most evident in this part of the year in because WRP is not available. WRP tends to stress standards with Dell and its Windows-based product offerings dominating the computer spend.
- Historically, IT spending conforms to a well-known pattern that we see repeated again for the current review period wherein the first-half on the fiscal year sees roughly twice the spending due to WRP and the payment schedule of a few large UM System software contracts.
IT Procurement Spend by Six-Month Period

Top Ten Hardware Vendors
• Workstation Replacement Program
  o Arranged and tracked deliveries for over 650 computers and related peripherals
  o Communicated with IT Liaisons, IS staff, freight companies and other stakeholders regarding delivery timetables and logistics
  o Provided numerous reports and responded to related data requests
  o Recorded and ordered off-session WRP-approved computer purchases
  o Updated IT community on vendor model changes that will affect upcoming WRP sessions

• Mobile device and wireless service procurement
  o Served as institutional point-of-contact for wireless device procurement processes, including day-to-day activities such as item selection, consultation, device and plan ordering, resolving issues with four primary vendors and coordinating support requests with the IS Desktop Support team
  o Provided support to Blackberry Enterprise Server and reduced usage to two users by end of review period with goal of server retirement by the end of August, 2013
  o Assisted with new Cell Phone Policy migration by providing IT and fiscal stakeholders as well as users’ information about carriers, devices, and plans available on personal accounts.
    ▪ Provided users with historical data on their voice, text and data usage so they could make educated decisions about their cell phone migration
- Referred dozens of users to IS Operations & Administration for transfer of liability processing
  - Activated 80 lines of service on various devices (e.g., cell phones, air cards, hotspots, wireless tablets), including new lines, upgrades, ports and warranty replacements with a distribution as given below:

### Line Activations by Carrier

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<tr>
<th>Carrier</th>
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<tr>
<td>Sprint</td>
<td>22.5%</td>
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<tr>
<td>AT&amp;T</td>
<td>20.0%</td>
</tr>
<tr>
<td>Verizon</td>
<td>57.5%</td>
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</tbody>
</table>

- Processed numerous requests for device swaps and wireless plan/features changes
- Maintained websites to document purchase recommendations, carrier plan details and personal account discounts for UMKC affiliates
- Researched and documented vendor-specific positions for items such as early termination fees, contract language and agreement origins, phone unlocking policies and transfer of liability processes
- Large-scale Dental School cell phone project
  - Department was challenged to find effective communication tools and services in the case of an emergency situation affecting the Dental School’s staff, faculty, students or patients
  - Worked with department to consider proposals and offerings from multiple carriers
  - Completed consultation, ordering and deployment phases of project involving 24 devices and lines of service and one femtocell to boost Verizon network coverage in the Dental School basement
  - Managed change requests affecting these lines and the Push-to-Talk application environment for internal communications
Other Notable Activities

- Provided IT item selection and configuration consultation for 77 distinct departments in response to a myriad of different request scenarios

Wireless Lines of Service
(April 2, 2013)

- Worked with vendors to create 129 customized price quotes for various and multiple products and configurations
- Reviewed and provided IT approval for 56 eProcurement orders input by other departments
- Processed authorized returns for four hardware items
- Reconciled PCard orders on a monthly basis providing invoice/receipt documentation, MoCode and PeopleSoft account code assignments for 214 transactions
  - Instructed the creation of Journal Entry transfers to reallocate funds for eight (8) UMKC Bookstore orders and two (2) interdepartmental equipment transfers
  - Strengthened business relationships with a number of primary vendor contacts, most notably; Absolute, CDW-G, Verizon, AT&T, Apple, Sprint, Dell and GovConnection
  - Created, published and updated IT Hardware Procurement web pages to provide information on models, configurations and pricing on UMKC standards for computers and networked printers
  - Communicated with IT Liaison community regarding changes to hardware procurement, standards and product availability

IS Managed Labs

- Maintained operations in six IS-managed general use student computer labs, twelve restricted access labs, and supplied one associated computer classroom. 9,523 people used these sites during this time:
### Lab Usage

![Lab Usage Table]

<table>
<thead>
<tr>
<th>Lab</th>
<th>Individuals</th>
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<tr>
<td>Bloch 110</td>
<td>1,504</td>
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<tr>
<td>Health Sciences</td>
<td>1,077</td>
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<tr>
<td>Johnson Hall</td>
<td>423</td>
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<tr>
<td>Miller Nichols 2nd Floor</td>
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<tr>
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<td>568</td>
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<tr>
<td>School of Education</td>
<td>2,395</td>
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<tr>
<td>Student Union</td>
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</tr>
</tbody>
</table>

- Continued to collaborate with various schools and departments to ensure student computing needs are met
- Completed work on renovation of Royall Hall room 303 computer lab site
- Staffed Miller Nichols Library computer lab for extended hours during spring semester finals
- Staffed School of Computing and Engineering labs for extended hours for spring semester midterms and finals
- Continued to align lab hours with usage
- Assisted with testing of new IM client, Microsoft Lync
- Continued to simplify back-office procedures and documentation to improve efficiency of operations wherever possible
- Completed new and simplified internal reference web site for student employees
- Began research on new software solution for tracking Student Assistant shifts
- Completed a revision of application procedures for students interested in Student Assistant positions
- Worked with Student Disability Services Office to update Universal Access Station signs in labs
- Updated public labs web site
- Worked with Information Access on new lab hours database for public labs web site and mobile apps
- Assisted with one special event at the School of Education and many events and classes in the School of Computing and Engineering labs
- Provided staffing and support for seven special events in the Health Sciences Building room 3304 computer lab
- Staffed registration sessions during seven new student orientations (various orientation events took place in three different sites)
- Received over 117 applications for Student Assistant positions, interviewed 23 prospective new hires, and hired 18 new Student Assistants for IS-managed labs
- Conducted 11 new hire orientations
- Processed over 4,900 shifts and supervised nearly 14,500 Student Assistant man-hours
- Completed reviews for 60 Student Assistants
- Supported student printing needs by keeping supplies on hand and printers ready for use
  - Over 277,000 print jobs were printed in IS-managed general use student computer labs totaling over 1,640,000 pages

