INFORMATION SERVICES
5 Year Goals and Objectives Status Report

Mission:
We are a strategic asset for UMKC’s missions: Teaching and learning, research, service, and economic development.

2012 Goals:
1. Infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
2. User technologies and support that enhance and facilitate teaching and learning, research, service, and economic development.
3. Effective and efficient management of resources.
4. Accurate, understandable, and accessible communication, documentation and resource use.
5. Continuous improvement in services, facilities, and professional development.

The processes for achieving each of the above goals are listed in the first sections of this report.

2008 IS Project List and Point Person:
- IS project management – Guggenmos/Classroom Technology Services
- Infrastructure improvement (building cabling) – Johnston/Telecomm & Networking
- Policy/process documentation – Carnett/Administration
- VOIP rollout – Johnston/Telecomm & Networking
- Mass communication proposal – Hisle/Central Systems
- Software deployments – Reisenbichler/Support Services
- Course casting capacity/technology – Goodenow/Information Access
- Expansion of wireless coverage – Johnston/Telecomm & Networking

Details on each of the above projects can be found in the section for the responsible division.
INFORMATION SERVICES
5 Year Goals

Goal #1: Infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Student Live @ EDU Project
- Increase the ILE Classroom availability
- Upgrade Building Wiring Infrastructure
- VoIP Roll Out
- Expand Wireless Systems
- Network Core and Building Electronics Lifecycle
- Network new buildings and Residence Halls
- Course capacity/technology project

Goal #2: User technologies and support that enhance and facilitate teaching and learning, research, service, and economic development.
- New Campus Web Server Architecture and Content Management Project
- Increase the ILE Classroom availability
- Increase overall awareness and feedback for the ILE Classroom systems
- VoIP Roll Out
- Expand Wireless Systems
- IT Support Services become more accessible, visible and available to the campus community
- Improve campus computer lab experience and resources
- Course capacity/technology project

Goal #3: Effective and efficient management of resources.
- Implement an IS Project Management Office
- Restructure Classroom Technology Department to adequately support the ILE Classroom systems and campus AV projects
- Move Hospital Hill Fiber Optic Cable Off of Utility Poles
- Increase efficiency in delivery of services
- Expand efforts to comply with “green” computing initiatives including energy reduction and recycling.
- Provide advanced technical expertise and services to UMKC academic units, IT Liaisons and UMKC departments
- Course capacity/technology project
Goal #4: Accurate, understandable, and accessible communication, documentation and resource use.

- Storage Management: Accounting, Reporting and Allocation
- Disaster Recovery Planning and Procedures Project
- Overhaul of IS Related Security Policies and Enforcement of Policies
- Increase Security Awareness
- *Upgrade Software Deployment
- Change Management - changes to IT resources are organized, timely and well-communicated
- *Course capacity/technology project

Goal #5: Continuous improvement in services, facilities, and professional Development.

- *Implement an IS Project Management Office
- Increase the ILE Classroom availability
- Increase professional development opportunities for staff
- *Infrastructure Improvement
- *Expand Wireless Systems
- *Network Core and Building Electronics
- Lifecycle replacement schedule
- Network new buildings and Residence Halls
- Data Leakage Prevention

*2008 IS Projects
INFORMATION SERVICES
2008 Projects Update

IS PROJECT – PROJECT MANAGEMENT
Implement an IS Project Management Office (PMO) (Goals 3, 4, 5)
Over the last few months we have developed a very close working relationship with Campus Facilities Management (CFM) and the UMKC construction Job Order Contractor (KBR). The purpose of this enhanced relationship was to emphasis communicating typical IS task dependencies, and general awareness on what standard IS deliverables to expect on new campus construction projects. This collaboration has allowed IS to get involved earlier in the project planning phase allowing the IS tasks/deliverables to be included in the overall project timeline for both internal and external projects.

Critical Issues:
- Working with a PMO will be very different from what IS currently does. It will be imperative that IS management support the PMO initiative for it to become a success.
- IS currently does not have FTE completely dedicated to project management. As the use of the PMO increases, there will be a need for additional FTE.

IS Goals Supported:
- Effectively and efficiently manage resources.
- Communication, documentation and resources use that are accurate, understandable and accessible.
- Continue improvement in facilities, service and professional development.

IS PROJECT - INFRASTRUCTURE IMPROVEMENT
Upgrade Building Wiring Infrastructure (Goals 1, 5)
We have completed infrastructure upgrades in the new Residence Hall (Oak Place) the Bloch School of Business and the Fine Arts Building. We plan on moving to the Biological Sciences building and then the School of Law next. See Appendix for status chart by building.

Critical Issues
- New cable standards like Category 7 that will support 10 gigabit connections are projected to be out in 2009. New standards have increased the cable size and made 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 cost of materials could cause us to slow or stop some installations due to insufficient budget.
- Projections based on Networking & Telecommunications budget at 2007 or higher levels with no additional projects or funding requirements that would use departmental hard dollars.
- 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.

IS Goals Supported:
- Physical infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Effectively and efficiently manage resources.
- Assessment of and responsiveness to campus information technology needs.
IS PROJECT – POLICY/PROCESS DOCUMENTATION

Overhaul of IS Related Security Policies and Enforcement of Policies

Currently we are working from a limited framework of existing policies. Policies need to be updated and created to better address security issues. It is anticipated that it will take 1 year to overhaul the top-level policies. It will take an additional year to put into place implementation documents related to the policies. After the implementation documents are completed, we will be able to begin enforcement and auditing based on the new policy structure.

Critical Issues:

• Policies defining system administrator responsibilities.
• Policies defining types of sensitive data, and proper storage and protection of each type of sensitive data.
• Policies outlining required system security configurations.
• Policies adopting and implementing legal and industry mandated standards, such as Credit Card industry standards, and Federal Privacy standards.
• Policies related to sensitive data on portable devices are needed.

Timelines for deployment:

• First phase of top-level policies should complete around February 2009
• Last phase of implementation policies should complete around February 2010
• After last phase, ongoing updates to policy and implementation documents.

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IS PROJECT - VoIP Roll Out (Goals 1, 2, 5)

We started rolling out voice over IP phones first to all of Information Services and then in the new Health Sciences building. We have now started replacing phones building by building starting with Manheim, Royall, Haag and Flarsheim Halls. Each person who currently has a campus phone will receive a new IP phone similar in functionality at no charge to the department. We recently replaced the phones in the old Health Sciences building due to a cable cut that took their PBX phones out of service. See http://www.umkc.edu/is/nt/umkc-phone.asp for more information on phones. See Appendix for buildings with VoIP phones deployed.

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 25 years old and a catastrophic failure would require an immediate cutover to IP phones.
- Projections based on Networking & Telecommunications budget at 2007 or higher levels with no additional projects or funding requirements that would use departmental hard dollars.
- 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.

**IS Goals Supported:**

- Physical infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Effectively and efficiently manage resources.
- Assessment of and responsiveness to campus information technology needs.

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**IS PROJECT – MASS COMMUNICATION PROPOSAL**

**Mass Communications System**

In the spring of 2007 a University wide committee met to explore the technology of emergency mass communications. We were looking for a system that would aid us in the emergency notification of students, faculty and staff. The previous winter had several major storms and resulted in the first shut down of the Columbia campus in recent memory. In the first meeting we were focused on weather related notifications and scenarios. One week following our meeting, the Virginia Tech incident occurred. That event brought to the forefront the possible use of an Emergency Notification System (ENS) for reporting crimes in progress.

A Request for Proposal was issued in the summer of 2007 and a contract was signed with a company that would service all four campuses with ENS services. Their technology would allow us to send simultaneous E-mail, phone messages, pager messages, and text messages (SMS). An implementation plan was created with a timetable to have the system active on each campus for the fall semester of 2007.
In order to expedite the implementation, data already on record with the Human Resources and Student Information systems was used to create the notification database. UMKC performed a full test with all database records to gauge operability of the system in December of 2007 and subsequently used the system for campus closure notifications through the winter of 2007-08.

Programming changes were made in the summer of 2008, allowing students to opt-in for emergency notifications. At the same time, if opting-in, they would select any or all of the several methods of receiving messages, home or business phone, cellular phone, text messages, pager or e-mail. In December of 2008, the Human Resources system was setup for faculty and staff to opt-in and at the same time select their preferred methods of receiving messages.

In summary, the technology has not proven as rapid in delivery as we would prefer. Realizing these limitations and absent better methods of message delivery, this system is working and available for use by our communications professionals. Nearly 12,000 of the campus population of approximately 18,000 students, faculty and staff have opted to use the system.

