



## **INFORMATION SERVICES 5 Year Goals and Objectives July 2009 – June 2014**

### **Mission:**

**We are a strategic asset for UMKC's missions of: Teaching and Learning, Research, Service, and Economic Development.**

### **2014 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 on the following two pages.**

### **2009 IS Project List and Point Person:**

- ILE Hybrid Classroom Integration – Guggenmos/Classroom Technology Services**
- Infrastructure improvement (building cabling) – Johnston/Telecomm & Networking**
- VOIP rollout – Johnston/Telecomm & Networking**
- E-learning Initiative – Goodenow/Information Access**
- Expansion of wireless coverage – Johnston/Telecomm & Networking**
- Disaster Recovery – Schonemann/Networking**
- Email Migration – Schonemann/Networking**
- Server Virtualization – Schonemann/Networking**

**Details on each of the above projects can be found in the individual sections for the responsible department.**

## **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.**

- Restructure Classroom Technology Department to adequately support the ILE Classroom systems and campus AV projects
- 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

## Educational Technology Services

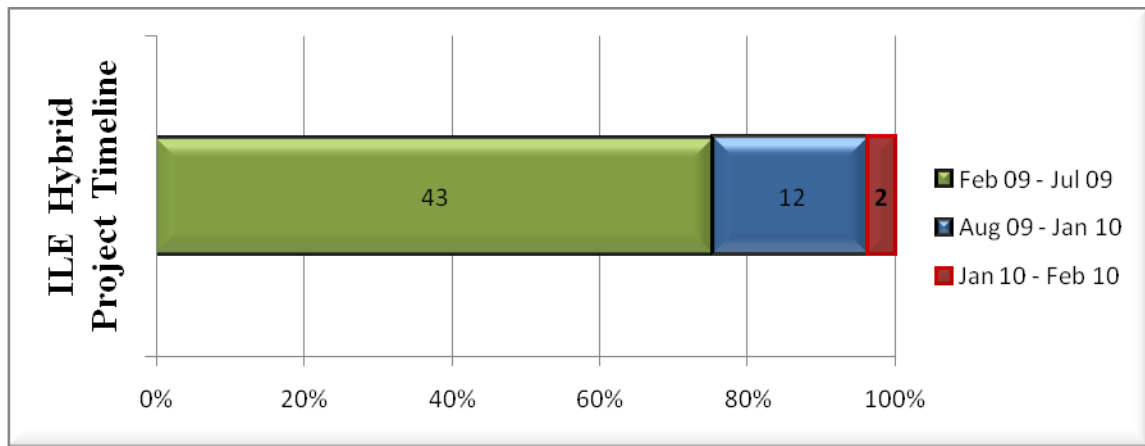
### Goals and Objectives Update

#### August 2009 – January 2010

#### ILE Hybrid Classroom Integration (Goals 1, 2, 5)

The Hybrid project started in early February 09 when 62 classrooms were selected for ILE AV upgrades. The project was broken into two phases. Phase-1, scheduled to run through June of 2010, consisted of upgrading 51 classrooms, currently without integrated AV. Phase-2, scheduled to run from July 2010 through December 2010, consists of upgrading 11 classrooms currently with limited ILE systems.

During this review period, upgrades have been completed in all 51 of the phase-1 classrooms and in 4 of the phase-2 classrooms. This has increased the number of UMKC ILE classrooms from 67 to 122. Also during this period, five Katz Hall rooms were removed from the Hybrid project and scheduled for completion during summer of 2010 as a result of pending Katz Hall building renovations. This has changed the overall room count for the Hybrid project from 62 to 57. We plan to complete upgrades in the two remaining classrooms by April 1<sup>st</sup>, 2010, completing the ILE Hybrid Project 8 months ahead of schedule. Upon completion of the five Katz Hall classrooms this summer, we will have added 62 ILE classrooms in 15 months.



#### Critical Issues:

- Additional funds are needed on a yearly basis. As we add additional classrooms, our maintenance/lifecycle pool funds will be stagnate and insufficient to maintain a 3 year lifecycle on all of the system components.

#### 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)**

This review period was used as a “soak in” period for our department to adapt to recent organizational structure changes. I feel the new AV Supervisor and Designer have acclimated to our department, its operational process as well as the culture of the University. We are noticing an improvement in work flow as a result of these changes and are quickly gaining ground towards supporting custom AV projects without impacting support.

The decision to employ part-time staff to cover the early morning maintenance and functionality testing has proved to be a wise choice. We are now able to check all of our classroom systems daily at a fraction of the cost of FTE. We are also seeing a reduction in trouble tickets. As a result, we are considering shifting one FTE staff member to the normal day shift to be available for support and project work during the busier hours of the day.

During the next review period, we will analyze the need to fill in technical staff to formalize the division between the two support groups. Currently, technical staff is floating between groups on a daily/task basis: ultimately we plan to have dedicated staff for each area.

### **Critical Issues:**

- It is difficult to ensure that the entire campus receives equal levels of support with the geographical boundaries that exist. This might require additional FTE in some of our remote locations.
- It is difficult to allocate adequate time for quality cross training due to the density of our project load.
- Technology changes so rapidly that keeping staff trained and skilled 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 awareness and feedback surrounding the ILE Classroom systems (Goals 2, 3, 4)**

During this review period we conducted several one-on-one ILE user training sessions with faculty. We continue to work with the Registrar's office to assist in marketing ILE user training to faculty at the start of classes. During the next review period, we plan to partner with ITS to provide ILE user training in conjunction with their Instructional Technology classes. We have added additional ILE related questions/answers to the Right Answers Knowledge base. We have updated information about ILE classrooms on our website and will continue to maintain its accuracy. Lastly, we are working on revising our ILE survey to cover new systems installed and plan to send it out once a year during the fall semester.

### **Critical Issues:**

- Some resources we plan to augment are web based. Currently, we do not have staff with expertise in this field.
- Some faculty and student requests are difficult to incorporate/consider on an enterprise scale.
- It is difficult to maintain system standardization when requested changes are not consistent for all ILE classrooms.

### **Ongoing Action Items:**

1. Continue to update and post training manuals for ILE systems
2. Continue to market ILE user training at the start of every semester through Registrars office and ITS
3. Continue to develop ILE content for the knowledge base. Review and add content as needed
4. Evaluate ILE classroom design continuously, taking into consideration 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 for staff (Goal 5)**

Professional Development goals have been identified and included in each staff member's performance evaluations. These goals are reviewed bi-annually. Training materials have been purchased to allow for more in-house training to reduce budget expenses. We have various required training seminars and campus-offered training events scheduled for staff this year.

### **Critical Issues:**

- It is difficult for our staff to find time to work on their professional development skills. When needed, some staff might need to work on developing these skills during their personal time.
- Allowing staff to attend training during working hours impacts our level of service.

### **IS Goals Supported:**

- Effectively and efficiently manage resources.
- Continuous improvement in facilities, service and professional development.

## Individual Educational Technology Services accomplishments this period –

### Departmental Items

1. Completed **\$306,452.04** of AV projects during this review period.
2. Converted morning maintenance and functionality testing of ILE systems to be covered by PT staff and added four PT AV Technicians to the team.
3. Completed ILE Classroom and projector maintenance during break.

### System Projects

4. Serving on New Student Union Technology Committee – Justin Guggenmos
5. Serving on MNL Library Expansion Committee – Justin Guggenmos
6. Attended regular Campus Facilities Project Review meetings – Justin Guggenmos

### Completed Projects

7. Completed – School of Dentistry Classroom renovations; AMX programming for additional classrooms.
8. Completed - Chancellor's Focus Room – Custom system; Full ILE, Satellite, Four 52" touch overlay LCD, custom analytical software. (Lifecycle cost - \$53,233.44)
9. Completed – SON NHSB 3301 Retrofit for student desk microphones. (Lifecycle cost - \$103,982.84)
10. Completed - SOM MG-200 METI MAN – Custom system; Partial ILE, 6 monitoring stations with HD recording capabilities. (Lifecycle cost - \$61,172.24)
11. Completed – A&AH Travel Projector. (Lifecycle cost - \$745.00)
12. Completed – CCAS Counseling Rooms Upgrade – new DVR/VCR, 10" preview monitors. (Lifecycle cost - \$905.25)
13. Completed – SON Conference Rooms (NHSB 2327 & 2418) – Full ILE capable conference rooms. (Lifecycle cost - \$54,459.10)
14. Completed – UC Barber Shop – LCD and Satellite service installation. (Lifecycle cost - \$767.01)
15. Completed – Johnson Hall Room 008 – Full ILE Classroom. (Lifecycle cost - \$23,922.39)
16. Completed – Johnson Hall Lobby Signage – LCD signage installation. (Lifecycle cost - \$5,077.77)
17. Completed – 5306 Holmes Room 201 – Audio upgrade. (Lifecycle cost - \$298.58)
18. Completed – 5317 Holmes Room 207 – Partial ILE installation (Lifecycle cost – \$1,888.42)

### Current Projects – Implementation Phase – (\$108,622.56)

19. Ongoing - ILE Hybrid Project – 96% complete (55 of 57 rooms), project completion est. of February, 2010
  - SOE – 13 systems installed
  - BS – 5 systems installed
  - LS – 2 systems installed
  - BSB – 1 system installed
  - SRC – 3 systems installed
  - CH – 3 systems installed
  - RH – 3 systems installed
  - GH – 6 systems installed
  - PAC – 2 systems installed
  - FH – 6 systems installed
  - HH – 2 systems installed
  - SOM – 2 systems installed
  - NHSB – 2 of 4 systems installed
  - NLD – 5 systems installed
  - KP – 4 systems removed from project



20. Ongoing – Law School Room 028 – Multi-purpose Courtroom/Classroom; 90% complete. (Lifecycle cost - \$76,738.57)
21. Ongoing – Law School AV Distribution – Capability to link rooms 02 – 05 for AV distribution and recording. (Lifecycle cost - \$4,148.80)
22. Ongoing – Miller Nichols Library Room 121 – ILE Classroom Conversion/Upgrade; 90% complete. (Lifecycle cost - \$23,235.19)
23. Ongoing – 700MHz Microphone Replacements – 10 locations need wireless microphones replaced. (Lifecycle cost - \$4,500.00)

Current Projects – Design/Planning Phase – (\$704,556.29)

24. Planning – Flarsheim Hall room 310 – Distance Education Classroom – JOC build by KBR. (Est. Lifecycle cost - \$112,556.29)
25. Planning – New Student Union – Designing 13 ILE systems and 17 LCD digital signage locations; reviewing possible solutions for IP video/cable distribution system. (Est. Lifecycle cost - \$458,000.00)
26. Planning – Katz Hall Renovations – Updating/Refreshing 3 existing ILE Classrooms; installing 5 ILE Hybrid Classrooms; designing 2 custom rooms. (Est. Lifecycle cost - \$134,000.00)



## **Information Access Goals and Objectives Update August 2009 – January 2010**

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Efforts of the Information Access Division during the period August 2009 through January 2010 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)** significantly expanded the usage of Tegrity, Wimba and Moodle during the Fall Semester 2009. Blackboard interest from new faculty remained high. The University eCalendar continues to expand.