Other Initiatives within Support Services

- Served as UM-wide campus coordinator for Dell certifications and campus reimbursements
- Participated in the PWC IT audit for mobile devices
- Served on numerous university committees including UM Standards Committee, VPA committee, Document Lifecycle, ITSM Steering Committee, Sustainability Committee, Staff Council, Pathway Leads Committee and various others
- Met with numerous vendors to stay current with new technology, updates, etc.
- Coordinated and chaired IT Liaison meetings
- Renewed agreements for technical support with the Toy and Miniature Museum and the Real Estate group
Infrastructure Services

Infrastructure Improvement

Upgrade Building Wiring Infrastructure
We have completed infrastructure upgrades in the Bloch School of Business, Health Sciences Building, Union Station, Biological Sciences, Spencer Chemistry, Fine Arts, School of Education, Durwood Soccer Stadium, Johnson Hall, Pershing Place Building, Student Union, Law School, Miller Nichols Library, Student Success Center and the Cherry Street Garage. And we are currently working on the Medical School. We hope to complete the Medical School upgrade to Category 6 cable over the next year.

Critical Issues

- New cable standards, Category 7 that will support 10 gigabit connections are projected to be out in 2014. New standards have increased the cable size and made the cable stiffer. These new cables require larger conduit sizes and longer installation times which increase cost.
- Copper cable prices have more than doubled in the last 5 years driving up the cost of many of the supplies we use on a daily basis. If this inflation rate continues the cost of materials could cause us to slow or stop some installations due to an insufficient budget.
  - Projections are based on Infrastructure Services budget at 2007 or higher levels with no additional projects or funding requirements that would use departmental hard dollars or substantial staff time.
  - Projections based on 2007 or higher staff levels. This project would stop or substantially slow down with staff cuts or vacant staff positions for extended periods of time.

---

Project Completion & Timeline

[Graph showing project completion and timeline]
VoIP Rollout
We started rolling out voice over IP phones first to all of Information Services and then in the Health Sciences building in 2007. We have now replaced phones in the

- Administrative Center
- Biological Sciences
- Bloch School
- Spencer Chemistry
- Cherry Street
- Cockefair Hall
- Dental School
- Diastole
- Durwood Soccer Complex
- School of Education
- Epperson House
- Heating/Cooling Plant
- Fine Arts
- Flarsheim Hall
- General Services Building
- Grant Hall
- Haag Hall
- Hospital Hill Gym
- Katz Building
- Law School
- Manheim Hall
- Miller Nichols Library
- Newcomb Hall
- Northland Campus
- Old Maintenance
- Parking Structure - Hospital Hill
- Performing Arts Center
- Purshing Building Offices
- Repertory Theatre Downtown
- Residence Hall - Oak Place
- Residence Hall - Oak Street
- Residence Hall - Johnson Hall
- Royall Hall
- Scofield Hall
- Student Union
- Swinney Recreation Center
- Toy and Miniature Museum
- Union Station Offices
- Western Missouri Mental Health Offices
- The 51st Street Annex

Each person who currently has a campus phone will receive a new IP phone similar in functionality at no charge to the department. See http://www.umkc.edu/is/nt/umkc-phone.asp for more information on phones.

**Critical Issues**

- This project is dependent on both the campus network and each buildings cable plant infrastructure. IP phones require inline power for greatest functionality which requires a Category 5 or higher cable plant. This project would slow if the campus infrastructure project is delayed.
- The campus PBX is 30 years old and a catastrophic failure would require an immediate cutover to IP phones.
- Projections based on Infrastructure Services budget at 2007 or higher levels with no additional projects or funding requirements that would use departmental hard dollars or substantial staff time.
- Projections based on 2007 or higher staff levels. This project would stop or substantially slow down with staff cuts or vacant staff positions for extended periods of time.

**Project Completion & Timeline**
Infrastructure & Network New Buildings

UMKC was building the Bloch Executive Hall, a new student residence hall on Hospital Hill, during the review period. The campus was expanding the Miller Nichols Library with additional classroom space and doing some remodeling work at the Medical School. These projects require extensive planning, engineering and staff time both before and during the building’s construction. Bringing voice and data systems online when a building is completed requires the efforts of the entire Infrastructure Services department.

Critical Issues

- The addition of buildings with voice and data equipment put a greater demand on campus resources. Consequences specific to Information Services are; network usage both wired and wireless, the load on the Internet connections (which costs hard dollars to increase), Call Center support, trouble tickets and onsite visits to repair and trouble shoot issues, network security, etc. These projects include expenses for cable plant and electronics but no additional resources for staff or ongoing maintenance of infrastructure.
- Projections are based on Infrastructure Services budget at 2007 or higher levels with no additional projects or funding requirements that would use departmental hard dollars.
- Projections are based on 2007 or higher staff levels. We could miss deadlines for building projects with staff cuts or vacant staff positions for extended periods of time.

Shared Services – Data Center Strategy Project

UMKC is actively participating in the system-wide Shared Services Initiative. This initiative includes projects that span multiple campuses and are designed to cut costs. These projects share resources and even staff when possible. Specific to IS -Infrastructure Services is the Data Center Strategy Project. The goal of this project is to enhance the University’s intercampus data network as a shared service. Cisco has agreed to provide free consulting services to support this project. A committee has been formed with representatives from each campus, the Hospital and MOREnet to work with Cisco and move this project forward.

Critical Issues

- Trying to get an agreement across all groups on objectives and outcomes of the committee
- Funds and staffing to implement the committee’s recommendations

Infrastructure Services Training Program Overview

Infrastructure Services training plan includes a comprehensive array of courses to acquire and keep technicians certified as Belden Cable Installation Professionals. Training also includes a wide range of
courses on University related policies and procedures, safety, telecommunications and copper or fiber optic cable related topics. The BiCSI Registered Communication Distribution Designer (RCDD) on staff must also follow a specific training program throughout the year to maintain his certification credentials. New staff members attend a week long training course followed by a certification test to become a Belden Cable certified installer within their first year of employment. All technicians then attend an update course once every 2 years on the latest in cable and fiber optic technology and installation techniques. All staff members are encouraged to take local courses throughout the year on related topics when they are available.

