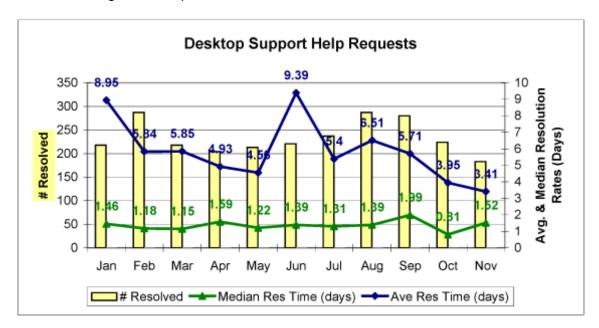
Service Review - Self Study

Computer Support: Help Desk & Desktop Support, Desktop Engineering

Executive Summary

This review focuses on services provided primarily by the Desktop Support/Help Desk and Desktop Engineering groups within Information Technology Services. These services have improved significantly over the past five years, with the result that at least 75% of USF students, faculty, and staff are satisfied or very satisfied. Focus groups have, however, identified several areas for improvement, primarily with regard to the breadth and depth of support and resources available.

ITS internal performance metrics tell a similar story, with Help Desk and Desktop Support indicators, such as first call resolution percentage and escalated incident resolution rate, either holding steady at good levels or showing marked improvement.



Areas of most internal concern are Accounts/Access Management and asset management (relevant to both desktop computer hardware and software services).

Financial analysis shows moderate staff growth funded largely through internal reallocation of resources. Financial analysis by service indicates that e-mail consumes the largest amount of Help Desk support resources, followed closely by USFconnect. Desktop Computer Hardware and Desktop Computer Software are, however, the most costly services in the scope of this review. Analysis of these costs indicates that the differential desktop hardware and software cost of providing Apple computer options for the USF community has been nearly \$500K over a four-year period, or \$125K annually.

Benchmarking shows that USF has Help Desk and Desktop Computing resources on par with comparable institutions, with the most notable differences emerging in the number of Help Desk hours (low, to be expanded) and the three year replacement cycle for faculty and staff computers (many institutions have moved to 4 years for these computers).

Specific plans for improvement are described for action on a four-year time frame (2007-10). Measures include an overall goal of 85% client satisfaction with these services.

Review Scope

The following IT services, provided principally by the ITS Computer Support department, are included in the scope of this program review.

1. Desktop Computing & Printing Services

ITS Desktop Computing and Printing services are designed for reliability, efficiency, and regulatory compliance in balance with the flexibility required by academic freedom. ITS retains desktop support staff certified in Apple and/or Microsoft operating systems. Support may be performed remotely with the permission of the client, or through an office visit. Specific services include:

- Assistive Technologies
- Desktop Computer Hardware
- Desktop Computer Security
- Desktop Computer Software
- Personal Computer Purchasing Program
- Printing

2. Customer Service/Help Desk

The ITS Help Desk provides friendly, responsive service to the University community. Open until 8:00 pm Monday though Thursday and 5:00 pm Friday, the Help Desk is staffed by certified Help Desk professionals, as well as trained USF student employees. Help requests may be submitted online at www.usfca.edu/its, by phone (415-422-6668) or via e-mail (itshelp@usfca.edu). Services include:

- Accounts/Access Management
- Advice & Recommendations
- Troubleshooting
- Equipment Reservations
- Office Moves

In addition to these services, this review includes the Incident Management process, which is a primary focus for the Help Desk/Desktop Support team. The Incident Management process is the process that aims to restore any IT service when it is interrupted for any reason. Service restoration may be accomplished through a temporary work-around or actual resolution of the root cause of the incident (i.e. restoration of e-mail service following a hardware failure). The scale of an incident may be as large as an entire system outage, or as small as an individual client issue.

Client Satisfaction

Survey Data

ITS has three sources of client satisfaction survey data:

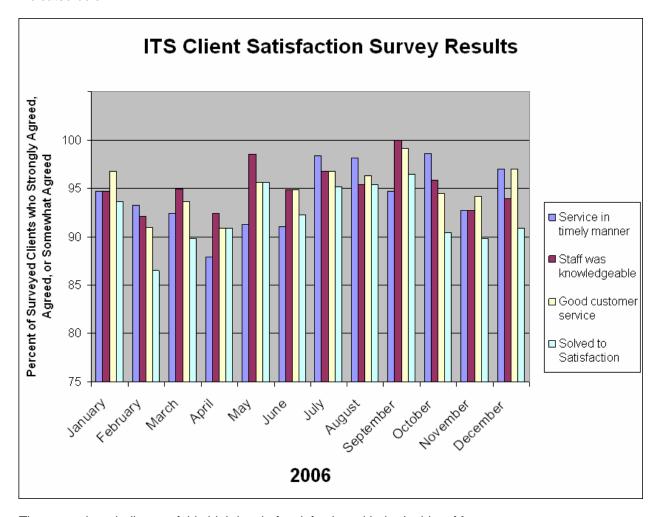
- Routine responses to very brief Client Satisfaction survey delivered to clients upon closure of a help request ticket
- Semester Graduating Student Survey responses (ITS-wide, little specific feedback)
- Annual ITS Survey