**Information Manipulation Services (IMS)** spent resources and time on large projects for the School of Dentistry, Conservatory, Bloch School of Business and School of Law. The IMS group started account cleanup processes for SSO and email management. Scanning and Printing completed hundreds of projects for groups across campus.

**Information Presentation Services (IPS)** continued to create a high quality web development UMKC. Highlight projects during this time period included e-commerce projects and the introduction of a WordPress server to campus.

Information Access 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)**

#### **Projects, Research and Development, and Personnel**

##### **Podcasting:**

- Successfully completed two years of the Tegrity Podcasting project.
- Users have grown from 15 instructors during the FS 2007 semester to approximately 76 instructors during the FS 2009 semester
- Created 1508 recordings between August and December 2009
- Recordings were viewed approximately 44,294 times

##### **ePortfolios:**

- Completed two years of ePortfolio administration
- Continued successful usage by the History and Dental Hygiene departments
- 78 active Dental Hygiene accounts
- 111 active History accounts

#### eCalendar:

- Successfully implemented & administered UMKC calendar
- Currently support 35 calendars that feed into the main UMKC calendar
- Approximately 44,000 views in the months of September, October, November and December (I am basing this on last month's data J)

#### Media Outreach:

- Converted and published courses to UMKC's YouTube channel with the assistance of the Physics Department – Four courses currently available
- Converted and published courses to UMKC's YouTube channel with the assistance of the Math department and UMKC VSI – Two courses currently available
- UMKC's YouTube channel is currently among the top 70 most popular EDU channels of all time

#### **KHEN 17 & KCEN 18 / Cable TV: Educational Access Networks:**

We have made significant efforts to improve the quality and number of shows airing on our stations. Currently, there are around 75 unique shows with multiple episodes stored within our archives. Close to 60 hours of our shows come from local programming produced within the Kansas City area and around 475 hours of unique programming is shown each month. Our shows span a wide range of educational topics including: college classes, poetry discussion, local events, classic arts, NASA, various types of music, world events, cooking, fine arts, home improvement, gardening and piano instruction. We currently have satellite feeds that provide us with Classic Arts Showcase and NASA Public TV feeds, and we are currently looking into acquiring the equipment needed to receive satellite feeds from LinkTV as well as Deutsche Welle. Station ID improvement is also beginning to manifest.

#### Usage Data

#### **Blackboard**

Reporting Period: August 2009 through January 2010

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Total ITS-related tickets for reporting period: 3059

ITS-Related Tickets: Resolved By	
Department	Number
Information Access	2242
Support Services	815
Central Systems	2
Total:	3059

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(Data after this point excludes tickets resolved by departments other than ITS)

<b>Support Issues: By Role</b>	
<b>Role</b>	<b>Percentage</b>
Faculty	44.29%
GRA	2.81%
Staff	15.75%
Student	33.94%
Other	3.21%
Total:	100.00%

<b>Support Issues: By Origin</b>	
<b>Origin</b>	<b>Percentage</b>
Direct ITS Contact	74.75%
Support Services	14.01%
Web Submission	11.24%
Null/Other	0.00%
Total	100.00%

<b>Support Issues by Software</b>	
<b>Software</b>	<b>Percentage</b>
Blackboard	68.60%
Digital Media	1.34%
e-Instruction	1.96%
Learning Objects	1.65%
Listserver	11.78%
LockDown Browser	0.04%
Moodle	1.43%
Needs Consulting	0.04%
Respondus	0.31%
SharePoint	1.87%
Tegrity	1.29%
Turnitin	1.12%
Wimba	4.95%
Other	2.59%
Null	1.03%
Total	100.00%

<b>Support Issues: By Department</b>	
<b>Department</b>	<b>Percentage</b>
Arts & Sciences	29.84%
Bloch School of Business	5.28%
Conservatory	1.35%
School of Biological Sciences	2.38%
S. of Computing & Engineering	3.32%
School of Graduate Studies	0.10%
School of Dentistry	9.02%
School of Education	7.88%
School of Law	1.04%
School of Medicine	6.84%
School of Nursing	12.23%
School of Pharmacy	5.08%
Libraries	1.87%
Non-Academic Departments	13.78%
Total	100.00%

Department data was only reported in 43% (n = 966) of support tickets.

#### **eInstruction**

<b>EINSTRUCTION 08/09--01/10</b>			
<b>INSTRUCTOR</b>		<b># Students</b>	<b># Classes</b>
Belden-Adams	Kris	44	1
Fairley	Joy	90	1
Ferrari	Michael	276	1
Flowers	Kara	82	2
Geisbrecht	Erika	178	1
Gounev	Andrea Drew	154	1
Gounev	Todor	248	1
Honigberg	Saul	122	1
King	Stephen	649	3
Lee	Kristin	160	2
Lindholm	Lyla	43	1
Lynn	Jolene	78	1
Lyon	Cary	53	1
Marte	Ricardo	120	1
Roberts	Cristy	84	2

Sherman	Marne	132	3
Singh	Gurmukh	67	1
Stanley	Leah	68	1
Stoddard	Elizabeth	156	2
Temm	Wanda	20	1
Thompson	Mikah	21	1
Vaught	Wayne	195	1
Wrobel	Jerzy	33	1
<b>GRAND TOTAL</b>		<b>3073</b>	<b>31</b>

<b>PERIOD</b>		<b># Students</b>	<b># Classes</b>
08/09-01/10		3073	31
08/08-01/09		2743	30
<b>% Change</b>		<b>12.03%</b>	<b>3.33%</b>

### Wimba

<b>WIMBA VOICE</b>	<b>Created 8/09-1/10</b>	
Presentations	10	
Board	80	
Podcaster	80	
Email	80	
Announcements	200	

<b>WIMBA CLASSROOM</b>		
<b>Period</b>	<b># Rooms</b>	<b># Users</b>
08/09-1/10	692	13532
08/08-1/09	360	6635
<b>% Change</b>	<b>92.22%</b>	<b>103.95%</b>

### Learning Objects

<b>LEARNING OBJECTS</b>	<b>Total #</b>	<b># Entries</b>
Blogs	501	14681
Expo	2683	47
Podcasts	unknown	unknown
Wikis	1037	14154

## Listserver Usage

Listserver Usage		
Term	Number of Lists	Number of Subscribers
WS2006	637	120,420
FS2006	679	125,876
WS2007	643	125,895
FS2007	677	132,552
WS2008	712	139,405
FS2008	705	169,048
SP2009	759	158,949

## SharePoint

UMKC has 140 sites running for faculty, staff and research purposes.

Total unique users: 1045

Anticipated change in demand: One site in 2007, 52 sites in 2008 and 72 in 2009. 13 new sites in 2010 year to date.

SharePoint sites		
Number of Sites	Year	% Change
1	2007	
52	2008	98%
72	2009	27%
13	2010	20%
Total Sites =138		
Total Unique users	1045	

SharePoint offers UMKC faculty, staff and department a unique place to share information such as share data, Outlook calendar, meetings, workflow etc. UMKC offers two types of SharePoint sites, one for password protected and other for public domain.

## Maestro

Software to track URL sent via email. Created 16 accounts.

## Listserv

Between August-1 and the end of January 2010, we had almost 17,161 listserv postings which went sent out 6.2 million emails to subscribers.

Number of lists: 832

Number of subscribers: 181,870

**Moodle**

25 active course sites, four test/sandbox sites and one organization site. 50% of the sites are actively used.

**Information Manipulation Services (IMS)**

- Special Accounts Tracking site was updated by adding a mandatory “Reason for Need” and “Expiration Date” for each special account.

**Scanning:**

Tests Scanned:	594
Questionnaires Scanned:	4
Departments Served:	25
Course Evaluations Scanned:	9131
Departments and Schools Served:	6

**Exchange Account Management:**

Deletion notices sent out for weekly faculty/staff termination list and accounts terminated and appeals processed.

**Special Accounts database clean-up project:**

Active status confirmed on an account by account basis for hundreds of accounts; others slated for deletion. Over 2000 accounts involved.

**SSO Forms**

SSO forms generated and printed for ISAO on a daily basis.

**Web Development**

- Moved UMKCAnnoucement and PublicRelations database from old server to new server kc-issrv-mssql1
- Public Relations: moved Experts Guide from old server to new server kc-issrv-mssql1

**Information Presentation Services (IPS)****Ecommerce**

1. Converted Communiversity eCommerce site to the new look and feel.
2. Converted UMKC donation site to the new look and feel.
3. Updated donation site for UMKC Foundations.
4. Event Registration went production.
5. School of Nursing National Clinical conference registration set up.
6. Counseling Center: The Central College Health Association annual conference registration setup.
7. School of Nursing: Bancroft program online registration set up.
8. Update Communiversity for Spring 2010 courses.
9. New Letters updated for new year.



## Web Development

- Job Self Identification for Diversity  
<http://dev.umkc.edu/ia/misc/kirk/JobAppSelfID/JobAppSelfID.aspx>
- Researched search engine solutions to upgrade the UMKC search experience and forwarded findings to the UMKC Web Liaison Group.
- Continued to plan and lead the Web Liaison Group.
- Developed a new downloadable virtual tour and virtual tour website (Maybe more IPS).
- Fixed listserv online request form.
- International academic programs: fixed broken pages, created SQL database to replace access, built online admin site to update data.
- Created rotate photo module for Blackboard home page.
- Worked with Web Tracking Group on Google Analytics.
- Built UMKC home page alert message and alert image admin.
- Law School: request for information online form and admin site.
- CTS: Collaboration Calculator and admin site.
- UMKC Outreach website set up.
- School of Education: updated TEApplication for new semester, help set it up on the new server.
- Created emergency message controller for student affairs home page.
- Build common used asp.net sample pages for new programmers.
- Fixed broken pages for AZ index.
- Fixed slide show problem for Blackboard homepage.
- Added optional audio/video irons to feature stories and home page slide show for PR.