**IS PROJECT – SOFTWARE DEPLOYMENTS**

**Deploy Office 2007 and Windows Vista (Goals 2, 4)**

During the past year, numerous campus computers have been upgraded to Microsoft Windows Vista and Office 2007. As of July 31st 2008, 77% of IS-supported MS Windows computers and 85% of Macintosh systems were using the most current version of MS Office. Most of the remaining IS-supported computers require newer hardware before they can be upgraded. When looking at the entire UMKC campus, 57% of computers have been upgraded to MS Office 2007.

Migration to Windows Vista is occurring at a much slower pace. This is because Vista has significant hardware requirements and in many cases requires a new computer. Some departments are slow to adopt due to the amount of changes in the new operating system and some remaining incompatibility issues. Seventeen percent of all IS-supported users have migrated to Vista and overall 11% of the campus is using Vista.

**Critical Issues:**

- It is challenging to achieve the right balance of system performance, computer security and application compatibility when deploying new technology in a complex environment. Budget shortfalls to replace computing equipment compound the issue. In many cases, deployment merits hardware upgrades or PC replacements.
- Slow release of service packs from software vendors to improve performance.
- End-users and IT will need to contend with a mixed platform environment for the next few years as the programs are gradually deployed.

**Timelines for deployment:**

- **Spring 2008:** Vista and MS Office 2007 will be included on newly purchased machines. MS Office 2007 (Windows) and MS Office 2008 (Mac) will be deployed to more departments
- **Fall 2008:** Continue to deploy Vista and MS Office as hardware is upgraded;
- **Spring 2009:** New workstation replacement hardware will be installed with Vista and MS Office 2007
IS PROJECT – COURSE CASTING CAPACITY/TECHNOLOGY
Instructional Technologies (Goals 1, 2, 3, 4, 5)

Instructional Technologies (ITS) continued project with UMR and UMSL as a collaborative partners using Blackboard. Blackboard usage continues to grow exponentially compared to the previous year. Podcasting became a campus success for students and instructors. Surveys from students provided glowing evaluations for podcasting and instructor demand is high for the fall semester. The addition of the Academic Enhancement group allows the IA division to provide professional audio and video services.

- Blackboard Intercampus Collaboration (BbIC)
- Horizon Wimba

- Learning Objects
  1. Purchased Learning Objects tools for Blackboard
  2. Wikis
  3. Blogs

- Podcasting – Tegrity
  1. Successfully completed 1 year podcasting pilot with Tegrity
2. Produced a total of 243 podcasts with 3,671 views
3. Renewed contract with Tegri for another year

- Distance Education/E-Learning
  1. Conducted research/analysis of distance education programs at various universities across the country
  2. Research possible distance education delivery mechanisms
  3. Continuing to analyze educational content providers

The Academic Enhancement Group within ITS worked to assist instructors by using multimedia to improve course instruction.

**IS PROJECT – EXPANSION OF WIRELESS COVERAGE**

**Expand Wireless Systems (Goals 1, 2, 5)**

With 150 wireless access points installed campus wide in Phase I of the wireless roll out we have now started Phase II. Phase II involves expanding wireless coverage in campus buildings to cover classrooms, offices and other usable spaces. In most buildings this would be 80% to 90% of the floor space allowing for seamless network access as you move throughout a building. We now have over 200 access points deployed. See Appendix for current buildings with wireless coverage.

**Critical Issues**

- New wireless standards like 802.11N, projected to be out in 2009, will require replacing every access point on campus with a new unit. New units may be more costly, especially when they first hit the market.
- The new 802.11N antennas take additional inline power so a new IEEE 802.3 inline power standard is coming out as well. This will require replacing at least some blades in network switches with new blades that support the new power standard.
- With hundreds of access points deployed managing them individually and security issues become major problems. We are planning to migrate to lightweight access for central management and security sometime during 2008.
- Projections based on Networking & Telecommunications budget at 2007 or higher levels with no additional projects or funding requirements that would use departmental hard dollars.
- 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.

**IS Goals Supported:**

- Physical infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Effectively and efficiently manage resources.
- Assessment of and responsiveness to campus information technology needs.
Central Systems
Goals and Objectives

Student Live @ EDU Project
The Student Live project is a spinoff of a System wide committee exploring E-mail consolidation across the University System. During our meetings Microsoft introduced the idea of a customized service based on Hotmail giving Universities and Colleges free E-mail accounts for students and using the school’s domain naming architecture. A pilot project was started in the Fall of 2007 with feedback from student participants. Planning for a conversion of Student Email platforms is in progress.

Critical Issues:
- Current student users of the Exchange system have been satisfied with its features and responsiveness. They have generally not been satisfied with the storage quotas currently 50MB (vs 5 GB for Live Mail).
- Student users often wish to retain the E-mail account they have used as an undergraduate and with the Microsoft licensing restrictions we are not able to allow that.
- The Alumni and development office would like to have students retain their Email under an E-mail for life program.
- Storage and maintenance costs of Student E-mail are over $50,000 per year. By using the Microsoft program, this money can be saved for a different purpose.
- Converting existing users from Exchange would be rife with problems. We would propose phasing in the use of the Live Mail program with newly admitted students and phasing out the students using Exchange via graduation or dropping out. Though full cost savings would not be realized under a phased implementation. The cost of staff time and time spent on individual user problems by avoiding a forced conversion could outweigh the potential savings.
- Based on recent enrollments and degrees awarded we would have approximately 13,000 degrees awarded during a 5 year period. This indicates the student body at the end of five years has turned over in terms of sheer numbers, though in reality a number of students in graduate or professional programs would still be present at the end of five years.
- Microsoft has increased the services tied to a Live Mail account to include a web social service, Spaces and a web collaborative area, Office Live Workspace. Since the introduction of the service in Fall of 2006, Microsoft is now providing services for over 500 institutions.

Timelines for deployment
- **May 2008**: Designated IS staff have test accounts assigned for familiarization.
- **September 2008**: Password federation is tested and validated. Internal link in Live Mail for University mail directory. System management tools are in place for password reset and account maintenance.
- **October 2008**: Students admitted for Fall Semester 2009 will be assigned Live Mail accounts. Students readmitted for Spring Semester 2009 and had their Exchange accounts previously closed by current policy, will be assigned Live Mail accounts.
- **May 2013**: Remaining student accounts on Exchange will be converted to Live Mail.
- **August 2013**: All student accounts will be on Live Mail.

Project Leader: Jim Hisle
New Campus Web Server Architecture and Content Management Project

The Campus Web Server is in need of a major revamping of its underlying architecture, in parallel the need for content management services continues.

Critical Issues:

- The Campus Web Server though much improved from its original adhoc beginnings, has a need for content management and editing tools. The existing folder based system is very cumbersome and prone to problems in granting permissions and what type of tools may be used to edit pages.
- Management policy for budgeting and oversight of the server must be established. This must include a sustainable management team that crosses multiple administrative boundaries.
- Management policy over server storage quotas must be established and enforced.
- A review of the current technology available and the costs for acquiring the technology.

Timelines for deployment

May 2008: A Committee is formed with key members of University Communications, Information Services and Information Services. This Committee will decide policy issues for web server management and budgeting.
November 2008: Web Server Policies are in place and operational.
February 2009: A decision is made for direction and focus on a web server platform, incorporating content management. A budget is built and incorporated into the budget for Fiscal Year 2009-10.
March 2009: RFP and procurement planning is done for acquisition in at the beginning of FY 2009-10.

Project Leader: Jim Hisle

Storage Management: Accounting, Reporting and Allocation

Storage Management: IS Central Systems currently manages over 2.5 Terabytes of general and web based file storage for most of the academic and administrative units on campus. There is currently no quota or allocation policy in effect.

Critical Issues:

- There must be a review of the current state of file storage through accounting and reporting software to understand which units are using what storage.
- A policy must be put into place allocating storage in a fair manner across academic and administrative units. Without a policy the campus users have the perception that storage is unlimited.
- Establish a delegated management structure in units so that they are informed of storage that they have in use as well as the users who have access to that storage. Storage used in excess of allocated amounts would be a billable charge to those same units.

Timelines for deployment:

May 2008: A Work Team would be formed in IS to determine and report on the current state of storage.
October 2008: A policy will be created for storage quotas and charges.
November 2008: Reporting tools will be examined and acquired to assist departments in their management of storage. Tools will be acquired to allow billing for storage in excess of their quotas.
February 2009: Departments who must include charges in their budgets will be given notice in time for building this into their operational expenses.
July 2009: Billing begins for storage in excess of quotas.
Exchange 2007 Upgrade Project
The much anticipated upgrade to Exchange is being planned in coordination with UM System level staff and the other UM campuses.