Routine Client Satisfaction

ITS routine Client Satisfaction responses are particularly relevant to this service review given the Help Desk/Desktop Support group's primary role in the Incident Management process. Between 55 and 65 percent of incidents are resolved without escalation from the Help Desk. For incidents that require escalation beyond the Help Desk to another area of ITS for resolution, it is the job of the Help Desk to provide end-to-end management of the incident, including follow-up with the client.

ITS client satisfaction surveys are delivered to clients via e-mail upon resolution of a Help Desk ticket. The survey asks the client to indicate their level of agreement with statements regarding the timeliness of the service they received, the knowledge of ITS staff, the quality of customer service provided, and the resolution of the incident to their satisfaction.

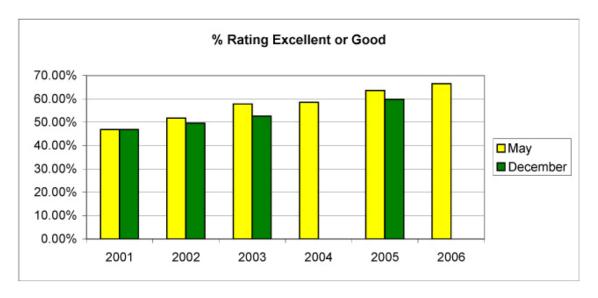
For the calendar year 2006, ITS received an average of 78 client satisfaction survey responses per month. The percentages of clients who either agreed or strongly agreed with the statements provided are indicated below:



These numbers indicate a fairly high level of satisfaction with the Incident Management process.

Semester Graduating Student Survey

ITS is evaluated as a whole in the Graduating Student survey, administered each semester. The results of this survey have been discussed in other forums, so we will not discuss them extensively here. ITS tracking of our survey results is as follows:



These results indicate a steady improvement in the overall quality of USF IT services. ITS' goal for this survey is 80% of graduating students rating us as Excellent or Good.

Annual ITS Survey

ITS administered its first annual survey in the spring of 2006. The survey measured client satisfaction with current IT services, as well as desire for new or enhanced services.

Survey responses for the services included in this review were as follows:

Service	Fac-Staff Satisfied or Very Satisfied	Student Satisfied or Very Satisfied	Average % Satisfied or Very Satisfied
Customer Service/Help Desk*	83% (Help Desk)	76% (Help Desk)	79%
Desktop Computer Hardware	88%	NA	NA
Desktop Computer Software	87%	NA	NA
Printing	79%	78%	78%

^{*}presented as one service, not broken down

Assistive Technologies and the Personal Computer Purchasing Program were not defined as services at the time of the survey and were therefore not assessed. They will be included in the 2007 ITS Survey.

ITS' target Satisfied or Very Satisfied percentage for these services is 85%.

Focus Groups

In conjunction with planning efforts, ITS had a consultant conduct student, faculty, and staff client focus groups during the fall of 2006. The consultant's summary report of focus group input contained the following items, quoted below, relevant specifically to Help Desk, Desktop Support, and Desktop Engineering.

- All roles want a clearer system for prioritization of help requests based on level of need/time/emergency status.
- Students and faculty would like 24/7 support.
- If faculty are teaching; ITS needs to be operating for support (evenings, weekends).

- Students with disabilities requested improved systems and client specific software.
- Faculty and staff and ITS staff want/ suggest Subject Matter Experts (S.M.E.) for each division
 with specific knowledge of each client's applications to serve as an I.T.S. liaison and service
 manager for each division or group.
- Faculty would like ITS to continue to focus on hiring ITS staff with educational backgrounds who
 can understand them and who can consult with faculty on educational platforms, applications,
 multi-media, solutions and other skills to collaborate etc.
- Both faculty groups recommended laptops for all faculty; including adjunct faculty.
- Faculty recommend requiring laptops with USF supported technology for all students.
- Students suggested to establish printing stations for holding printed documents for later pick-up; there were many requests for more printers.
- All user groups would like an ITS presence on main campus.
- Staff and faculty suggested having ITS separate help desk phone lines for faculty, staff & students.
- Students would like to have computer repair services on campus (for a fee).