## **August**

Collaborated with MU on getting an application up and running. The application was a ColdFusion 8 application developed and written by the University of California – Berkley. Some minor tweaks were needed in the code to have the application function properly for our campus.

Did some debugging for MU on the UCReady application. They had some login issues with Columbia and UM users. Columbia need to go against one LDAP and UM needed to go against another LDAP. I rewrote the ACCESSLDAP.CFC file to accommodate that situation.

Created a data extract for Grades First. The file was an extract of student athletes from PeopleSoft.

Rewrote several Blackboard queries to select instructors who's appointment doesn't start until 9/1.

## **September**

Created a poll application for the Bloch School. The Bloch School creates a poll on their website and I capture that information in a database. On their poll, there is a link where you can view the results of the poll. Those results are created using the information from the database and a ColdFusion product called Fusion Charts. The results of the Fusion Charts are displayed as a bar chart within a pop up window.

Implemented the LDAP authentication for the UFirst web site. I also wrote the logic to determine the user logging was a student or faculty/staff before they were transferred to the MapWorks site.

I moved the training session registrations over to the UFirst web. A user can sign up for training sessions for MapWorks on the UFirst site. Administrators can add/delete/update training sessions and view registrations all within the UFirst web site.

Developed an FTP file upload site for ITS. Users wanting to upload files for use by ITS can upload their files using this web page.

Redesigned the NSC site for the Registrar's office. The site now requires a login before being directed to the NSC site.

## **October**

Worked with Columbia on updating their UCReady ColdFusion application. I implemented LDAP into the code so that any campus could login.

Created a course proposal web form for Communiversity. I worked with Rick Mareske on creating the form and how they were to use it.

Made a change to the Bloch School Real Estate application to include/exclude QuikPay processing. They wanted to use the same site for free events without ecommerce processing and collection of payment.

Worked with Wayne Brown of Pharmacy to make some changes to his Access database/application. He needed some field changes within a few tables/forms/reports. This was something that Joe had done for him in the past.

## **November**

Imported courses for several schools. The courses are used for Instructor evaluations.

Worked with Columbia on branding their UCReady ColdFusion application. I went through the whole application and replaced "UC Ready" text with "UM BCM" text. This took about 2 days worth of time.

Created a booth web form for Communiversity. I worked with Rick Mareske on creating the form and how they were to use it.

Started updating the A&S Election application to work out any problems that had from last year.

Rewrote the code in the “Lookup” folder to be Cold Fusion. Once of the pages also uses AJAX binding to populate a couple of drop-down lists reading from a database. The page doesn’t reload doing it this way.

Created a Suggestion Box web page for Bill Marse.

## **December**

Made major enhancements to the Dentistry’s MDC ecommerce Web application.

Created a web application for Dentistry’s MDC conference that allowed registrants to download handouts for that conference.

Created an ecommerce application for Kevin Mc Cluskey in Biological Sciences. The application is used for an FGSC conference that is held every year.

## **January**

The enhancements to the Dentistry’s MDC ecommerce Web application was completed and moved into production.

I made some enhancements to the Electronic Travel Grant System for Jakob Waterborg since this application was being brought back online again.

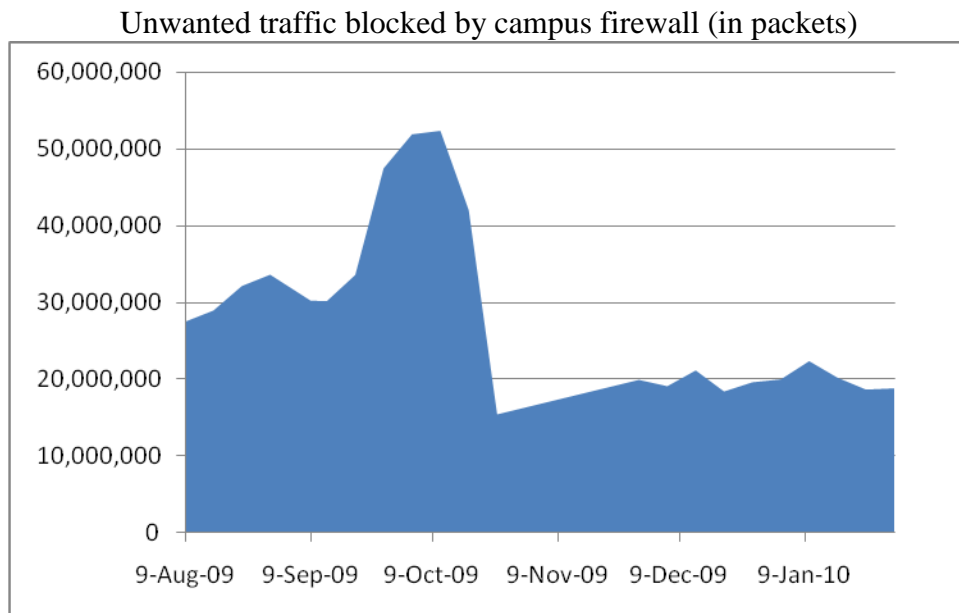
Created an application for Conservatory. This application a supplemental application for Conservatory Admissions. It piggy backs on to the UMKC Admissions application that was written by UM. Conservatory needed additional information when a student filled out the Admission application so a supplemental application was created to obtain that information.

Generated the SB389 download file for faculty evaluations. Spent a couple of hours massaging Conservatory’s data so that the data could be imported into my tables.

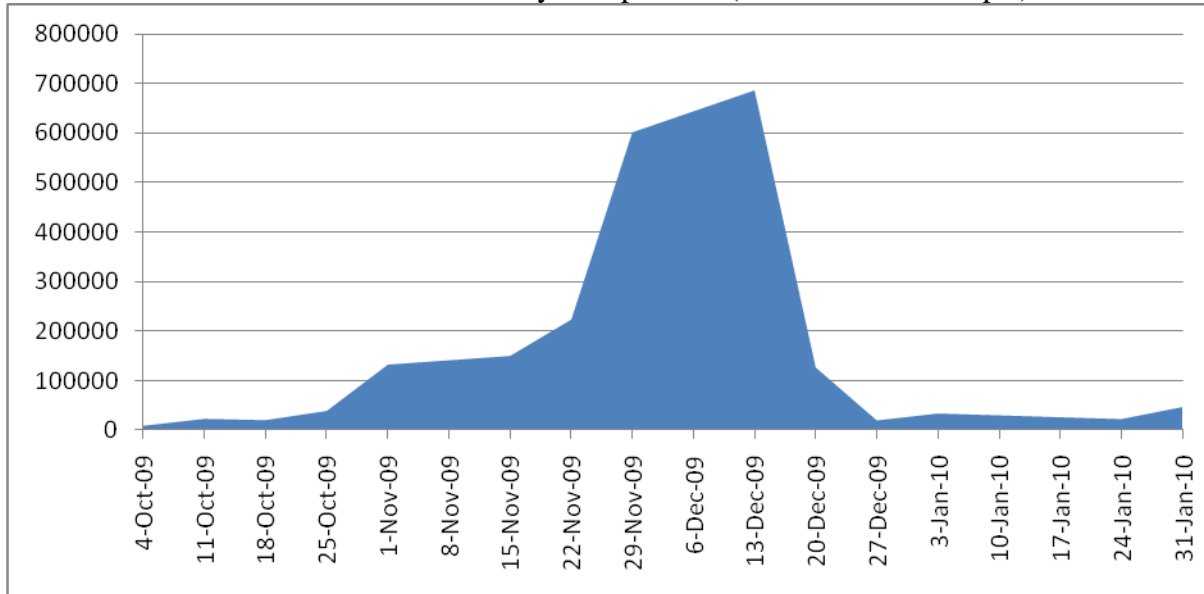
Created a web application for the Registrar’s Office. The application is a web survey application for generating results concerning their new web site.

## Network Security Goals and Objectives Update August 2009 – January 2010

1. Provided handling of security incidents
2. Trained on Virtual Server security
3. Training renewal on SANS Security Leadership
4. Vulnerability scans run on UMKCnet
5. Application vulnerability scans performed for multiple products in the process of being purchased for UMKC
6. Rebuild of select IS Security systems with Windows 2008 R2
7. Continued adjustment and monitoring of campus-wide Group-Policy settings (Settings applied from Active Directory to campus computers)



Unwanted traffic blocked by Campus IPS (in number of attempts)



## Support Services

### Goals and Objectives Update

#### August 2009 – January 2010

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#### Improve campus computer lab experience and resources

- Completed vendor selection and implementation of the new Printer Management System. This new system merges the University Libraries and the IS computer labs into one unified print management system. It also links the UMKC OneCard with the print management system giving much greater flexibility with meeting student's printing needs.
- Completed migration to Windows Vista in IS Labs
- Worked with Student Affairs to coordinate the opening of the computing lab in Johnson Hall lab last fall and closure of the Cherry Street lab
- Worked with campus colleagues on planning for student computing lab in new Student Center
- Partnering with Miller Nichols Library on improvements and expansion of IS computing lab facilities located in the library. New lab is scheduled to open fall 2010
- Evaluating thin client technologies for IS labs and kiosks. Collaborating with other campuses to share knowledge and leverage expertise around desktop virtualization
- Maintained operations in eight IS-managed general use student computer labs, seven restricted access labs, and supplied one associated classroom. 10,527 people used these sites during this time:

Lab Name	Individuals
Bloch School of Business 110	2,274
Health Sciences 3304	1,276
Johnson Residence Hall	485
Miller Nichols 3 <sup>rd</sup> Floor	3,572
Oak Place Labs	713
Royall Hall 303, 304, and 314	5,589
School of Education 129	3,330
University Center B17	2,488

#### IS Goals Supported:

- User technologies and support that enhance and facilitate research, service, teaching and learning and economic development.
- Effectively and efficiently manage resources

## **Provide advanced technical expertise and services to UMKC academic units, IT Liaisons and UMKC departments**

- Moved forward with major advances in the [UMKC Remote Labs](#) project in terms of server and storage infrastructure, end-user interface, overall system performance and available software titles in preparation for production usage
- Expanded print server infrastructure to embrace 64-bit computing and continued to migrate departments to more stable virtual print server environment
- Tested Windows 7 internally. Began Windows 7 deployments to first tier customers in mid-December, well ahead of schedule. User feedback has been largely positive.