To the right are examples of some of the certifications maintained by Infrastructure Services personnel.

**Individual Infrastructure Services Accomplishments This Period**

- Completed VOIP rollout to the 3rd floor of the Medical School
- Infrastructure Services staff attended over 117 hours of training during this reporting period
- Hosted IP phone training classes for several departments
- Staff member served as the campus building liaison representative
- Completed over 260 moves, adds and changes on voice jacks, data jacks and phones
- Designed and planned infrastructure, voice and data networks for the new Hospital Hill Residence Hall
- Responded to, solved and closed 197 trouble tickets recorded in ITSM (Remedy)
- Installed over 350 Voice over IP phones
- Staff member served on the Inter Campus Network Committee
- Provided construction documents, Division 27 standards for both the Bloch Executive Hall and Hospital Hill Residence Hall projects
- Processed over 2.7 million calls through voice systems
• Converted Berkley Child Care Center to Voice over IP phones
• Marked University buried cable plant locations as required by Missouri Law for One Call services over 305 times during this reporting period
Security

Notable Items

- The first phase of campus firewall upgrades started
- Vendor change on IPS technology, resulting in additional features and cost savings for subsequent renewal years
- Start of mobile and portable device audit
- Started work with multi-campus teams on a new UM-System account management system
- Started work with multi-campus teams preparing for Microsoft’s student email migration
- Assisted with a multi-campus mobile device policy review project

- Completed second phase of project to secure campus name resolution servers
- Assisted with Instant Messaging server upgrade, allowing UMKC clients to start upgrading to Lync client
- Deployed updated ‘Endpoint Protection’ Antivirus software for Windows and made the installer available for MacOS technicians
Information Access

Introduction

Efforts of the Information Access Division during the period January through July 2013 were notable for the improvements made in measurements of customer response times, despite a steady increase in requests for service. All divisions had singular and combined successes.

Instructional Design (ID) works with individual instructors and departments across campus incorporating assessment, goals and best practices to provide a sound structure for learning, particularly in online learning. ID offers certification courses, training and workshops aimed at educating faculty and improving courses for students. A total of 11 courses were certified between January and June 2013 and Instructional Design staff spent over 100 hours in one-on-one sessions with faculty to improve online course design.

Instructional Technologies (ITS) Usage of ITS related tools including Blackboard, Moodle, Tegrity and Wimba increased following the trend of the last few years. ITS continued the rollout of Equella, a Digital Asset Management system. Live chat support continues to be a very popular support option both during the regular workday as well as in the evenings.

Foundation Services (FS) provides secure, professionally managed data centers to meet the growing information technology needs of academic and administrative units at UMKC. FS upgraded the campus virtual server infrastructure and now provides the UM system infrastructure for the shared service initiative on Remedy Help Desk (ITSM). FS added 288TB of additional storage for file services and implemented a new backup product that dramatically increases backup retention, coverage and reliability.

Internal Applications (IA) worked on large projects for a number of colleges and schools and performed semi-annual account cleanup processes. IA worked on approximately 50 individual software and design projects. The database administration team has added multiple management agents including Oracle Grid control to optimize and increase performance of MySQL, Oracle and SQL server databases. In addition, we have an official Filemaker server dedicated for campus-wide use.

Academic Enhancement (AE) continues to provide academic support for instructors providing supplemental material for courses. In the past six months the group produced many live streaming events distributed to thousands of customers across the world. AE worked with over 15 different academic units or support departments on multiple content format projects.
Instructional Design (ID) Accomplishments

The UMKC Instructional Design group has focused on offering training sessions in best practices related to online courses. ID works with individual departments to incorporate assessment, goals and best practices to provide a sound structure for online learning. ID is also certifying online courses for quality under supervision from the Provost’s Office. ID offers certification of online instructors who have the opportunity to experience an online course from the perspective of a student while studying techniques to communicate effectively with this type of learner.

ePortfolios

- During the spring and summer of 2013 ITS support staff assisted the School of Dentistry with a complete restructuring of their portfolio structure and grading schema for all three of their existing portfolios:
  1. BS Dental Hygiene Degree Completion
  2. Dental Hygiene MA and
  3. BS Dental Hygiene Clinical Entry Program
- In addition, the School of Dentistry added one completely new portfolio program called the Pre-Doctoral. 109 new students will be added into this portfolio group in the fall semester of 2013.
- The School of Nursing is considering the adoption of Foliotek. Instructional Design staff members have met with several key faculty members to discuss the features of Foliotek.
- Foliotek enrollment from the period of 01/01/2013-6/30/2013
  1. Continued successful usage by the History and Dental Hygiene departments
  2. 227 active School of Dentistry accounts
  3. 82 active History Department accounts (see program breakdown below)

<table>
<thead>
<tr>
<th>Arts and Sciences</th>
<th>Number of Active Students as of 06/30/2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>History BA students</td>
<td>72</td>
</tr>
<tr>
<td>History MA students</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School of Dentistry</th>
<th>Number of Active Students as of 06/30/2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Prep</td>
<td>175</td>
</tr>
<tr>
<td>Degree Completion</td>
<td>52</td>
</tr>
</tbody>
</table>
Course Certifications
A total of 11 courses were certified between 01/01/2013 and 06/30/2013. It is interesting to note that faculty of courses that were not System funded requested a certification review. The ID team feels that there will be many programs that choose to certify their courses retroactively for a variety of different reasons.