ITS is working to incorporate this feedback into plans for service improvement in 2007-10.

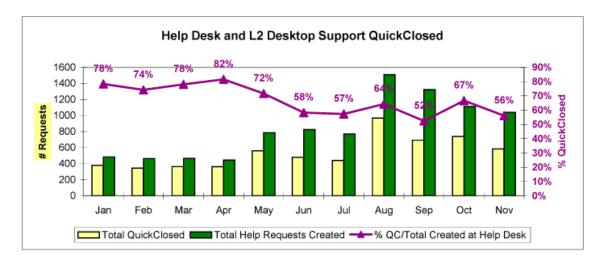
Performance Metrics

Key performance indicators for Customer Service/Help Desk Services are:

- First Call Incident Resolution Rate
- Call Abandon Rate
- Average Overall ITS Incident Resolution Rate

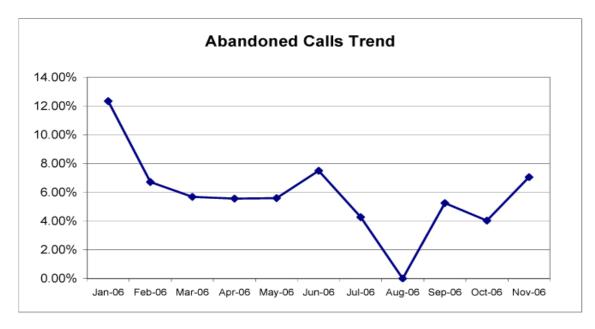
First Call Incident Resolution Rate

First call resolution rate is an IT industry measure of Help Desk effectiveness. This metric measures the number of incidents that are resolved at the Help Desk upon first call, without escalation to other areas, minimizing support load for higher level support technicians and inconvenience to the client. Targets rage for 80% in relatively straightforward, uniform environments to 60% in complex environments. USF's current first call resolution rate target is 65%. Our performance over the past calendar year has been as follows:



Call Abandon Rate

Call Abandon rate is another IT industry measure of Help Desk effectiveness. This metric measures the number of callers to the Help Desk who hang up before their call is answered. High abandon rates indicate problems, from understaffing to excessive incident/call volume, to Help Desk technicians spending excessive amounts of time on each call. Abandon rates also provide a barometer of likely client frustration with being able to access Help Desk services. ITS' target abandon rate is under 3%. Our performance over the past calendar year has been as follows:

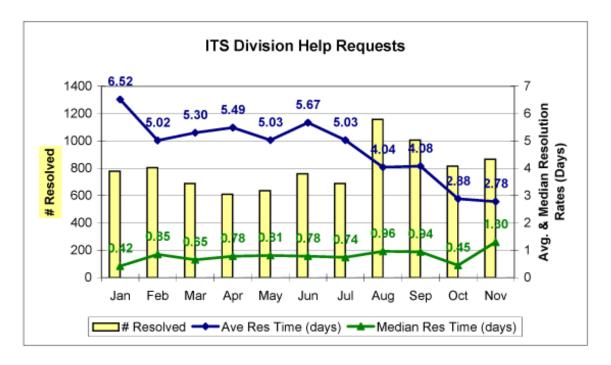


Note: Data not available for August 06.

Average Overall ITS Incident Resolution Rate

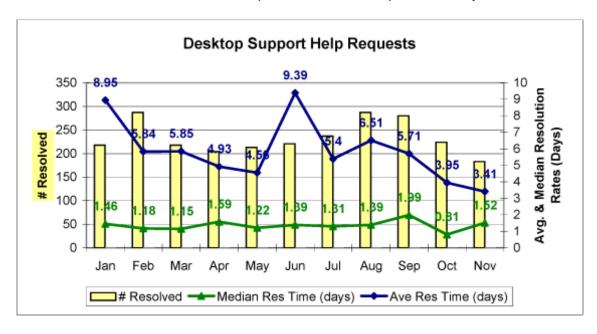
The overall ITS incident resolution rate is a function of division performance as a whole; however, the Help Desk team plays a vital role in managing all incidents, helping to bring about strong performance by all involved. Therefore the overall ITS incident resolution rate is a relevant indicator of Help Desk performance. Our goal is an average resolution rate of 3 days.