### **IS Goals Supported:**

- User technologies and support that enhance and facilitate research, service, teaching and learning and economic development.
- Effectively and efficiently manage resources

## **Increase professional development opportunities for staff**

- Coordinated Skillsoft training for technical staff on UMKC campus
- Serve as u-wide coordinator of Dell technical certifications
- Represented UMKC campus IT Training RFP

### **IS Goals Supported:**

- Continuous improvement in services, facilities and professional development

## **Expand efforts to comply with green computing**

- Represented IS on the Campus Sustainability Committee
- Continue to promote, coordinate and recycle large amounts of cardboard and packing materials from computer equipment boxes wherever possible
- Continue to update computer power-savings settings on standard images and look for new ways to conserve energy
- Reviewing various thin clients as possible PC replacements

### **Other Projects and initiatives within Support Services:**

- Collaborated with IT colleagues, UM campuses and Microsoft on the new student e-mail migration project. The new system called Outlook Live provides students with a larger mailbox and secure online data storage while reducing overall costs to the University and ultimately to the students. Students were provided a 3-month opt-in period to migrate to the new system. Support Services held numerous events on campus to assist students with the transition. A website with extensive documentation was developed along with ongoing support from the IS Call Center and Student Assistants in the IS labs. The migration phase of the project is scheduled to be complete in March, 2010.
- Working with campus colleagues to revise and revamp email policies and processes
- Trained staff and transitioned Support Services' processes to incorporate implementation of new PS applications including:
  - ePro
  - Time and Labor
- Serve as UM-wide campus coordinator for Dell certifications and campus reimbursements

- Participated in the PWC IT audit
- Worked with HP to conduct a thorough analysis and assessment of printing needs in the Administrative Center
- Coordinated technical support for HCL accreditation team and provided onsite support
- Served on numerous committees including UM Standards Committee, VPA committee, Life Cycle Document Management committee and various other group projects;
- Chaired and coordinated IT Liaison meetings; organized speakers
- Provided technology updates to the Provost blog and UNews

#### UMKC IS Call Center

- The Call Center responded to 16,564 support requests, resolving 13,242 tickets and escalating 3,322 tickets in the past 6 months. The Call Center's first-call resolution rate was 80%.

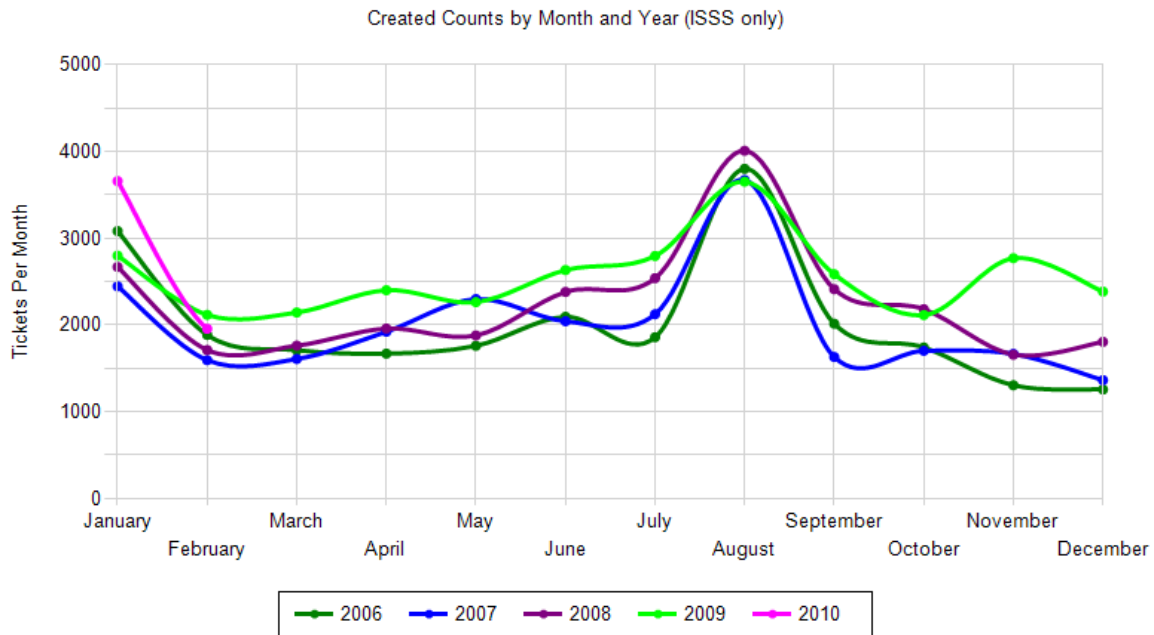
Time Period	Total Number of <b>Call Center</b> Support Requests
Q1 & Q2 2007	12102
Q3 & Q4 2007	11120
Q1 & Q2 2008	10644
Q3 & Q4 2008	13673
Q1 & Q2 2009	12810
Q3 & Q4 2010	16564

- The last few years have seen a steady increase in support requests generated through our online problem report tool. 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, when multiple users report on problems with the same services.

Time Period	Total Number of <b>Web Submission</b> Requests
Q3 & Q4 2007	5
Q1 & Q2 2008	33
Q3 & Q4 2008	783
Q1 & Q2 2009	677
Q3 & Q4 2010	920

- Over the last five years, the support volume in Support Services has steadily increased as demonstrated in the chart below. Month to month, the support request volume continues to increase by an average of 322 requests over this same period last year:





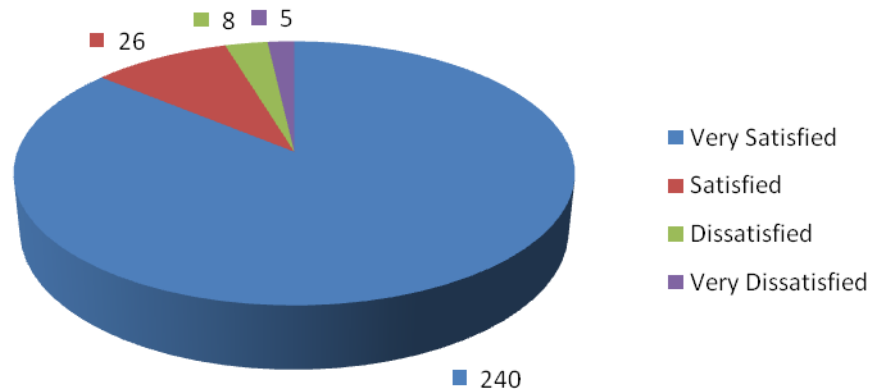
	2006	2007	2008	2009	2010
January	3084	2447	2670	2800	3660
February	1886	1595	1712	2118	
March	1710	1609	1763	2145	
April	1670	1923	1960	2402	
May	1761	2300	1880	2264	
June	2095	2044	2382	2634	
July	1860	2125	2540	2796	
August	3802	3673	4010	3654	
September	2015	1632	2414	2586	
October	1741	1703	2183	2115	
November	1306	1306	1658	2771	
December	1257	1364	1806	2386	

This increase can be attributed to many factors, the most relevant at this time being the student e-mail conversion from Exchange to Outlook Live. Other factors include an increase in number of students, use of new online applications (Pathway, on-line applications, MyHR, etc.), increased use of Blackboard and other classroom technology tools, increase in number of ILE classrooms to support and a continued increase in campus awareness of the Call Center as the IS central point of contact.

- Customer satisfaction continues to grow. The following chart represents customer satisfaction data collected from use of Remedy ticket tracking system. These surveys are generated randomly when tickets are closed by IS Support Services. Customers have an opportunity to

provide feedback on their experience with technical support staff. The surveys below represent the period of August 1<sup>st</sup>, 2009 and January 31<sup>st</sup>, 2010

### Support Services - Customer Satisfaction Rates



#### Other Call Center Projects:

- Added new content to the UMKC RightAnswers Knowledgebase detailing Outlook Live, other changes in technology and UM/UMKC procedures and processes
- Implemented new Bomgar remote assistance tool to allow us to better support users on and off campus
- Developed new procedures and processes for handling Web permissions and associated training requests, with the help of the Web and Central Systems teams
- Worked closely with UM and Registrar's office to implement new procedures and train team to support additional Pathway features
- Worked closely UMKC Human Resources office to implement new procedures for faster mailbox creation for new employees
- Continued to maintain and support Remedy Action Request System for tracking support requests

#### ISSS Desktop Support

- Responded to and resolved 2351 routine support requests during the last 6 months:

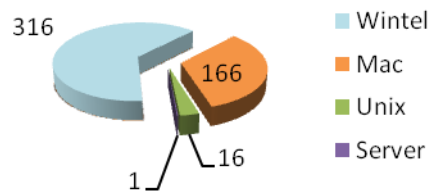
Affiliation	Ticket Count
Faculty	510
GRA/WorkStudy	114
Other	7
Staff	1437
Student	283
Total	2351