<table>
<thead>
<tr>
<th>Program</th>
<th>Course Number</th>
<th>Course Name</th>
<th>Faculty Developers</th>
<th>System Funded?</th>
<th>Date Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLA</td>
<td>ENG 317</td>
<td>Introduction to British Literature</td>
<td>Virginia Blanton</td>
<td>Yes</td>
<td>1/15/2013</td>
</tr>
<tr>
<td>BLA</td>
<td>Physics 140</td>
<td>How Things Work</td>
<td>Elizabeth Stoddard</td>
<td>Yes</td>
<td>1/29/2013</td>
</tr>
<tr>
<td>BLA</td>
<td>COMM-ST 110</td>
<td>Fundamentals of Effective Speaking and Listening</td>
<td>Linda Kurz</td>
<td>Yes</td>
<td>5/20/2013</td>
</tr>
<tr>
<td>BLA</td>
<td>Psychology 304</td>
<td>Learning</td>
<td>Jennifer Lundgren</td>
<td>Yes</td>
<td>6/14/2013</td>
</tr>
<tr>
<td>BLA</td>
<td>English 304WI</td>
<td>Workplace Writing</td>
<td>Jane Greer/Katie Kline</td>
<td>Yes</td>
<td>6/17/2013</td>
</tr>
<tr>
<td>BLA</td>
<td>COMM-ST 466</td>
<td>Principles of Advertising</td>
<td>Ye Wang</td>
<td>Yes</td>
<td>6/22/2013</td>
</tr>
<tr>
<td>Education</td>
<td>EDRP 5508</td>
<td>Principles of Methods of Research</td>
<td>Jake Marszalek</td>
<td>Yes</td>
<td>6/22/2013</td>
</tr>
<tr>
<td>CIL MA</td>
<td>EDCI 5596</td>
<td>Classroom Assessment</td>
<td>Erdem Demiroz</td>
<td>No</td>
<td>1/24/2013</td>
</tr>
<tr>
<td>CIL MA</td>
<td>EDCI 5570</td>
<td>Curriculum and Instruction in Technology</td>
<td>Molly Mead</td>
<td>Yes</td>
<td>1/31/2013</td>
</tr>
<tr>
<td>MS in Nursing</td>
<td>N 5550</td>
<td>Theoretical Foundations in Nursing</td>
<td>Peggy Ward-Smith</td>
<td>No</td>
<td>1/23/2013</td>
</tr>
<tr>
<td>PhD Clinical Psychology</td>
<td>Psych 5515</td>
<td>Advanced History and Systems of Psychology</td>
<td>Jennifer Lundgren</td>
<td>No</td>
<td>1/9/2013</td>
</tr>
</tbody>
</table>

Faculty Workshops
- Three online certification courses were completed between January and June with 32 instructors obtaining certification (see chart below for details).
### Faculty Completing the Online Certification Course

<table>
<thead>
<tr>
<th><strong>February 2013 faculty</strong></th>
<th><strong>School / Department</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Baker</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Breytspraak</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Carr</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Grimes</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Hoffman</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Kline</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Pritchett</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Wrobel</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Dobies</td>
<td>Business</td>
</tr>
<tr>
<td>Gibson</td>
<td>Dentistry</td>
</tr>
<tr>
<td>Demiroz</td>
<td>Education</td>
</tr>
<tr>
<td>Abreu</td>
<td>Nursing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>April 2013 Faculty</strong></th>
<th><strong>School / Department</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Edwards</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Hidalgo Johnson</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Horsmon</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Young</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Galindo</td>
<td>Business</td>
</tr>
<tr>
<td>Hunt</td>
<td>Nursing</td>
</tr>
<tr>
<td>Kelley</td>
<td>Nursing</td>
</tr>
<tr>
<td>Bennett</td>
<td>Nursing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>June 2013 Faculty</strong></th>
<th><strong>School / Department</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bennett</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Cantu</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Clark</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Daehne</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Gleeson</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Malakhova</td>
<td>Arts and Sciences</td>
</tr>
<tr>
<td>Morello</td>
<td>Arts and Sciences</td>
</tr>
</tbody>
</table>
A series of workshops entitled “Build Your Online Course” are designed to assist faculty in developing online courses so that they meet the UMKC Online Course Design Standards. A total of 9 faculty members took this course (offered three times) between January and June 2013.

Other workshops designed and offered by the staff of ID and the Instructional Technology Services departments are detailed below.

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Offerings</th>
<th>Attendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting Started with Microsoft Skydrive</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Tests and Surveys in Blackboard</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Getting Started with Blackboard</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Calibrated Peer Assessment</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Creating Peer Assessments with Turnitin</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Blackboard Basics</td>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td>Turning Point 5 Software</td>
<td>4</td>
<td>37</td>
</tr>
<tr>
<td>Build Your Online Course with Moodle</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Pharmacy Grand Rounds: Improving Communication with Technology</td>
<td>1</td>
<td>386</td>
</tr>
<tr>
<td>FACET Seminar: How to get your online course certified</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Faculty Scholars: Presentation on the Instructional Technology Tools offered by ITS</td>
<td>1</td>
<td>12</td>
</tr>
</tbody>
</table>

One-On-One Instructional Design Support Meetings
From January through June 2013 a total of 56 UMKC faculty members met with the ID team as they created their online courses. Total combined time for all of these sessions was 108 hours (see chart below for number of faculty and hours per month spent on this activity).
Instructional Technologies Services (ITS) Accomplishments

Instructional Technologies Conference
The Instructional Technology Services (ITS) department offered a one-day conference in January 2013. The conference was comprised of 11 different sessions offered by UMKC faculty and ITS staff. Forty-one faculty members signed up to attend the conference.

- The Diffusion of Innovations: Spreading Technology More Strategically (Lindsay & Stroud)
- Converting a traditional format course to a hybrid format: experiences with Moodle (Yoder)
- The Many Things You Might Not Know About Blackboard (Zou)
- Small Group Collaboration in the Classroom: Using Technology to Achieve Active Learning (Ta-Pryor)
- Fostering Collaborative Learning with Blackboard Groups (Buckingham)
- Online course support from the Miller Nichols Library (Thompson & Hunter)
- Teaching an online course from a multicultural perspective: Principles and best practices (Demiroz & Demiroz)
- Redesigning Modern World History—Introducing a New Hybrid Survey Course (Bergerson)
- Converting to the on-line modality: The good, the bad, and the ugly (Novak)
- Copyright Updates: Fair use, streaming and support for you (LeBeau and Thompson)
- The Integration of Technology into Foreign/Second Language Curriculum (Demiroz & Demiroz)

Blackboard Help Center
- Enhanced student assistant training along with regular review and self-learning on relevant technology topics resulted in a 90% tier 1 or 2 ticket resolution rate.
• The group initiated and collaborated with the Internal Applications department to improve user interface and functionality of the Blackboard User Request System.
• Operation hours were extended from 7:00 am to 10:00 pm on Mondays, Tuesdays, Thursdays and Sundays (hours were previously 6:00 pm to 10:00 pm) with the Live Chat tool.
• Customer feedback was largely positive.