We are in the early phases of tracking resolution rates by incident priority. We do not yet have sufficient data, however, to report these metrics. Our monthly average resolution rates for the 2006 calendar year were as follows:



Average Desktop Support Resolution rate

Our current key performance indicator for Desktop Computing & Printing services is average resolution rate of incidents in this service area. Our performance over the past calendar year has been as follows:



Qualitative Self Assessment

The following are the reflections of ITS management and staff on the quality of services in the scope of this review.

Customer Service/Help Desk

Accounts/Access Management

This is an area of challenge for us. We provide the best service we can at the Help Desk to assist people with account-related issues, but the account creation and removal process is complex and cumbersome. Significant streamlining, both from a policy and technology perspective, is needed. From a policy perspective, there are far too many unique access arrangements made, and tracking them all is labor intensive. Accounts need to be created and deactivated more automatically, with the process handling exceptions when they are specifically requested and justified, rather than the process assuming that every case will be unique and proactively soliciting special instructions from each manager involved.

From a technology perspective, we need a complete access management or, in industry terms, Enterprise Identity Management system that will more efficiently and effectively provision and deprovision accounts. Current scripts and batch processes that keep accounts in synch are less reliable than they should be and difficult to manage.

Advice & Recommendations

We would like to be more proactive in offering this service to clients, most likely via a liaison program. Too often faculty and staff do not know where to turn to discuss a technology idea or need they have, as opposed to a current service incident. We need to develop a structure that gives the community a point of contact within ITS for something other than incident resolution.

Troubleshooting

We believe we have made significant progress in this area. All of our Help Desk staff have received training and earned certification from the Help Desk Institute. Our help Desk Supervisor has developed improved training materials and programs for student technicians, and she actively manages Help ques to ensure timely response and resolution.

Our third party review provides several areas for improvement which we are pursuing, especially documenting incident procedures and focusing energy on resolution of the root causes of incidents. We have made progress this year in streamlining our priority guidelines and communication protocols, and these resources should help us to continue to improve our troubleshooting performance.

Equipment Reservations

We recently made a change in our process for equipment reservations, moving them from a separate Classroom Technology phone number to the main Help Desk line and adding a web-based reservation form. This transition has gone well, with few complaints and some modest labor efficiencies realized. We look forward to incorporating additional types of equipment reservations (conference phones, video cameras) into this centralized system.

Office Moves

We have performed large numbers of office moves in recent months with notable success. The Help Desk role in this service is the intake of the request, and this function is served well.

Desktop Computing & Printing Services

Assistive Technologies

This is an area for additional attention, in collaboration with Student Disability Services. We are currently working on documenting what our assistive technology services are – something that will certainly be helpful for our clients. We hope that clearer information on our web site regarding services and enhanced communication with SDS will result in improved satisfaction with this service.

Desktop Computer Hardware

This is an area of strength for us. The computer replacement program has had a tremendous impact on the overall quality of computing for USF faculty and staff. It is routinely cited by members of the community as one of the best things about ITS. We hope to maintain the quality of this service, while also containing costs.

We conducted a **Business Process Analysis** of the replacement process in the summer/fall of 2006, which identified a variety of areas for improvement. A summary of the analysis is attached as **Appendix A**, including the standard replacement process diagram. Full replacement program BPA documentation is available from the VPIT's office.

We are seeking to streamline and better document the replacement process in order to bring greater uniformity to the client experience. We need put several processes online to improve their uniformity and convenience, as well as improve the completeness and currency of our computer inventory. We are also planning to extend the life of some desktop computers to four years in cases where this produces cost efficiencies and does not pose a risk to staff or faculty productivity. This will be necessary to contain the cost of the program at an acceptable level, in balance with other University technology investments and non-IT priorities.

Desktop Computer Security

We have improved in this area over the past year, with the rollout of anti-spyware technology and the implementation of Network Access Control, requiring that computers connected in the residence halls have current operating system patches and anti-virus software. These have been labor intensive implementations, and Network Access Control in particular presents an ongoing Help Desk load. However, we believe that students and the USF network will benefit from reduced virus infections and other system compromises.

Desktop Computer Software

The current standard software suite meets the needs of most faculty and staff, and supplemental applications are easily purchased at good ITS/Purchasing negotiated prices. The addition of the full version of Adobe Acrobat to the suite was a good move. ITS standard image development and testing, as well as control over deployment of patches and upgrades, is the best it has ever been. Support for the standard software suite is good, with staff certified in both Apple and Microsoft support and practiced in resolving problems.

Areas for improvement in the desktop software arena include re-evaluating desktop e-mail clients in light of Eudora's discontinuing their product, as well as incorporating software license management into a broader asset management project, mentioned above under hardware.