- Software deployment progress:
  - Office 2007
    - 84% for ISSS clients (compared to 81% on 7/31/2009)
    - 76% for entire campus (compared to 67% on 7/31/2009)
  - Windows Vista
    - 43% for ISSS clients (compared to 40% on 7/31/2009)
    - 30% for entire campus (compared to 29% on 7/31/2009)
  - Windows 7
    - 5% for ISSS clients
    - 7% for entire campus
- Created or updated deployment packages including: Ad Astra, numerous Adobe products, Advance 9.3, Amos 18, ArcGIS, CompuTrace, CPS 5.62.0090, EndNote X3, Filezilla 3.3.1, iTunes 8.2.1.6, Java 6u17, Live Messenger 14.0.8089.0726, MatLab 2009b, MiPACS 9.16, Mozilla Firefox 3.6, OpenOffice, OPNET 16, Oracle 10g, Paint.NET 3.5.2, PaperCut MF 9.7, Peachtree, Pronto, QuickTime 7..6.5, Roxio Creator DE 10.3, RS Means CostWorks 2010, Sharepoint Designer 2007, SPSS 18, Tegrity 7.5.727, VLC 1.0.3,
- Evaluated the compatibility and performance of numerous software and hardware products including, Bomgar, Cisco UnityConnect, thin client technologies, etc. etc.
- Created new online reports including:
  - Configuration Manager
  - IS Labs usage and capacity planner
  - IS Remote Labs sessions
  - OneCard print quota transfer
  - PaperCut and printer usage
- Installed 192 new workstations as part of the 2009 Workstation Replacement Program
- Mentored, assisted and built solutions for IT Liaisons on a near-daily basis
- Rebuilt SCCM server on Windows 2008 R2 virtual platform
- Provided IT support for special projects and events, including the Math Expo 2009, North Central Accreditation team and UM Curator's meeting
- Worked with Hewlett Packard imaging consultants to perform a assessment of the printers and printer usage at the UMKC Administrative Center
- Earned certifications for Microsoft Technical Specialist certification for Windows 7 and Apple Macintosh Technician
- Worked with Absolute to consolidate all CompuTrace systems and accounts under a central management authority
- Implemented duplex printing in IS Labs as method of saving money and contributing to green initiatives
- Replaced 18 lab computers at HSB student computer lab
- Completed mastery of Operating System Deployment (OSD) methods to allow for the complete automation of large-scale operating system deployment and software installation
- Attended training and professional development on the following:
  - Preventing Employment Discrimination online course
  - Time & Labor training
  - VMware presentations

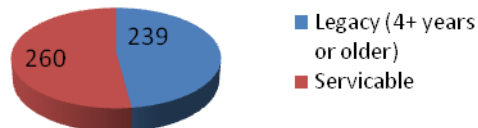
- Windows 2008 R2 development seminar
  - Windows 7 training courses
- Provided pre-deployment consultation services with departments on various IT projects:
  - Comply & Verify – Intercollegiate Athletics
  - NetBotz server upgrade – IS Central Systems
  - SchedulePlus – Student Auxiliary Services
  - Student Web Portal to Point-n-Click – Student Health and Wellness
  - Titanium upgrade and server replacement - Counseling Center
- Created or updated documentation for Allegiance, CHTC scanning workstation, iPhone email synchronization, Outlook Live FAQs, SafeConnect, Shoutcast streaming server and the UMKC Police SIMS license update process
- Created, updated and managed disk images for the following:
  - Special kiosk images for Student Health and Wellness, International Student Affairs, Registrar's Office and Human Resources
  - Special lab images for BSBPA, Physics, Northland Campus and Athletics
  - Windows 7 for universal use (32-bit and 64-bit)
  - Windows Vista for IS Labs
  - Windows Vista for universal use
  - Windows XP for universal use
- Provided workstation and network support for UMKC students living on campus
- Trained and integrated new full-time employee, and part-time employees into IS Desktop Support; promoted one employee
- Worked with UMSL counterparts to share information about our print management processes and infrastructure
- Updated Workstation Replacement Program ordering website
- Assisted in the integration and training of two new IT Liaisons
- Assisted with the migration of data from personal shares (e.g., J: drive) to departmental file shares
- Created and implemented a technical solution and communications plan around the required removal of Expression Web from over 1700 UMKC computers
- Analyzed cost and performance elements of multiple large capacity printers to guide purchasing decision for replacing certain IS Labs printers
- Participated on campus-wide Server Policy committee to respond to results of external server audit
- Participated in planning process for Unity voicemail configuration in light of potential changes to the Exchange environment
- Worked with IT Manager from Northwest Missouri State on issues with Microsoft ForeFront
- Provided analysis, projections and recommendations for WRP 2010 computer replacements
- Provided support and updates for the campus wide maintenance window processes
- Maintained and updated the IS website; added several new pages, news items and instructional documentation
- Network file storage support – Coordinated setup of network file storage resources between Central Systems and several departments and schools.

- Arts & Sciences Departmental Lab support – Updated inventory records of all student-use computers in labs and student offices, and provided this data to dean’s office to assist with their lab hardware lifecycle planning. Current total of all lab/student-use computers: 499

**A&S Departmental Labs  
OS Distribution**



**A&S Departmental Labs**



- Mac support
  - Provided IT Technical Liaisons with best-practices documentation on installing and custom-imaging OS X 16.6 Snow Leopard.
    - Updated documentation on Mac support website to reflect newer software versions and common support issues including, Snow Leopard support and configuration of 802.1x wireless connection profiles
  - Continued to assist School of Biological Sciences, School of Pharmacy, and School of Nursing with Mac support needs.
  - Added support for iPhone hardware.
- SharePoint implementation – Met increasing demand for this technology by coordinating tests between Information Access and two A&S departments
- Maintained a Support Services presence on Hospital to ensure fast response to computer issues in ILE classrooms.
- Created backup best practices documentation for IS website
- Upgraded ArcGIS license servers for Architecture, Urban Planning & Design to newer hardware.
- Nathan Fishback was a nominee for the Arts & Sciences Staff Member of the Year 2009 award.

#### **ISSS Lab Management Office**

- Collaborate with various schools and departments to ensure student computing needs are met.
- Worked with CFM to improve our recycling procedures.
- Staffed MNL for extended hours for Fall semester finals.
- Introduced duplex printing in four open-use labs.

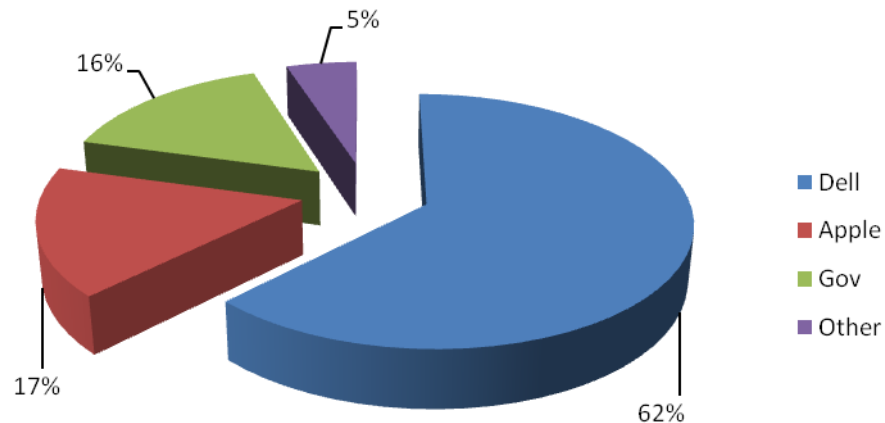
- Staffed registration sessions during one new student orientation.
- Conducted classroom training for nearly 60 student employees on new Time and Labor payroll management system.
- Created web content and/or FAQs on the following:
  - Time and Labor system – full-time biweekly employees entering payroll data
  - Time and Labor system – monthly employees entering payroll data
  - Time and Labor system – supervisors approving payroll data
  - New system for updating web pages
  - New print management system in IS labs
  - Duplex printing on HP printers
- Implemented new hiring and exit procedures per instructions from Human Resources.
- Began using eProcurement system for ordering consumables for computer labs.
- Tracked 2,200 questions, of which 766 were escalated.
- Received over 130 applications for Student Assistant positions, interviewed 41 prospective new hires, and hired 25 new Student Assistants for IS-managed labs.
- Processed over 6,079 shifts and supervised over 17,954 Student Assistant man-hours. Completed reviews for 60 Student Assistants.
- Supported student printing needs by keeping supplies on hand and printers ready for use. Nearly 400,000 print jobs were printed in IS-managed general student use computer labs, totaling over 2,300,000 pages.

## **Software and Hardware Procurement**

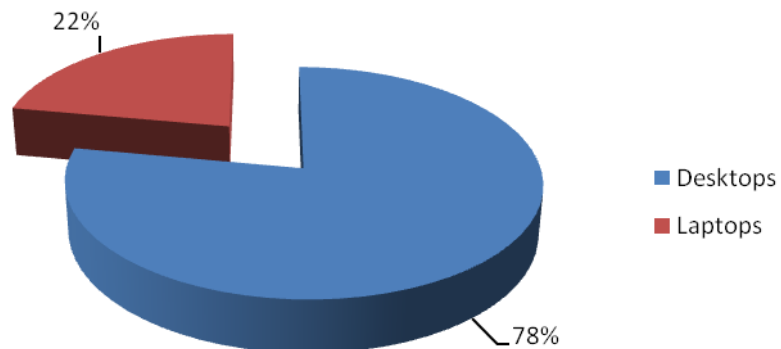
- Redesigned Adobe software pages, including new order form
- Reduced software licensing costs (where possible) by consolidating orders and collaborating with other UM campuses
- Placed miscellaneous software orders for various departments (\$52,783.83)
- Placed major software orders through eProcurement (\$223,615.76)
- Placed hardware orders for various departments in support of Hardware Acquisition position (\$13,063.60 : Apple 1,964.48, Dell 11,099.12)
- Completed conversion to Microsoft Forefront anti-virus software, terminated McAfee contract, saving \$69,189.62
- Completed conversion from Front Page/Expression Web to Sharepoint Designer, saving \$10,763.06
- Eliminated duplicate software licensing for Financial Aid and Data Warehouse, saving \$732.70 this year and \$523.70 every year from now on
- Completed paperwork with the release of new operating systems (Windows 7 and Apple Snow Leopard)
- Coordinated IT processes and communication when the following applications were released. These include: EndNote X3, Maple 13, SAS 9.2 Phase B and SPSS/Amos 18
- Renewed Microsoft Campus Agreement, Microsoft Select Agreement, Microsoft Server Agreement, Microsoft Premier Support Contract, Microsoft IT Academy
- Renewed campus licensing for Remedy, Right Answers, BlackBoard, Wimba, Learning Objects, TurnItIn, ListServ
- Renewed departmental licensing for MathCAD, Matlab, Mathematica, Minitab, ESRI, ERDAS
- Worked with Missouri S&T to transition away from McAfee anti-virus licensing
- Continued researching and pricing multiple options and licensing requirements for the Remote Labs project