Critical Issues:
- Exchange 2007 and the underlying operating system will require new servers. Most of the servers have already been budgeted for and purchased.
- The upgrade has been delayed to synchronize with the upgraded server operating system Windows Server 2008 now in final beta testing.
- Additional meetings will be required for a timetable, but previous discussions have indicated that a summer 2008 implementation should be possible.
- Additional communications convergence features in Exchange 2007 and Microsoft Outlook, will cause us to examine the possibility that they could supplant a Cisco desktop telephone in some office settings.

Timelines for deployment:

Fall 2007: New Server Hardware acquired as Exchange 2007 would not operate on present servers in place.
Spring 2008: Apply new Microsoft operating system to Exchange 2007 servers as it is released.
Summer 2008: Brief other IS units and Liaisons on anticipated changes and impact in the Exchange environment. In coordination with UM System make Exchange 2007 servers operational.
May 2009: Acquisition of new storage array for Exchange

IS Disaster Recovery Planning and Procedures Project
Disaster Recovery: UMKC’s IS Disaster Recovery plan is a framework plan needing additional work through reviews and detailed responses to selected scenarios.

Critical Issues:
- The IS plan will need to have fixed periodic reviews to update or correct information.
- IS must ensure that campus executive management is aware of the plan.
- IS will need to coordinate with any campus Business Continuity Planning.

Timelines for deployment:

Spring 2008: Working Group formed within IS to coordinate with other University units on our disaster plan and efforts to date.
Summer 2008: Review our current plan in context to other planning done at UMKC. Adjust our plan if required for a “best fit” to a UMKC wide disaster plan.
Fall 2008: Run through on our disaster plan to review steps we would need to take to respond to various scenarios under the plan’s framework.

Project Leader: Jim Hisle
Educational Technology Services
Goals and Objectives

Reduce the ILE Classroom availability bottleneck identified in the Ad Astra Report (Goals 1, 2, 5)

During this review period we were able to upgrade three departmental classrooms with ILE systems. These systems include: NHSB-5301, NHSB-4419, and law-2-200B. The installation, lifecycle and maintenance for these three systems are funded directly by the individual departments as the rooms are not centrally scheduled. We also had five classrooms undergo a general update and ADA renovations by CFM. During these renovations the ILE systems were updated allowing us to reuse some of the older equipment to put together ILE systems for additional centrally scheduled rooms. The proposed rooms for these four new systems are: HH-309, HH-315, FH-338 and RH-214. These four rooms will be installed during our next review period.

We are working on designing a partial ILE room system that could be used in the smaller (12-20 people) classrooms that do not warrant full ILE packages. This should allow us to provide basic AV systems in rooms of this size, and address a majority of the faculty’s needs. We hope to have a finalized system design soon and plan to install a small number of these smaller systems during our next review period.

Critical Issues:

- Additional funding needs to be on a yearly basis. As we add additional classrooms to our maintenance/lifecycle pool, we will have the funds to keep them up to date.
- There are a number of classrooms that are not centrally scheduled and do not qualify for central funds. It is up to the departments that control these spaces to fund the installation and maintenance of ILE systems in these rooms.

Total UMKC Classrooms

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full ILE</td>
<td>41%</td>
</tr>
<tr>
<td>Partial ILE</td>
<td>11%</td>
</tr>
<tr>
<td>ILE Eligible</td>
<td>6%</td>
</tr>
<tr>
<td>Non ILE Eligible</td>
<td>42%</td>
</tr>
</tbody>
</table>

IS Goals Supported:

- User technologies and support that enhance and facilitate research, service, teaching and learning and economic development.
- Effectively and efficiently manage resources.
Restructure CTS to adequately support the ILE Classroom systems and campus AV projects independently (Goals 3, 5)
We are currently in the middle of evaluating our existing services to determine how many staff and of what type will be required to successfully divide the department into two separate areas. We have begun the lengthy cross training process by requiring staff to gain experience in both supporting the central campus classrooms and participating in custom AV projects. We also have a couple relatively new staff members in our department and are working to bring these staff members up to speed.

During the next evaluation period we will evaluate how much additional staff we will be able to fund with our custom AV projects and hope to make progress towards adding new positions. We will also work towards establishing service agreements for all new and existing new custom AV installations.

Critical Issues:
- It is difficult to ensure that the entire campus receives an equal level of support with the geographical boundaries that exist. This might require additional FTE in some of our remote locations.
- Some of the staff areas we are 1 deep in are very specialized areas that require a lot of training and working experience.
- It can be difficult to find adequate time for good cross training due to the density of projects we are constantly working on.
- Technology changes so rapidly that keeping staff up to speed on new technologies before we are required to implement them is very difficult.

IS Goals Supported:
- Effectively and efficiently manage resources.
- Communication, documentation and resources use that is accurate, understandable and accessible.
- Continuous improvement in facilities, service and professional development.

Increase overall awareness and feedback surrounding the ILE Classroom systems (Goals 2, 3, 4)
During this review period we conducted a number of one-on-one ILE user training sessions with faculty. We enlisted the help of the Registrar’s office to assist in marketing the availability of ILE user training to faculty when they request an ILE room for their class. We have added additional detail about the ILE classrooms to our website and will continue to do so. We worked on revising our ILE survey which will be sent out every semester starting with the winter 09 semester. We have redesigned the standard ILE system making the desk smaller and reducing student sightline issues to the screen and whiteboards. We worked with faculty and incorporated their suggestions in the physical room and ILE system design during the classroom renovations for The School of Medicine, Spencer Chemistry, and Cockefair Hall classrooms.

Critical Issues:
- Some resources we plan to increase require a web interface. Currently, we do not have staff employed in this field.
- It will be very challenging to incorporate/consider some of the faculty and student requests on an enterprise scale.
- System changes should be as consistent as possible in all ILE Classrooms in order to remain standardized.
- Most major system changes would have to wait until a lifecycle refresh to be implemented because of funding limitations.
Ongoing Action Items:
1. Continue to update and post training manuals for ILE systems
2. Market ILE user training at the start of every semester through Registrars office and ITS
3. Investigate supplementing FTE to accommodate these needs
4. Continue to develop ILE content for the knowledge base. Review and add content as needed
5. Evaluate ILE classroom design constantly, considering information received from surveys

IS Goals Supported:
- Provide user technologies and support that enhance and facilitate research, service, teaching and learning and economic development.
- Effectively and efficiently manage resources.
- Communication, documentation and resources use that is accurate, understandable and accessible
- Continuous improvement in facilities, service and professional development.

Increase professional development opportunities and the level of its importance for staff (Goal 5)
We met with each individual staff member this year during performance evaluations and discussed individualized professional development plans. Professional Development goals have been identified and included in each staff member’s performance evaluations and will be evaluated on a yearly basis. We have also included various training seminars, conferences and campus offered training events for staff in this year.

Critical Issues:
- It will be very difficult for our staff to find time during the work day to work on their professional development skills. When needed, some staff might need to work on developing these skills during their personal time.
- Working with staff to allow them to attend training during working hours would impact our level of service.

Ongoing Action Items:
1. Evaluation of each staff member’s training needs and outline training that would be appropriate.
2. Develop standard competency levels for each classification in our department.
3. Set professional development goals for each employee for each review period.
4. Hold staff presented training sessions to increase knowledge base of principles and fundamentals of core Audio Visual concepts.
5. Provide key professional development opportunities for staff through outside training events and certification courses.
6. Evaluate position requirements on a yearly basis to ensure staff remains competent.

IS Goals Supported:
- Effectively and efficiently manage resources.
- Continuous improvement in facilities, service and professional development.