Personal Computer Purchasing Program

This is a relatively small program that allows members of the USF community to purchase computers at USF's institutional pricing via the USF web site. USF ITS receives 2% of each sale. The volume of purchases to date has been fairly low, and promotion efforts can be expanded. Apple's program is not currently compelling, requiring excessive investment of resources on the part of the University to benefit significantly.

Printing

Support for current printers is good and has improved over the past year, with more repairs being possible by in-house staff. However, there is desire for more printing resources for students. ITS is currently working to create anew printing station at Lone Mountain.

Financial Review

COMPUTER SUPPORT Financial Profile Draft v3

Unrectriot	ed		2003			- 2	2004				2006				2008				2007
			10. Final Close				10. Final Close				10. Final Close				10. Final Close				05. Dec Close
ACCOUNT	DESCRIPTION			YTD Actual no CT				YTD Actual no CT				YTD Actual no CT				YTD Actual no CT			Orig Budget-C8
218835	COMPUTER SUPPORT	11 Staff (OPE Incl, no temp)	630,130	610,711	19,419	3.1%	657,369	638,219	19,150	2.9%	725,444	689,089	36,355	5.0%	774,448	762,993	11,455	1.5%	826,639
	Ī	12 Student	44,539	42,139	2,400	5.4%	52,584	50,448	2,136	4.1%	57,458	48,300	9,158	15.9%	46,465	38,348	8,117	17.5%	45,000
		17 Benefits	204,792	198,481	6,311	3.1%	220,219	213,803	6,415	2.9%	245,651	234,290	12,361	5.0%	263,312	259,418	3,895	1.5%	285,190
		20 General Operating	184,858	174,805	10,053	5.4%	185,300	186,159	(859)	-0.5%	182,738	129,004	53,734	29.4%	129,482	108,823	20,659	16.0%	106,483
		30 Travel & Entertain	25,846	26,405	(959)	-2.2%	26,554	23,664	2,890	10.9%	29,776	31,341	(1,565)	-5.3%	26,881	31,906	(5,025)	-18.7%	27,160
Expense	Total		1,090,166	1,062,641	37,624	3.45%	1,142,028	1,112,283	29,733	2.6%	1,242,067	1,132,024	110,043	8.8%	1,240,688	1,201,487	39,101	3.2%	1,280,473
		University Student Count ¹	8.243				8.221				8,331				8,502				8,568
		University Employee Count ²	1563				1,660				1,724				1,780				1,780
	Comp	outer Support (Non-CT) Exempt Count ²	10.6				10.6				12.6				13.6				14.0
		emputer Support (Non-CT) OPE Count	1				4				1				0				0
	-	Clients supported per CS FT Staff	845				853				739				756				739
Year to Ye	sar Unit Change		2003			1	2004				2006				2008				2007
			10. Final Close				10. Final Close				10. Final Close				10. Final Close				05. Dec Close
ACCOUNT	DESCRIPTION		Original Budget	YTD Actual			Original Budget	YTD Actual			Original Budget	YTD Actual			Original Budget	YTD Actual			Original Budget
218835	COMPUTER SUPPORT	11 Staff					27,239	27,508			68,075	50,870			49,004	73,905			52,191
	Ī	12 Student				- 1	8.045	8,309		- 1	4,874	(2,148)			(10,993)	(9.952)		- 1	(1.465)
		17 Benefts				- 1	15.427	15,322		- 1	25.432	20.487			16,661	25.128		- 1	21,878
		20 General Operating	1			- 1	442	11,354		- 1	(2,562)	(57,154)			(53,257)	(20,182)		- 1	(22,998)
		30 Travel & Entertain	1			- 1	708	(2.741)		- 1	3.222	7,677			(2,895)	565		- 1	279
Expense	Total	SO HOVER OF THE COM					61,881	69,762			100.041	19,731			(1,479)	69,463			49,886
Exponed	Total						01,001	00,102			100,041	10,101			(1,410)	00,400			40,000
		University Student Count					(22)				110				171				66
		University Employee Count					106				65				56				0
		Computer Support Position Count					0				2				1				0.40
Year to Ye	sar % Change		2003				2004				2006				2008				2007
			10. Final Close				10. Final Close				10. Final Close				10. Final Close				05. Dec Close
	DESCRIPTION		Original Budget	YTD Actual		\rightarrow	Original Budget	YTD Actual		$\overline{}$	Original Budget	YTD Actual			Original Budget	YTD Actual			Original Budget
218835	COMPUTER SUPPORT		1			- 1	4.3%			- 1	10.4%	8.0%			6.8%	10.7%		- 1	6.7%
	Ī	12 Student	1			- 1	18.1%			- 1	9.3%	4.3%			-19.1%	-20.6%		- 1	-3.2%
		17 Benefits	1			- 1	7.5%	7.7%		- 1	12.0%	9.6%			6.8%	10.7%		- 1	8.3%
		20 General Operating	1			- 1	0.2%	6.5%		- 1	-1.4%	-30.7%			-29.1%	-15.6%		- 1	-17.8%
		30 Travel & Entertain				- 1	2.7%	-10.4%		- 1	12.1%	32.4%			-9.7%	1.8%		- 1	1.0%
Expense	Total						4.8%	6.7%		·	8.8%	1.8%			-0.1%	6.1%		,	4.0%
		University Student Count					-0.3%				1.3%				2.1%				0.8%
		University Employee Count					6.8%				3.3%				3.2%				0.0%
		Computer Support Position Count					0.0%				10.9%				7.9%				2.9%