Blackboard Usage Data
Total SP2013 courses: 7,938
Total SS2013 courses: 3,225

SP2013 courses with discussion boards: 369
SS2013 courses with discussion boards: 168

SP2013 courses with announcements: 1,010
SS2013 courses with announcements: 331

SP2013 courses with assignments: 376
SS2013 courses with assignments: 137

Support Issues by Application
Blackboard continues to account for the vast majority of user contacts and that position has not changed in the last few years. Blackboard Collaborate and Wimba are overlapping categories that will be combined in an updated ticket tracking systems.

<table>
<thead>
<tr>
<th>Application</th>
<th>Count / Resolved tickets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackboard Learn</td>
<td>1,115</td>
</tr>
<tr>
<td>Campus Pack</td>
<td>21</td>
</tr>
<tr>
<td>Tegrity</td>
<td>88</td>
</tr>
<tr>
<td>Moodle</td>
<td>7</td>
</tr>
<tr>
<td>Clickers/Turning Technologies</td>
<td>7</td>
</tr>
<tr>
<td>Wimba</td>
<td>30</td>
</tr>
<tr>
<td>Blackboard Collaborate</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,280</strong></td>
</tr>
</tbody>
</table>

Support Issues by Origin
The proportion of educational technologies users who approach ITS directly has continued to increase. The fact that rising numbers of users are approaching ITS directly rather than being routed through the general campus Call Center is due to several factors. These include
1. an increasing number of professors who preemptively address students’ potential technical challenges by including ITS contact information and hours in their syllabi;
2. improvements to the ITS website which make it easier for users to identify and directly contact the person best able to assist them; and
3. the inclusion of ITS contact information in multiple locations on the Blackboard portal, login, dashboard and technical assistance pages.

Online chat is continuing to make inroads, particularly amongst student users where it has become the contact method of choice. Email is showing a corresponding decrease amongst all users.

<table>
<thead>
<tr>
<th>Origin</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat</td>
<td>320</td>
</tr>
<tr>
<td>Email</td>
<td>384</td>
</tr>
<tr>
<td>In Person</td>
<td>3</td>
</tr>
<tr>
<td>Phone</td>
<td>563</td>
</tr>
<tr>
<td>Web Form</td>
<td>10</td>
</tr>
</tbody>
</table>

**ITS Chat Statistics**

Usage of the Chat tool continues to grow. In general, the percentage of chats that come in during our regular office hours ranges from 67% to 97%. The night chat, while helpful, does not represent a very large proportion of the total number of chats. There is a discrepancy between the total number of chats reported in the Remedy system and the actual number of chats that occur each month. Efforts will be made to ensure that a record(s) of all chats are entered into the official ticketing system from this point forward.

**ITS Chat Volume**

![Chat Volume Graph]

<table>
<thead>
<tr>
<th>Month</th>
<th>Chats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>265</td>
</tr>
<tr>
<td>Feb</td>
<td>143</td>
</tr>
<tr>
<td>March</td>
<td>142</td>
</tr>
<tr>
<td>April</td>
<td>137</td>
</tr>
<tr>
<td>May</td>
<td>111</td>
</tr>
<tr>
<td>June</td>
<td>140</td>
</tr>
</tbody>
</table>
UMKC Calendar
The ITS team took over the support of the UMKC Calendar application which is found on the main UMKC website. It is a heavily used application as you can see by the number of events that are posted to the various departmental calendars each month.

UMKC Calendar

UMKC WordPress
The ITS team assumed responsibility for the support of the UMKC WordPress application. The ITS team coordinates with both Foundation Services and Internal Applications when a UMKC WordPress site is requested. Consumers have a choice of having their site created in a managed environment (where a limited number of customizable options are offered) or an individual instance of WordPress. In the individual instance, the customer has complete creative control over the site.
Wimba
Wimba is the legacy live audio/video communication tool that is embedded in Blackboard and Moodle. UMKC is currently supporting the use of Wimba and Blackboard Collaborate. Collaborate is a newer tool with the same basic functionality, however, there are still some crucial capabilities that Wimba has and Collaborate does not. Eventually, Wimba will be replaced but not until there is a tool which has all the features UMKC currently uses.

**WIMBA VOICE**

<table>
<thead>
<tr>
<th></th>
<th>07/12-12/12</th>
<th>01/13-06/13</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentations</td>
<td>10</td>
<td>6</td>
<td>-40%</td>
</tr>
<tr>
<td>Board</td>
<td>17</td>
<td>73</td>
<td>+330%</td>
</tr>
<tr>
<td>Podcaster</td>
<td>10</td>
<td>20</td>
<td>+100%</td>
</tr>
<tr>
<td>Email</td>
<td>24</td>
<td>18</td>
<td>-25%</td>
</tr>
<tr>
<td>Authoring</td>
<td>24</td>
<td>32</td>
<td>+33%</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td><strong>85</strong></td>
<td><strong>149</strong></td>
<td><strong>+75%</strong></td>
</tr>
</tbody>
</table>

**WIMBA CLASSROOM**

<table>
<thead>
<tr>
<th></th>
<th>07/12-12/12</th>
<th>01/13-06/13</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rooms</td>
<td>1,071</td>
<td>1,125</td>
<td>+5%</td>
</tr>
</tbody>
</table>
### IS Accomplishment Report

#### January – June 2013

<table>
<thead>
<tr>
<th>Users</th>
<th>27,617</th>
<th>33,360</th>
<th>+20%</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>WIMBA PRONTO (accumulated)</strong></th>
<th>07/12-12/12</th>
<th>01/13-06/13</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users</td>
<td>21,138</td>
<td>31,110</td>
<td>+47%</td>
</tr>
<tr>
<td>Courses</td>
<td>28,850</td>
<td>39,647</td>
<td>+37%</td>
</tr>
</tbody>
</table>