February – July 2008 Accomplishments:
1. Completed $990,136.34 worth of AV projects during this review period
2. Serving on New Student Union Building Committee
3. Serving on MNL Library Expansion Committee
4. Staff attended training sessions on Office 07 and Vista
5. Reclassified one AV Supervisor position to AV Designer
6. RFB #6947 - AV equipment list – Split award between Mission Electronics and Conference Technology Inc.
7. Improved classroom check room assignments to include some of our non-classroom systems
8. Two staff members attended InfoComm conference and training sessions
9. Attended Miles electric vehicle demo
10. Working with Surplus to sell old equipment on EBay
11. Met with SOE to discuss database replacement project
12. CTS webpage – updated format and information
13. ETS/CTS 5 year goals
14. Staff Appreciation Week
15. Working with KCUR/ITS on re-org changes
16. Attended regular Campus Facilities Project Review meetings – Justin Guggenmos
17. Working on the UPS/generator project for AC
18. Completed renovations for SCB 214 and CH 104 ILE rooms for ADA compliance and lifecycle of equipment. 
   (Lifecycle costs - $37,000.00)
19. SON METI MAN project design completed – Partial ILE with observation, record and live stream capabilities for six rooms.
20. LS2-101 project completed – Modified full ILE
21. UMBC HD Video Conferencing System assembled and installed – located in NHSB 2427
22. Installed 2 zone alarm system in OMB
23. AMX Meeting Manager Server hardware & software upgrade completed
24. Epson Projector Lifecycle for all ILE classrooms completed – standardizing on Hitachi models (Lifecycle cost - $107,350.00)
25. GH207/211 Observation Project completed
26. SON NHSB 4302 Partial ILE installation
27. SON NHSB 4307 Partial ILE installation
28. SON NHSB 5308 Full ILE + Distance Education installation
29. SON NHSB 5309 Full ILE + Distance Education installation
30. SON NHSB 4419 METI Man Full ILE with observation, record and live stream capabilities for six rooms.
31. SON NHSB 5309 microphone retrofit for student ceiling microphones
32. SON NHSB 4308 microphone retrofit for student desk microphones design completed
33. NHSB 3309 Computer testing lab / Full ILE design completed
34. SOP NHSB 5301Project large lecture hall - Full ILE with Distance Education and student desk microphones completed
35. SOP NHSB 4306 – Modified existing Partial ILE system
36. SOP NHSB 2300 HD Video Conferencing System designed and installed
37. SOP NHSB 4230 Modified Partial ILE design completed
38. SOM Renovations for theaters A, B and C Full ILE will Distance Education Installed
39. ILE WRP and A&S mobile AV carts upgraded with new computers and projectors (Lifecycle costs – $16,259.11)
40. University Communications satellite & conference room installation
41. MTVU Plasma installed in Royall Hall commons area
42. University Center theft - replacement of equipment stolen + Securitas alarm installation
43. Tegrity Pilot - 19 new rooms added
44. Netbotz Server software upgrade
45. Law 2-200B Full ILE renovation project installed
46. School of Dentistry Classroom renovation - AMX programming
47. UMKCPD Squad Room design completed
48. ILE Classroom and projector maintenance during summer session
49. FH 262 – Upgraded partial ILE to Full (Lifecycle cost - $18,500.00)
50. PAC Lobby Renovation - Digital Signage Project design completed
51. FA 104 partial ILE Project design completed
52. FA 307 partial ILE Project completed
53. 4 ILE Classrooms planned for installation - HH 309, HH 315, FH 338, RH 214
Information Access
Goals and Objectives

Efforts of the Information Access Division during the period February through July 2008 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 Technologies (ITS) continued project with UMR and UMSL as a collaborative partners using Blackboard. Blackboard usage continues to grow exponentially compared to the previous year. Podcasting became a campus success for students and instructors. Surveys from students provided glowing evaluations for podcasting and instructor demand is high for the fall semester. The addition of the Academic Enhancement group allows the IA division to provide professional audio and video services.

Information Manipulation Services (IMS) spent resources and time on large projects for the School of Dentistry and Alumni Association. The Midwest Dental Conference held annually at UMKC had an e-commerce component to register hundreds of attendees and process hundreds of thousands of dollars. The Alumni Association developed an extranet to create a venue for UMKC alumni to communicate. IMS maintained course and instructor evaluation surveys for six schools and create numerous custom surveys for miscellaneous groups on campus.

Information Presentation Services (IPS) continued to create a high quality web development UMKC. Highlight projects during this time period included six e-commerce or conference registration programs, press release system for university communications, news feeds for public relations, and custom web site developments for multiple departments.

All Information Access Departments played roles in the implementation of Peoplesoft Student, acting as consultants and performing database and application testing and assessment services. IA played a key role videotaping and producing many campus wide UMKC events. IA continues to play a key role in defining and developing distance education solutions for the campus.

Instructional Technologies (ITS) Highlights (Goals 1, 2, 3, 4, 5)

Projects, Research and Development, and Personnel:
1. Blackboard Intercampus Collaboration (BbIC) (Course casting capacity/technology project) (Goals 1, 2, 3, 4)
   - Pre-update software testing for Blackboard allowed a successful upgrade to version 8
   - Design input and technical expertise enabled a virtually problem-free rollout of the Blackboard "portal".
   - Creation and maintenance of 48 new content modules as well as testing, installation, and configuration of five new user tools, adding significant additional value to the Blackboard user experience. Comparison of web activity statistics for the last weeks of FS2007 and SP2008 show an increase in page views/visit from 28.85 to 31.87.
   - Development of new faculty training materials and increased provision of in-person training opportunities for faculty, including monthly Open Lab sessions and Blackboard 8 training
sessions. (Erica’s efforts probably account for much of the decrease in support call
numbers compared to the previous 6-month period. Folks who know what they're doing don’t
need as much assistance.)

- Upgrades to Blackboard User Request System

2. eInstruction (student response system) (Goals 1, 2, 3, 5)
   - Coordinated faculty orientation and training with eInstruction representative to be provided
     through FaCET at no cost.
   - Blackboard 7.1 plug-in tested and plan to install during Fall semester.
   - New USB receivers have been installed improving technical communications.

3. Horizon Wimba (Course casting capacity/technology project) (Goals 1, 2, 3, 4)
   - Chose Wimba as replacement for Centra
   - Installed Blackboard plug-in on production server (Late Spring 2007)
   - Trained instructors and staff (May 2007)

4. Learning Objects (Course casting capacity/technology project) (Goals 1, 2, 3, 4)
   - Purchased Learning Objects tools for Blackboard
   - Wikis
   - Blogs

5. Podcasting – Tegrity (Course casting capacity/technology project) (Goals 1, 2, 3, 4)
   - Successfully completed 1 year podcasting pilot with Tegrity
   - Produced a total of 243 podcasts with 3671 views
   - Renewed contract with Tegrity for another year
   - Goal of 40 – 50 instructors each semester in 2008-2009

6. SharePoint (Goals 1, 2, 3, 4)
   - Increased usage to over 30 SharePoint sites on campus.

7. Instructor Evaluations (Goals 2, 3, 4, 5)
   - Conducted Instructor and Course Evaluations for School of Dentistry and Nursing, Conservatory
     of Music, School of Computing and Engineering and others
   - Met with multiple schools across campus to produce online evaluations for the Fall semester

8. Conferences Attended (Goals 5)
   - Central States Blackboard Users’ Group (Tulsa, Oklahoma)
   - Central States Blackboard Users’ Group (Bellevue University, Bellevue, Nebraska)
   - HELIX (Osage Lake, MO)

Usage Data:
Blackboard:

<table>
<thead>
<tr>
<th>Academic Unit</th>
<th>Aggregate number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Arts and Sciences</td>
<td>15,562</td>
</tr>
<tr>
<td>Conservatory of Music</td>
<td>797</td>
</tr>
<tr>
<td>School of Biological Sciences</td>
<td>2,110</td>
</tr>
<tr>
<td>School of Business and Public</td>
<td>2,918</td>
</tr>
<tr>
<td>Administration</td>
<td></td>
</tr>
<tr>
<td>School of Computing and Engineering</td>
<td>3,544</td>
</tr>
<tr>
<td>School of Dentistry</td>
<td>1,979</td>
</tr>
<tr>
<td>School of Education</td>
<td>2,084</td>
</tr>
<tr>
<td>School of Graduate Studies</td>
<td>28</td>
</tr>
<tr>
<td>School of Law</td>
<td>430</td>
</tr>
<tr>
<td>School of Medicine</td>
<td>1,185</td>
</tr>
<tr>
<td>School of Nursing</td>
<td>1,479</td>
</tr>
</tbody>
</table>
School of Pharmacy 1,900

**Grand Total** 34,016

### Number of course sites

<table>
<thead>
<tr>
<th>Academic Unit</th>
<th>SP 08</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Arts and Sciences</td>
<td>901</td>
<td></td>
</tr>
<tr>
<td>Conservatory of Music</td>
<td>159</td>
<td></td>
</tr>
<tr>
<td>School of Biological Sciences</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>School of Business and Public Administration</td>
<td>142</td>
<td></td>
</tr>
<tr>
<td>School of Computing and Engineering</td>
<td>314</td>
<td></td>
</tr>
<tr>
<td>School of Dentistry</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>School of Education</td>
<td>212</td>
<td></td>
</tr>
<tr>
<td>School of Graduate Studies</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>School of Law</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>School of Medicine</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>School of Nursing</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>School of Pharmacy</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>2,203</td>
<td></td>
</tr>
</tbody>
</table>