Sources: 1 FY03-06, Registration Statistics, End of Term, Fall Semester 2005, Table 1, five Years of Summary Headcount FY07, Registration Statistics, PreIminary 9/19/2006, Fall Semester 2006, Table 1, five Years of Summary Headcount

This five-year budget analysis shows full-time staff position growth in Help Desk/Desktop Support and Desktop Engineering from 11.6 FTE in FY03 to 14 in FY07, yielding a small decrease in the number of clients supported per staff member from 845/1 to 739/1, despite increases in the size of the campus community. Managing this support ratio is important to overall service quality.

Position growth is shown to be funded largely by operating budget reallocations to staff salaries (note negative percentage changes in FY06, and 07). Operating budget reallocations were also made from other areas of ITS to cover position growth.

² IPEDS Survey

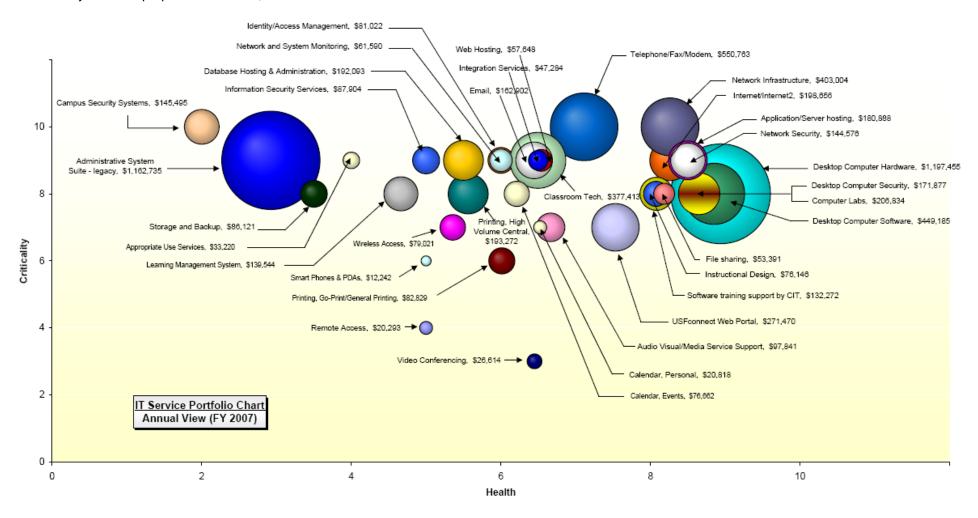
³ Labor Distribution FY's staff sheet. Full-time exempt employee only; part-time exempt & temp staff and student are not included.

Labor Distribution FY's staff sheet. Full-time OFE employee only; part-time exempt & temp staff and student are not included.