### Campus Pack

#### CAMPUS PACK TRENDS

<table>
<thead>
<tr>
<th></th>
<th>12/12</th>
<th>06/13</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content in Courses</td>
<td>64,825</td>
<td>82,077</td>
<td>+26%</td>
</tr>
<tr>
<td>Content in PLS</td>
<td>36,724</td>
<td>37,146</td>
<td>+1%</td>
</tr>
<tr>
<td>Content in Group Spaces</td>
<td>3,460</td>
<td>4,405</td>
<td>+27%</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td>105,009</td>
<td>123,628</td>
<td>+17%</td>
</tr>
</tbody>
</table>

### Overall Usage Trends by Month

<table>
<thead>
<tr>
<th></th>
<th>January 2013</th>
<th>February 2013</th>
<th>March 2013</th>
<th>April 2013</th>
<th>May 2013</th>
<th>June 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content In Course</td>
<td>67,990</td>
<td>71,632 (+5%)</td>
<td>74,516 (+4%)</td>
<td>77,003 (+3%)</td>
<td>78,702 (+2%)</td>
<td>82,077 (+4%)</td>
</tr>
<tr>
<td>Content in PLS</td>
<td>37,088</td>
<td>37,112 (+1%)</td>
<td>37,121</td>
<td>37,128 (+3%)</td>
<td>37,133</td>
<td>37,146 (+1%)</td>
</tr>
<tr>
<td>Content in Group Spaces</td>
<td>3,637</td>
<td>3,639 (+1%)</td>
<td>3,644 (+3%)</td>
<td>3,658 (+1%)</td>
<td>3,666 (+1%)</td>
<td>4,405 (+20%)</td>
</tr>
<tr>
<td>Data Transfer (monthly)</td>
<td>5.44 GB (-19%)</td>
<td>4.36 GB (-3%)</td>
<td>4.51 GB (+3%)</td>
<td>4.57 GB (+1%)</td>
<td>2.42 GB (-47%)</td>
<td>2.77 GB (+14%)</td>
</tr>
<tr>
<td>Storage Quota Used (total)</td>
<td>23.45 GB (+1%)</td>
<td>23.92 GB (+8%)</td>
<td>25.88 GB (+3%)</td>
<td>26.80 GB (+1%)</td>
<td>27.14 GB (+1%)</td>
<td>28.37 GB (+4%)</td>
</tr>
<tr>
<td>Peak Active Weekly Users</td>
<td>587 (+40%)</td>
<td>822 (+40%)</td>
<td>682 (-17%)</td>
<td>666 (-2%)</td>
<td>627 (-5%)</td>
<td>334 (-46%)</td>
</tr>
</tbody>
</table>

### Turning Technologies (Clickers)

- 33 instructors are currently using Turning Technologies
- 15 Instructors are using Mobile Learning (ResponseWare software)
- 2,686 students are registered in Blackboard (accumulated)
- 52 (45%) ILE Classrooms with Turning Technologies enabled
Listserv

Listserv Usage

<table>
<thead>
<tr>
<th>Term</th>
<th>Lists</th>
<th>Subscribers</th>
<th>Postings</th>
<th>Emails Sent (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP 2013</td>
<td>470</td>
<td>221,953</td>
<td>14,126</td>
<td>4,650,616</td>
</tr>
</tbody>
</table>

Maestro

- Active accounts: 21
- Tracking Events: 320,177
- Directly distributed Recipients: 963,791

Moodle

- Active course sites plus organizations: 80

SharePoint

- UMKC has 442 sites running for faculty, staff and research purposes
- Total unique users: 2,427

Tegrity

<table>
<thead>
<tr>
<th>Podcast Downloads</th>
<th>MP3 Downloads</th>
<th>M4V Downloads</th>
<th>Session Downloads</th>
</tr>
</thead>
<tbody>
<tr>
<td>424</td>
<td>626</td>
<td>790</td>
<td>438</td>
</tr>
</tbody>
</table>

Foundation Services (FS) Accomplishments

Foundation Services (FS) provides secure, professionally managed data centers to meet the growing information technology needs of academic and administrative units at UMKC. FS upgraded the campus virtual server infrastructure and now provides the UM system infrastructure for the shared service initiative on Remedy Help Desk (ITSM). FS added 288TB of additional storage for file services and implemented a new backup product that dramatically increases backup retention, coverage and reliability.

Storage/SAN

- 288TB of additional storage for file services was added
- A new backup product (Simpana 9 by CommVault) was implemented, dramatically improving our backup retention, coverage and reliability rates
- Performed hardware upgrade to primary Compellent storage to improve performance

ITSM

As part of a UM System shared initiative, FS hosted the ITSM infrastructure and exceeded the goal of 99.9% uptime as well as providing technical expertise concerning the ITSM 8.1 upgrade.

Server Virtualization

- The vSphere environment was upgraded to 5.0U2 and the host network infrastructure was upgraded to 10Gb, improving VM performance
• FS continued to target physical server infrastructure for virtualization by working with IT Liaisons to retire aging hardware

**Systems Monitoring (Bunyanesque)**
Bunyanesque went through code refactoring to make it even more resilient and allow us to more efficiently create additional monitoring types/options.