### elInstruction:

<table>
<thead>
<tr>
<th>Term</th>
<th># Classes</th>
<th># Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/08–07/08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructor</td>
<td># Classes</td>
<td># Students</td>
</tr>
<tr>
<td>Todor Gounev</td>
<td>2</td>
<td>244</td>
</tr>
<tr>
<td>Marilyn Yoder</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Jeffrey Price</td>
<td>2</td>
<td>154</td>
</tr>
<tr>
<td>Eric Martin</td>
<td>1</td>
<td>44</td>
</tr>
<tr>
<td>James Benevides</td>
<td>1</td>
<td>286</td>
</tr>
<tr>
<td>Andrea Drew Gouvev</td>
<td>1</td>
<td>170</td>
</tr>
<tr>
<td>Ellen Suni</td>
<td>1</td>
<td>63</td>
</tr>
<tr>
<td>Law Tech</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Michael Kruger</td>
<td>1</td>
<td>47</td>
</tr>
<tr>
<td>Jolene Lynn</td>
<td>1</td>
<td>83</td>
</tr>
<tr>
<td>Kristin Lee</td>
<td>1</td>
<td>79</td>
</tr>
<tr>
<td>Lyla Lindholm</td>
<td>1</td>
<td>58</td>
</tr>
<tr>
<td>Sherman</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Saul Honingberg</td>
<td>1</td>
<td>119</td>
</tr>
<tr>
<td>Jersey Wrobel</td>
<td>1</td>
<td>119</td>
</tr>
<tr>
<td>Nathan Oyler</td>
<td>1</td>
<td>45</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>19</td>
<td>1,528</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term</th>
<th># Classes</th>
<th># Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/08–07/07</td>
<td>19</td>
<td>1,528</td>
</tr>
<tr>
<td>01/07–07/07</td>
<td>19</td>
<td>1,174</td>
</tr>
<tr>
<td><strong>% Change</strong></td>
<td>0%</td>
<td>23.17%</td>
</tr>
</tbody>
</table>
**Wimba:** (Course casting capacity/technology project)

<table>
<thead>
<tr>
<th>#Rooms</th>
<th>#Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/08-7/08</td>
<td>296</td>
</tr>
</tbody>
</table>

**Remedy Statistics**

1) **Support Issues - User Type**

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>1034</td>
</tr>
<tr>
<td>GRA/Work Study</td>
<td>41</td>
</tr>
<tr>
<td>Other</td>
<td>143</td>
</tr>
<tr>
<td>Staff</td>
<td>438</td>
</tr>
<tr>
<td>Student</td>
<td>611</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2267</strong></td>
</tr>
</tbody>
</table>

Remedy's default value for Contact Type is 'Student', so these numbers slightly underestimate the proportion of non-student users served.

2) **Support Issues - Software**

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackboard</td>
<td>1545</td>
</tr>
<tr>
<td>Digital Media</td>
<td>38</td>
</tr>
<tr>
<td>e-Instruction</td>
<td>31</td>
</tr>
<tr>
<td>Horizon Wimba</td>
<td>98</td>
</tr>
<tr>
<td>IP Network Videoconferencing and Streaming</td>
<td>1</td>
</tr>
<tr>
<td>Learning Objects</td>
<td>5</td>
</tr>
<tr>
<td>Listserv</td>
<td>375</td>
</tr>
<tr>
<td>LockDown Browser</td>
<td>1</td>
</tr>
<tr>
<td>Macromedia Contribute 2</td>
<td>1</td>
</tr>
<tr>
<td>Microsoft Office Suite</td>
<td>2</td>
</tr>
<tr>
<td>MoCAT</td>
<td>6</td>
</tr>
<tr>
<td>PeopleSoft</td>
<td>1</td>
</tr>
<tr>
<td>Respondus</td>
<td>13</td>
</tr>
<tr>
<td>SharePoint</td>
<td>29</td>
</tr>
<tr>
<td>SPSS</td>
<td>1</td>
</tr>
<tr>
<td>SSO</td>
<td>5</td>
</tr>
<tr>
<td>Tegrity</td>
<td>10</td>
</tr>
<tr>
<td>Turnitin</td>
<td>22</td>
</tr>
<tr>
<td>Other/Null</td>
<td>83</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2267</strong></td>
</tr>
</tbody>
</table>
3) Support Issues - Origin

<table>
<thead>
<tr>
<th>Support Issues: Origin</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct ITS Contact</td>
<td>2005</td>
</tr>
<tr>
<td>Call Center</td>
<td>173</td>
</tr>
<tr>
<td>Web Submission</td>
<td>89</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
</tr>
</tbody>
</table>

This grossly under-reports the number of issues that are escalated from the Call Center. Often ITS receives forwarded emails or phone calls from the call center which are not captured.

4) Support Issues - Department

<table>
<thead>
<tr>
<th>Support Issues: Department</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASC</td>
<td>467</td>
</tr>
<tr>
<td>BSB</td>
<td>62</td>
</tr>
<tr>
<td>CONS</td>
<td>13</td>
</tr>
<tr>
<td>LIB</td>
<td>10</td>
</tr>
<tr>
<td>SBS</td>
<td>21</td>
</tr>
<tr>
<td>SCE</td>
<td>38</td>
</tr>
<tr>
<td>SOD</td>
<td>442</td>
</tr>
<tr>
<td>SOE</td>
<td>101</td>
</tr>
<tr>
<td>SOL</td>
<td>14</td>
</tr>
<tr>
<td>SOM</td>
<td>52</td>
</tr>
<tr>
<td>SON</td>
<td>138</td>
</tr>
<tr>
<td>SOP</td>
<td>90</td>
</tr>
<tr>
<td>OTHER</td>
<td>126</td>
</tr>
</tbody>
</table>

Only 53% of tickets have a department associated with them, but the basic ticket proportions should be correct.

Listserver Usage

<table>
<thead>
<tr>
<th>Listserver Usage</th>
<th>Term</th>
<th>Number of Lists</th>
<th>Number of Subscribers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WS2006</td>
<td>637</td>
<td>120,420</td>
</tr>
<tr>
<td></td>
<td>FS2006</td>
<td>679</td>
<td>125,876</td>
</tr>
<tr>
<td></td>
<td>WS2007</td>
<td>643</td>
<td>125,895</td>
</tr>
<tr>
<td></td>
<td>FS2007</td>
<td>677</td>
<td>132,552</td>
</tr>
<tr>
<td></td>
<td>WS2008</td>
<td>712</td>
<td>139,405</td>
</tr>
</tbody>
</table>

Between February and the end of July 2008, we had almost 12,500 listserv postings sent out to 6.7 million email subscribers.
Podcasting: (Course casting capacity/technology project)
- Successfully completed 1 year podcasting pilot with Tegrity
- Produced a total of 243 podcasts with 3671 views
- Conducted student survey and received an overwhelmingly positive response from respondents
- Conducted one on one training sessions with instructors
- Featured in the University News
- Conducted analysis of project till date and developed a detailed executive report
- Negotiated non-standard one year contract with Tegrity
- Moved podcasting project out of pilot mode
- Attended Tegrity user conference

ePortfolios:
- Completed ePortfolio pilot with History program
- Implemented ePortfolio solution for Environmental Sustainability Cluster Course
- Introduced & Implemented ePortfolio solution for School of Dentistry
- Moved History ePortfolio project into post-pilot phase
- Approximately 200 students to use ePortfolio this Fall

eCalendar:
- Researched eCalendar solutions to replace current UMKC web calendar
- Completed licensing for Trumba Web Calendar
- Implemented calendar solutions for the Registrar’s Office, Admissions and the Student Life Office
- Anticipate implementation of central UMKC calendar and various departmental calendars in the next couple weeks.

Distance Education/E-Learning: (Course casting capacity/technology project)
- Conducted research/analysis of distance education programs at various universities across the country
- Researched possible distance education delivery mechanisms
- In the process of Analyzing educational content providers

Multimedia Outreach: (This is more of a IA as a whole achievement)
- Re-Implemented SCALA publishing system for digital displays
- Planned, Produced and Broadcast New Student Union Town Hall Meeting

The Academic Enhancement group within ITS worked on many UMKC high profile events and renewed its mission to assist instructors by using multimedia to improve course instruction. (Course casting capacity/technology project)
- Produced 18 animated segments for the 2008 Alumni Awards Dinner.
- Produced Human Rights Council videos.
- Conducted new Student Union podcast.
- Worked with School of Pharmacy to produce a series of audio PowerPoint teaching tools.
- Videotaped Son of “E.E.” Thompson for an informational program that explains the reason and man behind the Law Schools Thompson Courtroom.
- Working with Conservatory of Music to create distance education course using internet or DVD.
- Working with School of Nursing to create distance education course using internet or DVD.
- Produced “Your UMKC” animations for videos.
- Videotaped Michelle Obama for UMKC podcast.
- Videotaped numerous Linda Hall Lectures.
• Served as technicians on over a thousand hours of distance education courses.
• Hosted numerous video conference calls.