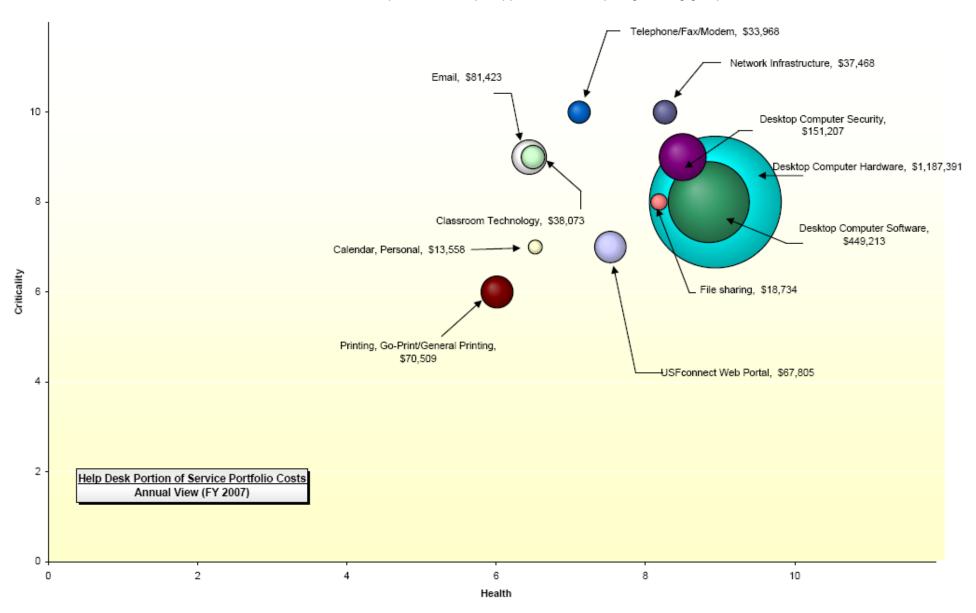
^{*} Note: FY07 FT&PT faculty count pending updated; kept same as FY06 until available

Costs By Service

ITS has been working to clearly define its services and identify the cost of providing each one. For the purposes of this program review, we have looked at the costs of IT services for which the Computer Support group is primarily responsible, as well as the Help Desk costs associated with the IT services they support most heavily. For the purposes of context, the full IT Service Portfolio with costs is as follows:



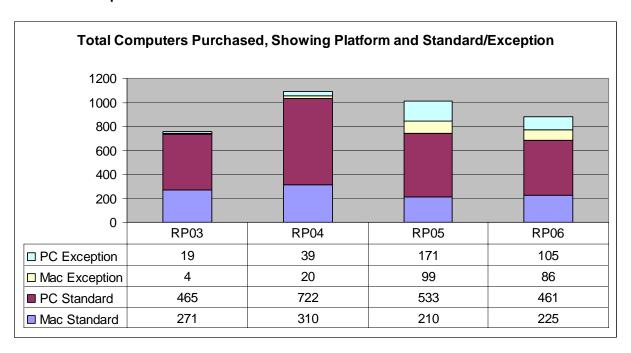
The service costs indicated above that are attributable to the Help Desk/Desktop Support and Desktop Engineering groups are:



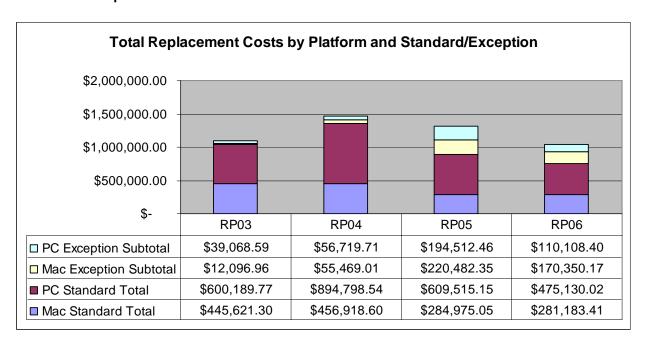
Computer Replacement Costs

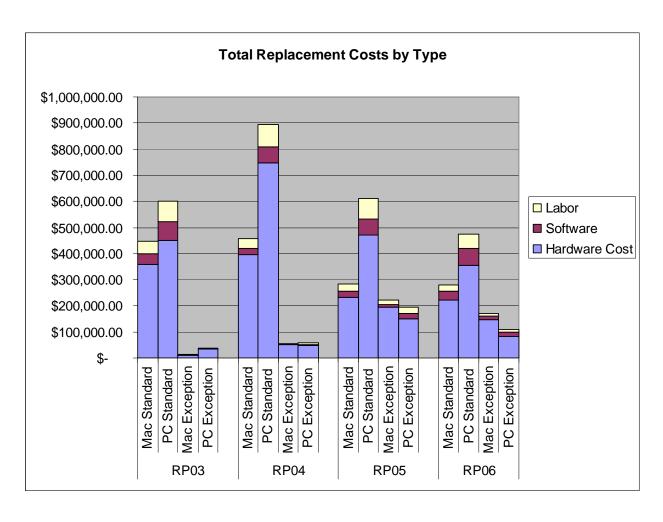
The following financial analysis focuses on the computer replacement program. All replacement costs include software and labor.