**Miscellaneous**
Additional notable achievements for FS
• FS addressed and closed 595 Remedy tickets. Ticket completion times continue to be held low.
• Provisioned approximately 50 new virtual servers
• Virtualized approximately 10 physical servers
• Implemented new fee structure based on level of affiliation with the University

**Internal Applications (IA) Accomplishments**

**Database Server Design, Implementation & Administration**

**Oracle, MySQL, MSSQL**
• Upgraded the DW Production Oracle server to 11.2.0.3
• Upgraded the SCE Oracle server to 11.2.0.3
• Installed a central Filemaker server and migrated existing databases from other instances to this box
• Converted the Conservatory Filemaker databases from version 11 to 12
• Assisted with the CS 371 course set up to allow students to connect to the Oracle instance
• Multiple Oracle related knowledge sharing sessions
• Successfully configured heterogeneous connectivity on our Oracle boxes - We can now connect to and from Oracle - MS SQL Server
• Installed the Oracle Grid Control server
• Cleaned up account security on the SCE Oracle server
• Cleaned up account security on ORA1 and ORA2
• Set up support pages for users who are interested in using databases (Pages required authentication)
• Set up an Oracle dev server, so we don’t have dev and prod schemas on the same box
• Cleaned up DSNs on a number of our webservers
• IA also began testing of MySQL version 5.6 as a replacement for our current MySQL instance. This will allow us to run the server on Windows, automate updates and much more.
• Resolved Oracle wallet issues on ORA1 and ORA2
• Worked with Foundation Services to switch all of the database servers to using CommVault (instead of Avamar)
• Assisted Support Services with AirWatch upgrade
• Assisted Classroom Technology Services with SCALA Postgres DBMS upgrade
• Assisted the SOM with their database programmer search
Software Design and Development

- Set up process for Blackboard math placement scores to be automatically sent to the Registrar’s Office
- Set up data export process for MyLaw
- Ported the special accounts application from PL/SQL to ASP.NET
- Set up a new ASP.Net web application for ISAO’s SSO ID letters
- Created evaluation and SB389 reports for Arts & Sciences and SCE
- Assisted Foundation Services with queries for various distribution lists
- Implemented an evaluation & SB389 report generator app to speed up generation of report files from scanning data
- Implemented multiple components of an SGS iPhd Student Tracker to replace an aging Paradox application (this app is still being developed)
- Implemented a Blackboard automated grade book export
- Implemented various enhancements for the SBS Peer Tutor Program website
- Implemented a new database/PS driven version of the UMKC Mobile App for both the iOS and Android platforms
- Completed a majority of work on the RooWriter application that will replace the WEPT
- Implemented a survey notification site that will allow users to send out emails to intended audiences
- Implemented a new version of the sexual harassment training website
- Created a new website and multiple web registration forms for the Women of Color Leadership Conference
- Made multiple UFirst related edits
- Built functionality to allow administrators to add/remove/update courses in the HSCP course submissions form
- Added an advertisement search functionality on the Communiversity website
- Multiple edits to the New Letters ecommerce site
- Implemented a web based application related to graduation for the Registrar's Office
- Multiple edits and improvements to the SBS website CMS
- Implemented a wait-list feature on the WEPT website
- Migrated all of the IS lab times into a database driven app
- Multiple enhancements to the environmental health tracker app
- Completed the Law ecommerce website project
- Setup Oracle packages to generate data files for the Starfish prod and test tenant
- Built an Orientation registration website for new and transfer student orientations
- Multiple edits and enhancements to the IS website pages
- Multiple edits made to the Diversity, Access & Equity website
- Implemented an RSS feed feature for the IA-ITS workshop site
- Made branding edits to the eCompliance website
- Implemented a web form for the entrepreneurship program at the Bloch School
- Assisted the UM ecommerce team with connection testing in relation to the new Quikpay Data Center
- Made modifications to the Library's Annual Celebration web site to allow for Amex support
- Modifications to the SCE Continuing Education ecommerce site
• Set up the SP2013 A&S evaluations
• Worked with Foundation Services to configure Shibboleth for RedCap
• Assisted UNews with various WordPress related issues
• Began work on a four campus research resource website
• Updated the Student Kiosk forms so the CAPTCHA is more user friendly
• Set up multiple mass emails for Institutional Research
• Implemented version 1 of the Bloch appointment scheduler
• Multiple enhancements to the Kasey Kudos app
• Multiple enhancements and bug fixes made on the Conservatory website
• Set up a tuition assistance request website for HSCP
• Implemented a campus-wide performance appraisal website
• Upgraded the code on the SSO emails application
• Made enhancements to multiple web forms for the School of Education
• Implemented a new SIS data load process for Blackboard in conjunction with ITS

Software Administration

• WordPress
  o Multiple WordPress sites created on info.umkc.edu, infodev.umkc.edu and stuorgs.umkc.edu
  o Cleaned up the main sites for info.umkc.edu and infodev.umkc.edu
  o Transitioned WordPress administration to the ITS team
• Catalog Navigator
  o Resolved a notification related issue
  o Assisted with training sessions for curriculum editors
  o Configured the notification engine
  o Fixed course information for the Bloch School
  o Resolved issue related to communication studies catalog requests
• SSO letter generation for ISAO
• HR Termination Report and Exchange mailbox deletion processing
  o Weekly processing of deletion notices to faculty, staff and students who are no longer eligible for a mailbox on the Exchange server

Documentation/Version Control

• Documented PS HR and SA info for internal use + obtained ERDs for PS
• Continual additions of documentation on core data load processes to OneNote
• Added documentation on Blackboard, Moodle and Equella
• Created ERDs and a Data Dictionary for our Moodle data feed
• Created ERDs and a Data Dictionary for Snapshot/Blackboard data feed
Scanning Services
Scanning services provided during this period include
- Total tests scanned: 665
- Total surveys scanned: 2
- Total evaluations scanned: 30,827 in 18 evaluation scan requests

Exam Requests by School

<table>
<thead>
<tr>
<th>Division</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts &amp; Sciences</td>
<td>303</td>
</tr>
<tr>
<td>Bloch School of Business</td>
<td>141</td>
</tr>
<tr>
<td>Conservatory</td>
<td>13</td>
</tr>
<tr>
<td>School of Biological Sciences</td>
<td>143</td>
</tr>
<tr>
<td>School of Engineering/Computer Science</td>
<td>2</td>
</tr>
<tr>
<td>School of Education</td>
<td>4</td>
</tr>
<tr>
<td>School of Law</td>
<td>10</td>
</tr>
<tr>
<td>School of Medicine</td>
<td>1</td>
</tr>
<tr>
<td>School of Pharmacy</td>
<td>48</td>
</tr>
<tr>
<td>Total</td>
<td>665</td>
</tr>
</tbody>
</table>