Hardware purchases August, 2009 – January, 2010, totaled \$196,301.46

Dell	\$ 122,878.09
Apple	\$ 32,772.80
GovConnection	\$ 30,726.11
Other	\$ 9,924.46

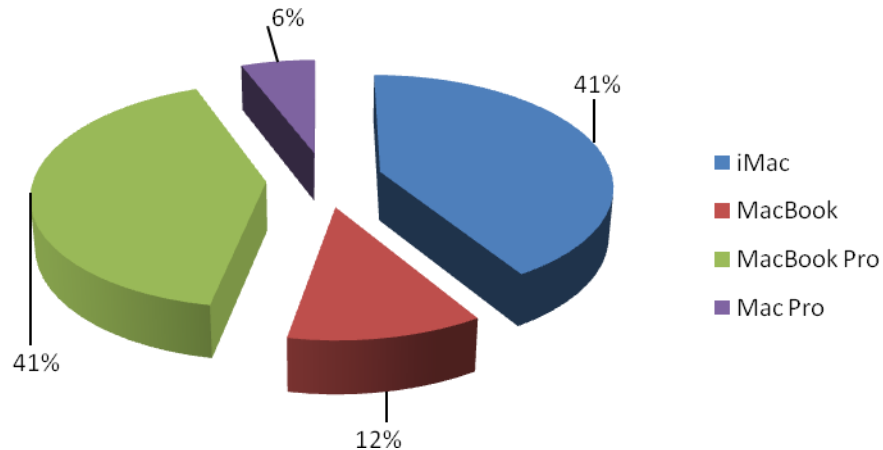


- Of the Dell computer purchases, 105 were desktop PCs. There were 43 laptops purchased.



- Of the nearly \$33,000 in Apple purchases, there were eight desktops and nine laptops purchased.

• Mac Pro	• 1
• iMac	• 7
• MacBook	• 2
• MacBook Pro	• 7



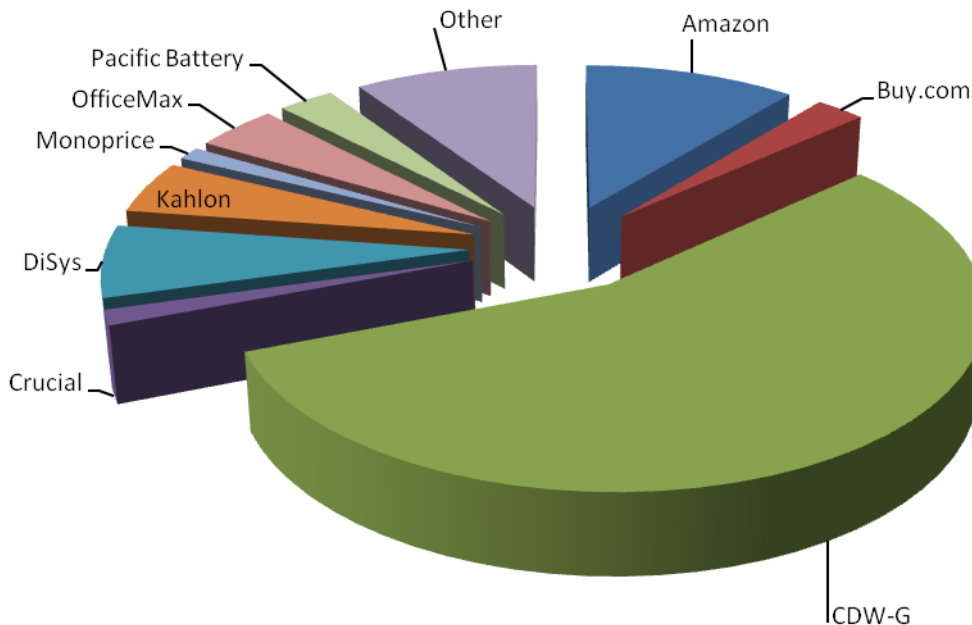
- Purchases at GovConnection totaled almost \$31,000. Although the UM System has HP printer contracts in place with four other vendors, GovConnection continues to price HP printers competitively. Twenty-six (26) printers were purchased during the period.

Printers	26
Cables	15
Toners	2
Adapters	6
Flash drives	12
Hard drives	2
webcams	24
other	5

Support Services purchased other goods from fourteen different vendors, primarily for memory modules, replacement batteries, printers, and cables, including USB, Ethernet, audio and HDMI. Other vendor purchases totaled \$9,924.46.

The vendor most often used was CDW-G with 11 orders. Amazon.com was second with eight. None of the others received more than five orders, and five vendors received one order each.





Because the annual Workstation Replacement Program took place in July of 2009, there were no large purchases in this reporting time frame. However, a second round was held in January 2010. Those figures will be included in the next six-month accomplishments report.

Other activities of note during the period:

Implementation of a computer ordering process that involves obtaining approvals for systems campus-wide from the C.I.O. A corollary to the computer approval process is the inclusion of Support Staff personnel in the eProcurement ordering process. The order reviews by Support Services for computer supplies and peripherals has resulted in several orders being redirected to other vendors that offered the same items at a lower cost.



## **Infrastructure Services**

### **(Networking, Telecommunications & Central Systems)**

## **Goals and Objectives Update**

### **August 2009 – January 2010**

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#### **IS PROJECT - Expand Wireless Systems (Goals 1, 2, 5)**

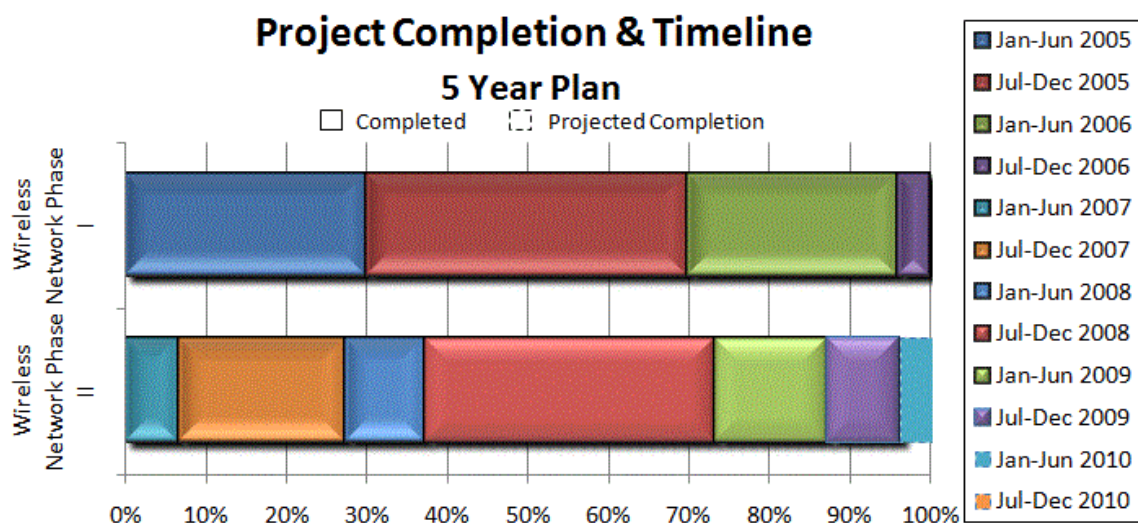
With 288 wireless access points installed campus wide we are now expanding wireless coverage in campus buildings to cover classrooms, offices and other usable spaces. In most buildings this would be 80% to 90% of the floor space allowing for seamless network access as you move throughout a building. We have also moved to lightweight access points for easier management of the growing number of units. See Appendix for current buildings with wireless coverage.

#### **Critical Issues**

- The new wireless standard 802.11N, was just approved in September of 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 out as well. This will require replacing at least some blades in network switches with new blades that support the new power standard. We have already started this process and are 98% complete.
- 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 - INFRASTRUCTURE IMPROVEMENT

### Upgrade Building Wiring Infrastructure (Goals 1, 5)

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 Bld. and are currently working on the Law School. We hope to complete the Law School upgrade to Category 6 cable in next few months and then move to the Medical School. See Appendix for status chart by building.

#### Critical Issues

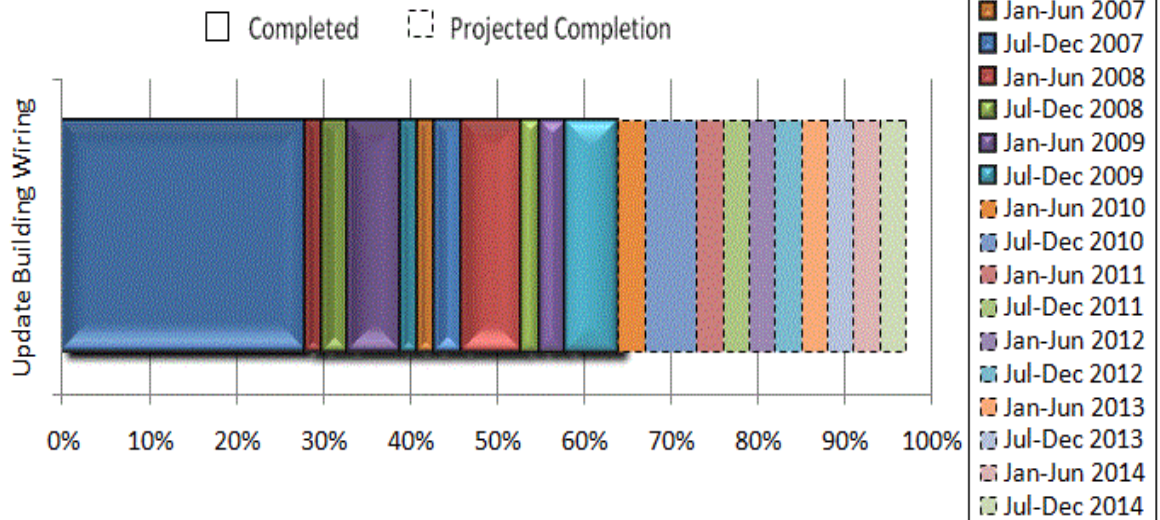
- New cable standards like Category 7 that will support 10 gigabit connections are projected to be out in 2010-11. New standards have increased the cable size and made cable stiffer. These new cables require larger conduit sizes and longer installation times, which increase cost.
- Copper cable prices 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.