**Information Manipulation Services (IMS) Highlights (Goals 2, 3, 4)**

**February:**
• Completed the administrative site for the MDC eCommerce Web Application and it was moved into production.

**March:**
• Refined and enhanced the CE Application for Dentistry - to print out certificates for attendees that completed the Midwest Dental Conference.
• Began developing and programming an application for Alumni called eAlumni - to allow UMKC Alumni to register, update their information, and search for other Alumni.

**April:**
• Developed and programmed an application for Karen Schlabach - to list name, score, date, time, and course name of those students who passed one of four math entrance tests. The application was programmed to pull the data from Blackboard which the students used to take the test.

**May:**
• Continued to develop and program the eAlumni Application - working with the Alumni Office on web content and how information should be stored and transferred back to the Alumni database.
• Changed and enhanced the Survey Application used by various schools.

**June:**
• Continued to develop and program the eAlumni Application

**July:**
• Continued to develop and program the eAlumni Application
• Developed and programmed a Summer School Survey Application for new visiting students.
• Completed yearly changes for the Women’s Council Graduate Assistance Fund Application.
• Completed several grading queries for Doug Swink.

**Information Presentation Services (IPS) Highlights (Goals 1, 2, 3, 4)**

**Ecommerce:**
• Golf tournament with UMKC Advancement
• Fixed duplicated order problem for New Letters online subscription.
• Nursing conference NCC 2008 development and production
• Library Ecommerce site addition
• Communiversity online registration site development
• Crescendo 2008 online registration development.

**Web Development:**
• Backend programming for University Communication:
  • New Rotating photos template
  • New External Affairs Website
  • Press Release News Feed
  • UMKC Homecoming RSVP site
  • Expert Guide addition.
• Updated and maintained sites for provost office.
• Housing online application additions.
• Nursing Alumni Surveys
• Nursing Pat Kelly Surveys addition.
• Nursing Alta Vista Surveys
• Updated new fee schedule information for 2008-2009
• New Cashiers website
• HR Job posting site troubleshooting
• Degree site troubleshooting
• Department listing site troubleshooting
• UMKC RA website addition
Networking & Telecommunications
Goals and Objectives

Network Core and Building Electronics Lifecycle (Goals 1, 3, 5)
UMKCnet has over 300 routers, switches and other electronic devices that make it functional. These systems are replaced on a 5 to 6 year lifecycle plan to keep the network reliable, robust and maintainable with current hardware and software contracts. See Appendix for building by building electronics lifecycle status.

Critical Issues
- Network equipment connectivity is dependent on the campus fiber optic cable plant. This plant is aging and some of the older fiber may have to be replaced to support higher speeds like 10 Gigabit Ethernet.
- VoIP systems are dependent on the campus network and infrastructure for reliable operation. If funding is insufficient to keep UMKCnet equipment current both voice and data systems could fail.
- Projections based on Networking & Telecommunications budget at 2007 or higher levels with no additional projects or funding requirements that would use departmental hard dollars.
- 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.

IS Goals Supported:
- Physical infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Effectively and efficiently manage resources.
- Assessment of and responsiveness to campus information technology needs.

Age of Network Electronics
Network new buildings and Residence Halls (Goals 1, 5)
UMKC has a number of buildings planned including Oak Place Residence Hall (just completed), Oak Street West Phase II (breaking ground), a new Student Union (out for bid) and a soccer stadium (out for bid). Oak Street West Phase II will open for Fall Semester 2009 and the Student Union fall of 2010. All of these projects require extensive planning, engineering and staff time both before and during the buildings construction.

Critical Issues
- Some buildings UMKC is using a “Design Build” method which leaves out specific specifications often leaving out telecommunication, infrastructure and budget requirements.
- Additional students living on campus put a greater demand on campus resources. Specific to Information Services, network usage both wired and wireless, the load on the Internet connections which cost hard dollars to increase, Call Center support, trouble tickets and onsite visits to repair and trouble shoot issues, network security, etc. These projects include cost for cable plant and electronics but no additional resources for staff or ongoing maintenance of infrastructure.
- Projections based on Networking & Telecommunications budget at 2007 or higher levels with no additional projects or funding requirements that would use departmental hard dollars.
- Projections based on 2007 or higher staff levels. Building projects could not make deadlines for building openings with staff cuts or vacant staff positions for extended periods of time.

IS Goals Supported:
- Physical infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Effectively and efficiently manage resources.
- Assessment of and responsiveness to campus information technology needs.

Move Hospital Hill Fiber Optic Cable Off of Utility Poles (Goals 1, 3)
UMKC did have almost 3 miles of fiber optic cable strung on utility poles along Troost Ave. from the Volker campus to Hospital Hill. A Kansas City redevelopment plan required the removal of these poles so we were forced to remove our fiber optic cable in the summer of 2008. This fiber provided both voice and data connectivity between the two campuses. Over a six month period we gathered pricing information and quotes from every telecommunications carrier, cable company, fiber provider, utility company, boring contractor or anyone else we could think of that might provide some type of high speed connectivity between the Volker and Hospital Hill campuses. We have now worked out a deal for fiber strands but it will not be available for several more months. In the interim we have added another backup link between the two locations.

Critical Issues
- Quotes from providers ranged from $800,000.00 to 1 million dollars. Networking & Telecommunication does not have funds for this expensive of a project.
- If the new fiber is cut or damage we are dependent on someone else to fix it on their timeline.
- Current estimate on new fiber being live are early 2009. Until then if we have a failure the backup link is very slow and my not support some applications.

IS Goals Supported:
- Physical infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Effectively and efficiently manage resources.
- Assessment of and responsiveness to campus information technology needs.
Appendix

Wireless Coverage Map – University of Missouri-Kansas City
UMKC WIRELESS INVENTORY

<table>
<thead>
<tr>
<th>Devices by Vendor</th>
<th>Device Count</th>
<th>Average Monthly Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT&amp;T-Cingular</td>
<td>69</td>
<td>$3,461.00</td>
</tr>
<tr>
<td>Sprint PCS/Nextel</td>
<td>188</td>
<td>$10,728.00</td>
</tr>
<tr>
<td>T-Mobile</td>
<td>47</td>
<td>$2,929.00</td>
</tr>
<tr>
<td>Verizon</td>
<td>17</td>
<td>$1,312.00</td>
</tr>
<tr>
<td></td>
<td>321</td>
<td>$18,430.00</td>
</tr>
</tbody>
</table>

FY 07-08 Wireless Costs $221,160.00
February – July 2008 Accomplishments:
1. Internet connection speed increased from 90M to 110M.
2. Networking & Telecommunication staff attend over 570 hours of training during this reporting period.
3. Installed additional wireless access points in the Miller Nichols Library.
4. Upgraded the operating systems on over 250 network devices with the latest security patches and updates.
5. Staff member served as the campus building liaison representative.
6. Completed over 190 adds, moves and changes on the voice and data networks.
7. Responded to, solved and closed over 140 trouble tickets recorded in Remedy.
8. Installed over 290 Voice over IP phones.
9. Processed over 2.6 million calls through voice systems.
10. Staff member served on the campus recycle program committee.
11. Upgraded the operating system on all wireless access points (206) with the latest patches and updates.
12. Marked University buried cable plant locations around campus over 8 times during this report period.
13. Two Technicians passed the Beldon installers certification.
14. Installed backup network link to Hospital Hill.
15. Networked and installed electronics in new Oak Place Residence Hall.
16. Staff member served on the MOREnet Next Generation Network committee.
17. Repaired fiber optic cable cut to Nursing School.
18. Installed wireless access points in new Oak Place Residence Hall.
19. Staff member served on the Miller Nichols Library Building committee.
20. Finish infrastructure upgrades in the Bloch School of business.
21. Installed Impulse network access control in new Oak Place Residence Hall.
22. Batteries replaced in Newcomb Hall Uninterruptable power supply.
23. Serviced on the new Student Union building committee.
24. Assisted with the GENI project grant proposal.
26. Removed fiber optic off utility poles from Volker to Hospital Hill campus.
27. Upgraded Unity voice mail system from V4 to V5.
Security and Research
Goals and Objectives

Network Access Control / Authentication, Quarantine, Remediation
At this time we have limited ability to protect the network from un-patched or otherwise insecure guest machines. We need to move towards a model of being able to automatically allow secured machines into the network. We would also provide quarantine and remediation to insecure machines. We also need to be able to authenticate the ownership of machines attached to the network.

Critical Issues:
- Currently we have a similar technology in place in the Oak Hall and Cherry Street Residence Halls. The technology is still maturing, and we will likely need to use a collection of products to get the best solution for the campus.
- Policies defining machine requirements are needed, before this project can be successful.