Evaluation Scan Requests by School

<table>
<thead>
<tr>
<th>Division</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts &amp; Sciences</td>
<td>4</td>
</tr>
<tr>
<td>Bloch School of Business</td>
<td>4</td>
</tr>
<tr>
<td>School of Engineering/Computer Science</td>
<td>6</td>
</tr>
<tr>
<td>School of Law</td>
<td>3</td>
</tr>
<tr>
<td>University College</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
</tr>
</tbody>
</table>

Academic Enhancement (AE) Accomplishments
Academic Enhancement provided the following services
- Bloch School
  - 2 events covered (DVD/Raw footage delivered)
  - Produced, edited and uploaded to YouTube CASE Analysis Promo
  - Event coverage, Lewis White Real Estate (DVD produced)
- Location Shoot 4 person talking head promo for AICPA
- 2 Lewis White location event coverage
- One location shoot for Beth Folmer
- Record Venture Creation Challenge on location
- Camera documentation of Chinese Delegates
- Event coverage location shoot for Active Learning

- Division of Diversity
  - 2 events covered (DVD(s) delivered)
  - 3 event coverage projects (DVD(s) delivered)
  - Event coverage for Maria Hinojosa

- Chancellor’s Office
  - Shot and produced a first draft and a re-recording of Diversity program script
  - Re-shot second draft and rerecording of Diversity Program Script
    - Edited and approved
  - Shot 7 commencement ceremonies

- VSI Department
  - Completed chap 18a-e
  - Recorded-cut 19a-e
  - VSI History – Produced Chap 20a-c

- School of Biology
  - Shot and produced Gram Staining demo for Prof. Klamm
  - Finished Gram Staining animation and Gram Staining demo for Prof. Klamm
    - Uploaded to her Bb site
  - Produced demonstration video with graphics and animation

- School of Law
  - Output the Edit Decision List
  - Movies for Campus Free Speech Litigation
  - Cases 40 years later
  - Award ceremony event coverage

- Athletic Department
  - Kangaroo Sports Update shows 13-20
  - Compressed and uploaded to AD’s FTP
  - Continued to assist with each show’s feature spot
  - Live streaming of WAC press conference (uploaded program to FTP)

- Conservatory of Music
  - Dubbed 2 VHS masters for Prof. McIntyre
- Normalized audio
  - Match back video of concert performance to audio
- Re-mastered performances from 2 VHS tapes for Prof. McIntyre
  - Normalized and assisted with uploaded to his YouTube account
- Various uploads and video enhancements for Faculty, John McIntyre
- Event coverage of a dance program
- Multi-camera recording and broadcast from Kauffman PAC Helzberg Hall
- Video edit for Prof. John Borja
- FaCET
  - Recorded symposium and uploaded links to server
  - Event coverage – Achieving Excellence (conversion uploaded and linked)
- Provost’s Office
  - Recorded and live streamed second Strategic Listening Session
  - Posted to their website
- Swinney Recreation Center
  - Swinney Senior sendoff video to help the Recreation Center promote their employee program
- Linda Hall Library
  - 4 separate event coverage location shoots
- UMKC Special Events
  - CNN lecture – Sarah Ralph
    - Raw footage only (DVD delivered)
- School of Dentistry
  - White Coat ceremony location event coverage
- School of Education
  - Location shoot 4 scenes for Positive Connections PSA
- Training for Terence to learn to take responsibility for streaming events
- Multi-camera training shoot for SI Instruction
- Photo ID’s for UMKC employee
- Video Production consulting with the KCMSD
- Alumni Awards
  - Authored DVD and artwork
Data Warehouse

Introduction
The UMKC Data Warehouse supports the campus by providing a one-stop shop for data and figures related to campus activities. In collaboration with the Office of Records and Registration, the Human Resources Officer, the Officer of Admissions, and the Division of Advancement Services; the UMKC Data Warehouse provides reporting services to the campus.

Data Requests Processed
The UMKC Data Warehouse provides a number of self-service, online reporting tools to allow users to retrieve information about UMKC. However, not every request can be met this way; thus we satisfy user requests submitted on an ad-hoc basis. Below is a chart detailing the number of requests we have completed.

<table>
<thead>
<tr>
<th>Request Area</th>
<th># of Requests Completed</th>
<th>Average Feedback</th>
<th>Average Turnaround Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Records</td>
<td>225</td>
<td>3.8 / 4.0 (N=22)</td>
<td>4.2 days</td>
</tr>
<tr>
<td>Admissions</td>
<td>35</td>
<td>4.0 / 4.0 (N=3)</td>
<td>3.5 days</td>
</tr>
<tr>
<td>Human Resources</td>
<td>18</td>
<td>4.0 / 4.0 (N=2)</td>
<td>2.9 days</td>
</tr>
<tr>
<td>Advancement Services</td>
<td>54</td>
<td>4.0 / 4.0 (N=1)</td>
<td>4.3 days</td>
</tr>
</tbody>
</table>

Completed Projects
Below is a listing of major projects that the UMKC Data Warehouse completed during the timeframe.

- Spring Semester 2013 Census Process and Reporting
- Automated the RuffaloCody Daily Import/Export Process
- Fiscal Year 2013 HR census process and reporting
- Complete College America 2013

External Surveys Completed
On behalf of the campus and various schools/departments, the UMKC Data Warehouse completes a variety of surveys from third-party organizations. These surveys vary in length and time, some requiring vast amounts of time, some are simpler. Below is a listing of surveys that we completed during the reporting period.

- CUPA HR Survey
- OSU Faculty Salary Survey
- OSU GRA/GTA Salary Survey
- US News Main Survey
• US News Financial Aide Survey
• US News Finance Survey
• 2013 Bloomberg Undergraduate Business Survey
• Peterson’s Annual Survey of Undergraduate – Financial Aide
• Peterson’s Annual Survey of Graduate and Professional Institutions
• HLC Annual Update 2013
• Wintergreen/Orchard House Annual Survey of Institutions
• ACT Institutional Data Questionnaire (IDQ)
• 2013 Princeton Review Common Data Set/Review Data Set Survey (CDS/RDS)
• KC Business Journal Top Area Public Sector Employers Survey
• Ingram’s MBA Program survey 2013