## Project Completion & Timeline

### 5 Year Plan



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

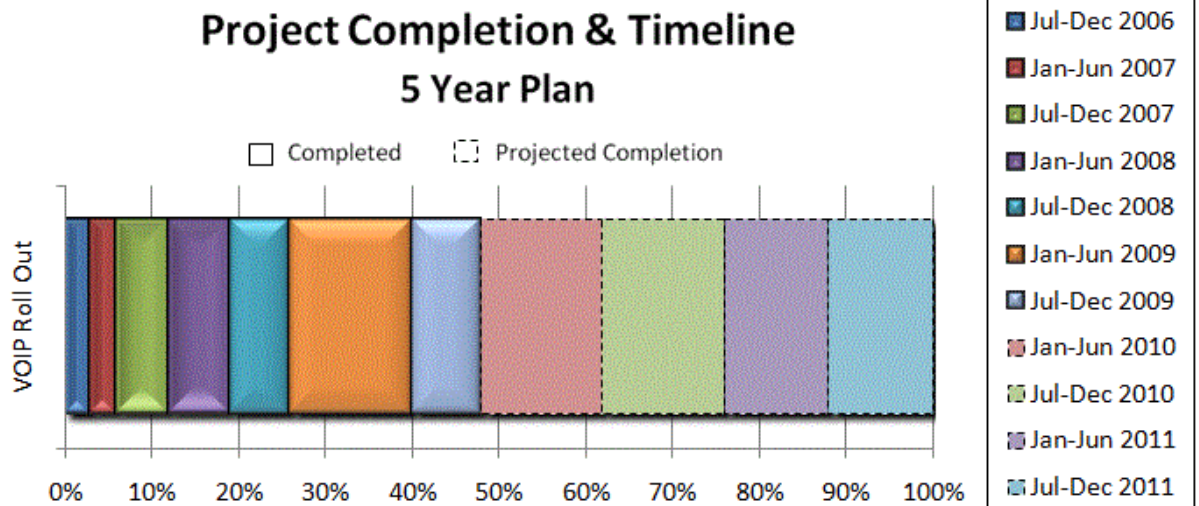
We started rolling out voice over IP phones first to all of Information Services and then in the new Health Sciences building. We have now replaced phones in Manheim, Royall, Haag, Flarsheim, Fine Arts, Old Maintenance, Nursing School, Spencer Chemistry, Biological Sciences buildings, Dental School, Oak Place, Oak Street, Johnson Hall and are working on the Administrative Center. 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. 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.



### IS PROJECT - Disaster Recover (Goals 1, 3, 5)

Existing data centers are not being used redundantly. This project will upgrade the data storage and backup hardware, using current technologies like virtualization and SAN replication to take advantage of diverse locations. This will provide high availability and greater fault tolerance for servers.

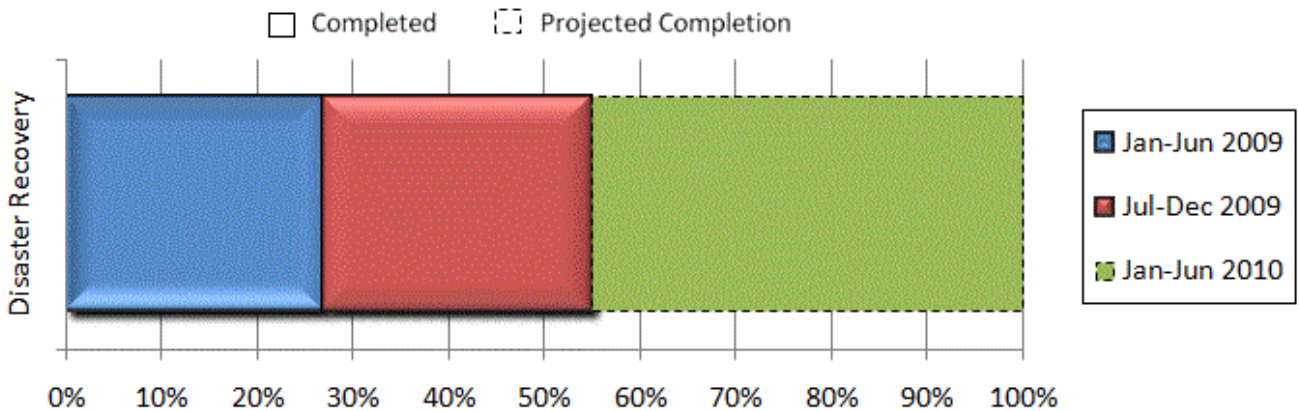
#### Critical Issues

- Insufficient backup resources to protect existing servers.
- Unreliable backup software.
- Existing data is vulnerable to a single site disaster.
- Projections based on Networking & Telecommunications budget at 2009 or higher levels with no additional projects or funding requirements that would use departmental hard dollars.
- Projections based on 2009 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:

- Infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Effective and efficient management of resources.
- Continuous improvement in services, facilities, and professional development.

## Project Completion & Timeline 5 Year Plan



### IS PROJECT - Email Migration (Goals 1, 3, 5)

Student Email accounts are being migrated to Microsoft Live Mail partially as cost saving but also to provide additional services. These include, a permanent account that they can keep after they graduate, a significant amount of additional storage and Live Mail collaboration tools.

#### Critical Issues

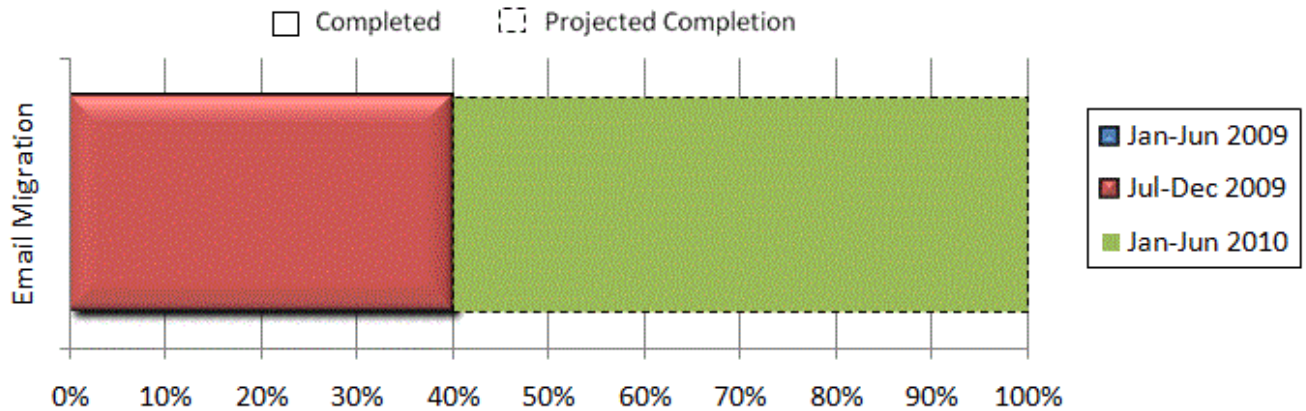
- We lose control of the hardware and application software.
- A MOREnet outage will take down student on campus access to E-mail.
- Projections based on Networking & Telecommunications budget at 2009 or higher levels with no additional projects or funding requirements that would use departmental hard dollars.
- Projections based on 2009 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:

- Infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Effective and efficient management of resources.
- Continuous improvement in services, facilities, and professional development.



## Project Completion & Timeline 5 Year Plan



### IS PROJECT - Server Virtualization (Goals 1, 3, 5)

Existing data centers are nearing capacity for space, power and cooling. Virtualization of over 100 servers will reduce the loads in all three of these areas. Virtualization allows the separation of the host operating systems from the physical hardware making the systems more reliable, scalable and efficient.

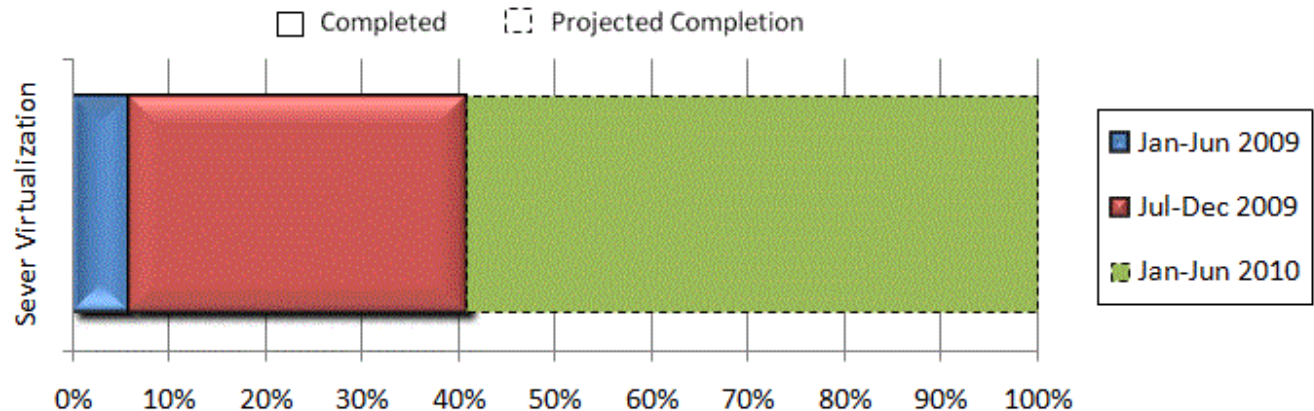
#### Critical Issues

- Existing servers are vulnerable to hardware failures.
- Existing servers are vulnerable to a single data center disaster.
- Many existing servers are in need of life cycle replacement.
- Projections based on Networking & Telecommunications budget at 2009 or higher levels with no additional projects or funding requirements that would use departmental hard dollars.
- Projections based on 2009 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:

- Infrastructure that delivers seamless, secure, reliable, anytime and anyplace user access.
- Effective and efficient management of resources.
- Continuous improvement in services, facilities, and professional development.

## Project Completion & Timeline 5 Year Plan



### Move PSTN Trunks to IP Systems (Goals 1, 3)

UMKC currently has 10 T1 smart trunks to the Public Switched Telephone Network (PSTN), 9 for in and outbound calls and 1 for long distance calls. All of these trunk lines started out connecting to the PBX. As the installed base of IP phones increase we will move 1 or 2 trunks at a time over to IP systems.