Timelines for deployment:
- Review of technological solutions through June 2009. Allows time for technologies to further mature, and placement of initial critical policies.
- Completion of implementation by August 2010. Allows for implementation between semesters, and can match the new budget cycle if sufficient funding is not available sooner. It would be best to budget for August 2009 purchase, and phase in over the Fall semester for non-academic buildings, and Winter Break/Spring Break for academic buildings.

Data Leakage Prevention
As data classification is defined, and data protection policies are set, we will want to begin using technologies to enforce these protection policies. There is an emerging market of products which will protect against unauthorized disclosure of sensitive data at multiple levels of the network.

Critical Issues:
- Data classification policies must be created first.
- Data protection policies must be created.
- Protection can occur at the workstation, server, and network level.

Timelines for deployment:
- Review of technological solutions through June 2009. The market in this area is still immature technologically, and overpriced. As the technology and market matures, technology which would best fit in a University environment should become available.
- If a good solution is found by June 2009, implementation should occur through December 2009.

Security Awareness
We need coordination regarding security awareness, and data protection. Currently we have fragmented systems of training around sensitive data. We have groups providing FERPA training, groups providing HIPAA training, but we don’t have a holistic program to cover all security essentials.

Critical Issues:
- Web learning tools may be necessary to properly scale the delivery of this information.
- We should be working on uniform documentation for those who complete various types of awareness training. This will allow a person to change jobs/departments, and avoid having to re-take a training on the same subject manner.

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A life cycle on awareness training should be established. This is critical, as risks continue to evolve, and the way technology can be applied to information continues to change.

Timelines for deployment:
- Collect and review information on each group currently providing security related training. Complete by December 2008.
- Plan and implement security awareness supplemental training for groups already providing discrete training, so that trainees will be more likely to have consistent knowledge from these discrete training groups. Complete by December 2009
- Provide stand-alone training available to individuals who do not receive discrete training (i.e. HIPAA only/FERPA only), so that all users have an opportunity to receive network security related training. Complete by May 2010, and ongoing afterwards.

Security System Lifecycle
We will need to be able to upgrade and replace our security systems as they age out or hit their capacity limits.

Critical Issues:
- Our network IPS units typically run about $100,000 each. I am currently anticipating supplementing one unit in FY starting July 2008, and a second unit in FY starting July 2009. (The units currently in use will be moved to less critical lower-bandwidth locations.)
- Yearly support/maintenance costs continue to rise, and the addition of two supplemental units over the next two years will result in higher maintenance costs.

Timelines for deployment:
- Purchase of one $100,000 unit around August 2008 (to be part of FY starting July 2008)
- Purchase of one $100,000 unit around August 2009 (to be part of FY starting July 2009)
- There is a possible snag that there is a larger model to be released soon which may double the current cost per unit. If so, a consolidated buy of one unit in July 2009 would be the most effective. (combining the two FY funds together to make the purchase of the extra-capacity system.

February – July 2008 Accomplishments:

1) Provided handling of information security incidents as necessary.
2) Worked on the File Redirection Project to improve file security and improve workstation performance. This project is primarily for the student laboratories but may be expanded to include staff.
3) Started the conversion of smartcards to a more robust version. Expanded the use of smartcards to all staff which has an administrative role in the domain. Developed and documented the procedures for smartcard installations.
4) Worked with UMKC School of Dentistry on a review of the HIPAA audit they are conducting.
5) Received certification from GIAC for Incident Handling (GCIH).
6) Attended a Cisco training seminar on CS-MARS and ASAxxxx devices used on UMKCnet.
7) Researched Vista security and the impact of Vista Service Pack 1 on our environment.
8) Developed, planned, and deployed Vista Service Pack 1 in cooperation with Support Services.
9) Began research on virtualization project.
10) Installed and deployed the Foundstone appliance for a limited testing area (Administrative Center subnets).
11) Customized the management of firewalls to facilitate the integration of new applications. This service is provided to both Information Services and the IT Liaisons.
12) Began testing on the next generation of desktop computers for UMKCnet.
13) Researched the changes in Active Directory Group Policy for the Vista/Server 2008 architecture.
14) Worked with the UMKC School of Education on a customer relationship management (CRM) project. Worked in conjunction with Information Access on this project.
15) Researched Microsoft Dynamics CRM as a possible alternative for the SOE project.
17) Worked on setting up a highly secured workstation for a specialized research project at the UMKC School of Education (Tamara Murdock is the investigator). Worked in conjunction with Support Services on this project.
18) Assisted UMKC School of Dentistry in the set up and installation of 250+ computers as part of the renovation of the UMKC Dental Clinic.
19) Deployed new certification infrastructure as a joint project with Central Systems.
20) Installed Cisco gigabit switches in our office to improve connectivity with the data centers.
21) Deployed new domain controllers and processes for the Vista/Server 2008 architecture. Worked with Central Systems on this project.
22) Deployed a new management server and processes for the Vista/Server 2008 architecture.
23) Updated Windows Server Update Services (WSUS) to version 3.0 Service Pack 1.
24) Began testing of Sprint Mogul phones for campus use.
25) Re-installed the McAfee IntruShield manger.
26) Began vulnerability scans of the UMKC web sites using Watchfire AppScan.
27) Prepared for a new series of Remote Vulnerability Assessment (RVA) scans from MOREnet.
28) Worked with the FBI and the Cybercrime Taskforce on several issues.
29) Upgraded LANGuard to the latest version.
30) Upgraded Watchfire AppScan to the latest version.
32) Researched the possibility of developing an information security awareness program for campus.
33) Reviewed proposed changes in the FERPA regulations and how they might affect our environment.
34) Supported and managed the CCA system for use at the Residence Halls. This initiative is a joint operation with Support Services and Networking.
35) Researched the possibility of specialized training on Vista/Server 2008 Group Policy and how it pertains to managing Windows Firewalls. This training would be required for all smartcard users.
36) Tested Windows XP Service Pack 3, prepared for deployment, and deployed it in conjunction with Support Services.
37) Ran a specialized vulnerability scan of the vanity server using Watchfire AppScan. This scan was requested by Central Systems.
38) Conducted research on Linux as an adjunct for the Virtualization Project.
Support Services
Goals and Objectives

Make IT Support Services more accessible, visible and available to the campus community (Goal 2)

- Improve and expand online support and self-service tool availability, such as the KnowledgeBase@UMKC
  1. Added new content to the UMKC Knowledgebase detailing changes in technology, UM procedures and processes
- Improve residential student support experience by collaborating with new and current campus housing organizations
  1. Established a technical position to act as liaison with Student Affairs Housing and academic units who are sponsoring a growing number of summer conferences
  2. Worked with colleagues in Networking and Telecom to test and support an improved compliance management system for the residence halls
- Improve communication through extensive use of IS website, change management application and other tools
  1. Created numerous change management instances that provide detailed information on changes in the IT environment; select audiences are then notified of these changes.
  2. Developed a new RooTools 2008 CD for distribution to UMKC students
  3. Continually update IS website with new information including the addition of dynamic phishing updates, redesign of the lab reservations page as well as many other updates.
- Participate in campus events and activities and make services accessible to campus community
  1. Provided technical support services at numerous student orientations throughout the summer months, UMKC Healthfair, RooFairs, and various other UMKC sponsored events

Critical Issues:
- Construction on the Troost Street Bridge will block quick access to campus from the 4825 Troost Bldg, causing an increase in response times for desktop support requests, as well as exacerbating student/campus accessibility
- Funding for additional staff to meet growing demand for IT support services, security initiatives and other emerging technologies

IS Goals Supported:
- Provide user technologies and support that enhance and facilitate research, service, teaching and learning and economic development.

Increase IT’s efficiency in delivery of services (Goals 2, 3, 4)

- Expand use of Microsoft’s System Center Configuration Manager (SCCM) and other enterprise management tools so that software can be conveniently and efficiently deployed to campus machines
  1. Configured SCCM’s Operating System Deployment (OSD) feature and task sequences to deploy MS Vista images to UMKC lab
  2. Deployed and managed XP SP3 and Vista SP1 services packs to eligible campus workstations
3. Created 26 new SCCM software deployment packages
4. Deployed and managed (campus wide) patches for 9 unique, widely used applications (in order to eliminate known vulnerabilities)
5. Expanded use of SCCM to School of Computing and Engineering
6. Deployed new version of SPSS 16 to all users running v.15 and below
7. Updated site licensed software web pages to promote automated and remote installations
8. Assisted and trained numerous IT Liaisons on creating software installation packages and using new web tools through regular presentations at monthly meetings, documentation and one-on-one training sessions.