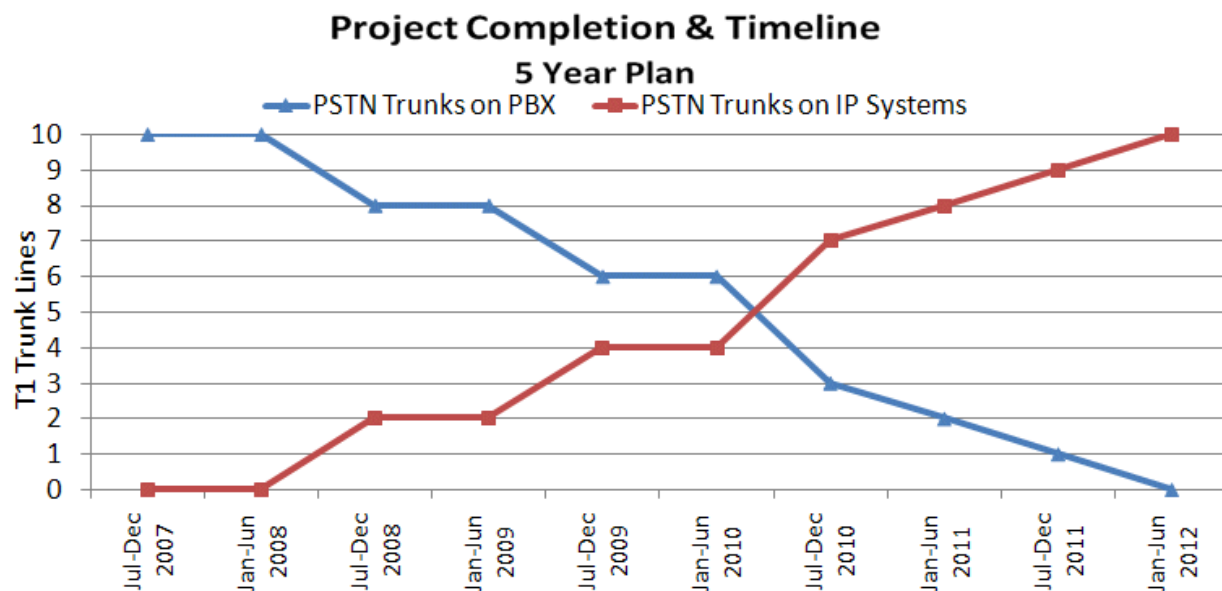
#### Critical Issues

- The campus PBX is 25 years old and a catastrophic failure would require an immediate cutover of the trunks to IP systems.
- This project is dependent on the VoIP phone rollout. If that project is delayed then so would this project.
- 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.





### 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.

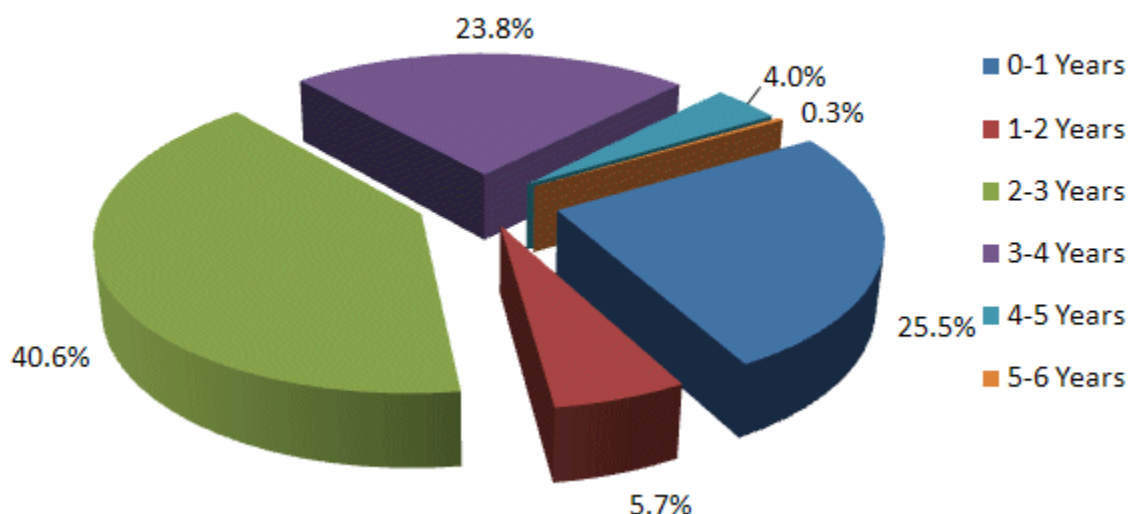
#### Critical Issues

- The campus keeps growing and expanding without adding additional resources to support the voice and data networks. Just in the last few years 8 new buildings have been built and 3 other additional locations added to the network. During that same period the Networking & Telecommunications budget has been cut.
- 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 newer 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 (Goals 1, 5)

UMKC is currently building a new Student Union, expanding the Miller Nichols Library, remodeling Katz and Cherry Street Halls. The first 3 will open for Fall Semester 2010 and the last for Spring Semester 2011. These projects require extensive planning, engineering and staff time both before and during the buildings construction. Bringing voice and data systems online when a building is completed requires the efforts of the entire Networking & Telecommunications staff.

#### Critical Issues

- Additional buildings with additional voice and data equipment 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.

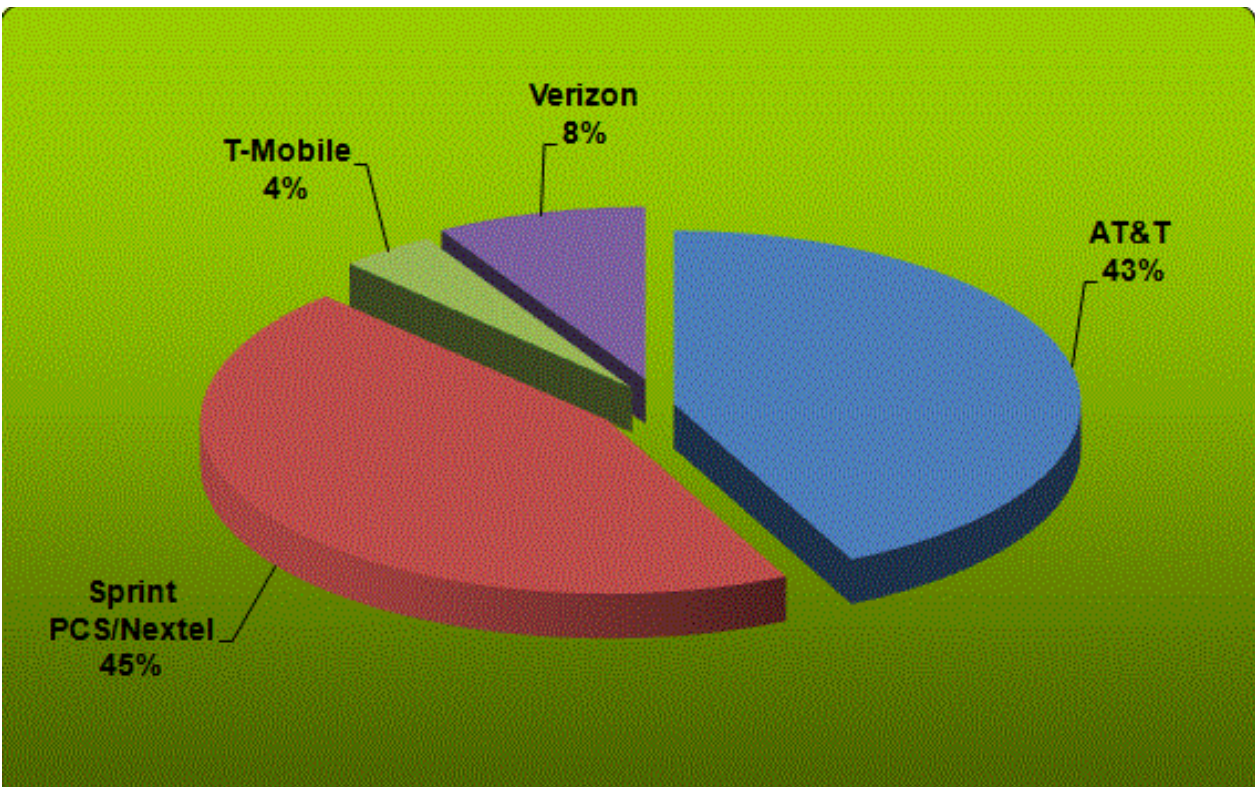
## Appendix

### Individual Infrastructure Services accomplishments this period:

1. Internet1 link speed increased from 130M to 170M.
2. Networking & Telecommunication staff attend over 300 hours of training during this reporting period.
3. Advised Metropolitan Community College on their VOIP installation.
4. Upgraded the operating systems on over 300 network devices with the latest security patches and updates.
5. Staff member served as the campus building liaison representative.
6. Completed over 359 moves, adds and changes on the voice and data networks.
7. Responded to, solved and closed 908 trouble tickets recoded in Remedy.
8. Installed 292 Voice over IP phones.
9. Virtualized over 40 servers.
10. Designed the infrastructure voice and data cables systems for Student Union, Miller Nichols Library addition, Katz Hall, and Cherry Street Hall.
11. Processed over 4.5 million calls through voice systems.
12. Staff member served on the campus recycle program committee.
13. Hosted Park University, demonstrating our VOIP systems.
14. Upgraded the operating system on all wireless access points (288) with the latest patches and updates.
15. Upgrade Netbotz server software.
16. Coauthored NSF grant with Deep Medhi for network infrastructure upgrades.
17. Install patches on Exchange servers.
18. Marked University buried cable plant locations as required by law for Missouri One Call over 287 times during this reporting period.
19. Serviced on the new Student Union building committee.
20. Wireless Access Points added to Health Sciences Building, Johnson Hall, 4747 Troost.

## UMKC WIRELESS INVENTORY

Vendor	Count	Average Monthly Costs	Average Cost per Device
AT&T	179	\$14,358	\$80
Sprint PCS/Nextel	188	\$8,647	\$46
T-Mobile	16	\$1,094	\$68
Verizon	35	\$1,837	\$52
Totals	418	\$25,936	\$62



## IS Accomplishment Report: August 2009 – January 2010