- Improve and expand online support tools
  1. Improved Workstation Replacement ordering and reporting websites
  2. Created customized web tools for IS staff and IT Liaisons to efficiently manage computers and software

- Propose, develop and publish IT support policies, guidelines and procedures to support best practices
  1. Coordinating new policy and procedures to establish a maintenance window to keep UMKC computers updated and more secure
  2. Worked closely with UM and Registrar’s office to implement new procedures and train team to support Pathway
  3. Worked with Human Resources to create a welcome email that provides new employees with key information on UMKC

- Reduce hardware and software costs (where possible) by consolidating orders and collaborating with other UM campuses
  1. Business technology experts consulted and purchased $412,207.82 in hardware (approximately $100K more than last year) and $83,662.44 in software at the lowest possible costs for various campus departments during the past 6 months.
  2. Consolidated AutoCAD licenses with other UM campuses resulting in annual savings of $7,945.
  3. Saved $5,500 by moving JMP user base over to SAS
  4. Coordinated the purchase, consolidation and installation for over $100K worth of specialized lab hardware and software upgrades in Arts & Sciences.

- Collaborate, exchange ideas and expertise with UM counterparts
  1. Met with UM Support Directors on a quarterly basis to share and leverage knowledge and systems
  2. Attended February Helpdesk collaboration meeting with other UM Call Center managers
  3. Collaborated with UM-IT to deliver several end-user training sessions on MS Office 2007 and MS Vista
  4. Worked with UM Procurement to learn and use new eProcurement system to order equipment and software. This allows for quicker processing and immediate payment of larger invoices.
  5. Met with UM counterparts and computing vendors quarterly to review computing standards and costs

**Critical Issues:**

- Funding for replacement of computing equipment falls short of need, thus leaving obsolete technology on the network
- Funding for technical training falls short of need
- A few departments will not use standardized management tools such as SCCM, thus creating inefficiencies for asset management and deployment of software
IS Goals Supported:

- Provide user technologies and support that enhance and facilitate research, service, teaching and learning and economic development.
- Effectively and efficiently manage resources.
- Communication, documentation and resources use that is accurate, understandable and accessible.

Improve campus computer lab experience and resources where possible (Goals 2, 3)

- Update lab facilities and create new collaborative student work spaces where possible
  1. Completed new agreement with Place Properties to manage six computing labs for students residing in residence hall
  2. Working with Nursing on a new testing lab facility
  3. Reviewed assistive technology software in student computing labs
  4. Tested and implemented new Group Policy changes in all IS labs/ILE systems to reduce login times by about fifty percent
- Align lab hours to better meet academic needs
  1. Adjusted lab hours periodically throughout the semester to address needs

Critical Issues:
- Insufficient resources to fund more modern labs
- Insufficient space on campus

IS Goals Supported:
- Effectively and efficiently manage resources.

Effectively and efficiently manage resources

- Expand efforts to comply with “green” computing initiatives including energy reduction and recycling.
  1. Worked with technical staff to recycle as much packaging (cardboard/Styrofoam) as possible
  2. Actively participate on Campus Sustainability committee
  3. Adjusted configuration settings on standardized image to take advantage of new power management features where possible

- Provide advanced technical expertise and services to UMKC academic units, IT Liaisons and UMKC departments
  1. Completed an agreement with Schools of Nursing and Pharmacy; established a new technical position on Hospital Hill to support ILE classrooms, multi-media equipment and labs
  2. Provided backstop technical support to School of Biological Sciences and others when departmental IT person was unavailable
  3. Provided advanced technical support and troubleshooting techniques on various technologies including Windows Vista, imaging, SCCM, Apple Remote Desktop, Tegrity, etc. to support campus initiatives
  4. Assisted Dental School with multiple facets of a large coordinated project to replace hundreds of clinic and other computers on Hospital Hill campus
5. Assisted Student Health Center with evaluation and selection of electronic medical records systems
6. Coordinated the Dell Warranty Parts Certifications for all UMKC support technicians

Critical Issue:
- Funding for necessary resources may not be available

Communication, documentation and resource use is accurate, understandable and accessible

- Changes to IT resources are organized, timely and well-communicated
  1. Updated IS website with additional content including, remote desktop documentation, MS Office 2007 training, Impulse SafeConnect, VPN Remote Access and summer conference information.
  2. Chair IT Liaison meetings; provide regular updates and presentations on initiatives on IT initiatives, vendor updates, etc. Arrange for guest speakers. Document meeting highlights and post for IT Liaisons.
  3. Hosted several UM meetings at UMKC to demonstrate System Center Configuration Manager implementation. Also presented information on pre-requisites to deployments, overcoming obstacles, various web tools and best practices.
  4. Improved communications with Campus Facilities Maintenance, Campus Police, and IS Operations and Administration by creating standardized procedures, forms, and reports when reporting on IS lab information.

February – July 2008 Accomplishments:

- Prepared new server for KC-Print replacement. In the process of updating drivers so that a phased migration of print queues can commence this fall
- Provided numerous reports on IT assets, departmental labs, software, etc.
- Installed and configured more than 300 computers for 52 departments during Workstation Replacement.
- Published new or updated internal technical documentation for Terminal Services Gateway, VPN Remote Access, PocketPC Quick Guide, CertiPort, TitaniumSchedule and many aspects of KCUR support, including DAD, Shoutcast, Allegiance and others.
- Installed nearly 300 memory module upgrades in support of the Office 2007 and Vista project.
- Staff earned the following professional IT certifications:
  - Microsoft Certified IT Professional: Enterprise Support Technician certification.
  - Microsoft Certified Technology Specialist: Windows Vista Configuration certification.
- Evaluated the effect of numerous security and other important patches and updates prior to campus-wide deployments,
- Resolved 2527 desktop support requests, including 368 that were critical in nature.
- Renewed site licenses for AutoCAD, EndNote, ListServ, Maple, Respondus, SAS, SPSS, Symantec Ghost, etc.
• Setup the following labs/kiosks
  ▪ 2 new printers for Cherry Dorm Lab
  ▪ 3 new kiosks for Oak Hall
  ▪ 16 seat computer lab in Fine Arts 307
  ▪ 4 seat computer lab in Oak Place
  ▪ 12 new computers for the EMAS lab

• The Call Center responded to 10,664 support requests, resolving 8,764 tickets and escalating 1900 tickets. The Call Center's first-call resolution rate was 82%.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Total Number of Call Center Support Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 &amp; Q2 2006</td>
<td>8459</td>
</tr>
<tr>
<td>Q3 &amp; Q4 2006</td>
<td>10175</td>
</tr>
<tr>
<td>Q1 &amp; Q2 2007</td>
<td>12102</td>
</tr>
<tr>
<td>Q3 &amp; Q4 2007</td>
<td>11120</td>
</tr>
<tr>
<td>Q1 &amp; Q2 2008</td>
<td>10644</td>
</tr>
</tbody>
</table>

The chart above reflects overall support requests (18,710) fielded by IS Support Services including the Call Center between January 31 and July 31, 2008.

Customer satisfaction continues to grow as well. The following chart represents customer satisfaction data collected from surveys closed by IS Support Services for the period of January 31st, 2008 through July 31st, 2008:
- Maintained operations in eight IS-managed general use student computer labs, one restricted access lab, and two associated classrooms. Over 9,000 people used these sites during this time:

<table>
<thead>
<tr>
<th>Lab Name</th>
<th>Individuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bloch School of Business 110</td>
<td>1,968</td>
</tr>
<tr>
<td>Cherry Street Residence Hall</td>
<td>549</td>
</tr>
<tr>
<td>Health Sciences 3304</td>
<td>1,090</td>
</tr>
<tr>
<td>Miller Nichols 3rd Floor</td>
<td>3,193</td>
</tr>
<tr>
<td>Royall Hall 303, 304, and 314</td>
<td>5,038</td>
</tr>
<tr>
<td>School of Education 129</td>
<td>2,457</td>
</tr>
<tr>
<td>University Center B17</td>
<td>1,924</td>
</tr>
</tbody>
</table>

- Tracked 2,076 questions, of which 358 were escalated: a first-contact resolution rate of 83%.
- Screened 52 applicants, interviewed 34 prospective new hires, and hired 14 new Student Assistants for IS-managed labs.
- Processed over 7,500 shifts and supervised over 20,000 Student Assistant man-hours.
- Supported student printing needs by keeping supplies on hand and printers ready for use. Over 350,000 print jobs were successfully printed in IS-managed general student use computer labs, totaling over two million pages.
- Completed renewal of Apple Alliance Support Agreement
- Helped to test and evaluate Microsoft’s Live Mail
- Completed IS-SS report on space utilization