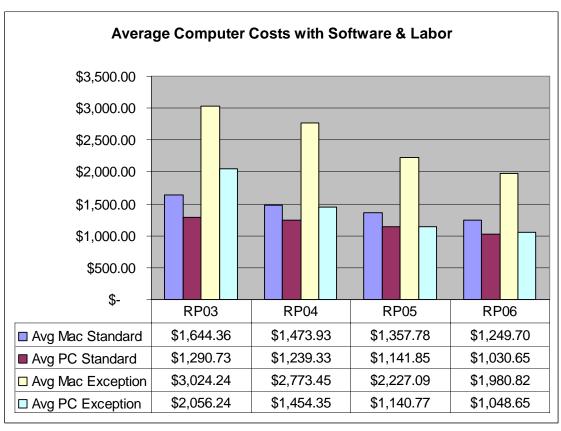
Number of Computers Purchased Per Year



Total Annual Replacement Costs







These views of Replacement Project financial data indicate the following:

- Consistent with market trends, USF per-computer costs are falling.
- A trend toward increased numbers of exceptions began in 2004. ITS is working on processes to reduce this volume but will need executive support in the various client areas to make a significant difference.
- Exceptions are, on average, \$650 more expensive that standard computers. This differential accounts for \$357,908 over these four years.
- Standard Macs are, on average, \$255 more expensive than standard PCs. This differential accounts for \$259,270 over these four years.
- Exception Macs are, on average, \$1077 more expensive than exception PCs. This differential accounts for \$225,137 over these four years.
- The differential cost of providing the Mac options, both standard and exception, for these four years is \$484,407. Labor costs were allocated equally between PCs and Macs, so the cost of maintaining both of these skill sets is not included in this differential.
- In order to avoid an increase in total replacement expenditures due to the high volume anticipated for RP07 (replacement of RP04, largest year shown above), ITS plans to keep classroom and some lab computers for a fourth year.

Benchmarking

Educause Core Data Survey Benchmarks

The following benchmarks were obtained from the Educause Core Data Survey for FY05 (FY06 numbers are currently being collected).

Help Desk Hours

	Hours Per Week
USF ITS Help Desk	56
AJCU Mean	70.5
Tuition Comparators Mean	72

By reallocating a staff position and shifting work schedules, ITS will expand to over 80 hours per week by mid-spring, 2007. This will add night coverage until 9:55 pm, as well as Saturday and Sunday coverage.

Campus Owned/Leased Computers Per Head*

	Computers Per Head
USF	0.3
AJCU Mean	0.29
Tuition Comparators Mean	0.35

This ratio indicates that the total number of institutional computers at USF is very much on par with competitor institutions.

Percentage of Central IT Workers Allocated to Help Desk

	% of Central IT FTE
USF ITS Help Desk	6.68
AJCU Mean	8.93
Tuition Comparators Mean	7.08

This percentage reflects how the central IT group allocates its staffing resources to the Help Desk. Recent adjustments will increase this percentage in the next Core Data survey benchmarks.

Percentage of Central IT Workers Allocated to Desktop Computing Support and Training

	% of Central IT FTE
USF ITS	15.69
AJCU Mean	15.64
Tuition Comparators Mean	13.65

This percentage reflects how the central IT group allocates its staffing resources to desktop support and training. The percentage reflected here for USF includes training resources in the CIT, outside the scope of this program review. Recent adjustments toward the Help Desk will reduce this percentage in the next Core Data survey benchmarks.

^{*}Total campus headcount is derived by adding the total campus employees, including faculty to the total IPEDS student headcount.

Campus Computing Survey

The following benchmarks were obtained from the Campus Computing Survey for 2006.

Institutions that have established a single product standard for Desktop/notebook computer operating systems

	Yes	No
USF		X
Private Institutions	17.7% Win XP	82.4%
All Institutions	31.4% Win XP	67.5%

It has on occasion been suggested that USF should eliminate support for Macs in order to reduce desktop computing IT costs. The above benchmarks indicate that most institutions have not gone to a single product standard. In addition, survey responses to a separate question indicate that 94% of private institutions support Mac OSX.

To address budget issues, institutions outsourcing user support services to commercial providers

	Currently	Beginning	Reviewing	Decided
	doing this	in 06-07	for 06-07	not to do
Private Institutions	14.3%	4.1%	10.2%	71.4%
All Institutions	12%	1.3%	7.8%	75.3%

USF ITS is not currently considering outsourcing user support services.

Current Replacement Cycle for desktop/notebook computers (years):

Student Labs

	3yrs	4yrs
USF	X	
Private Institutions	64%	28%
All Institutions	52.3%	32.3%

Faculty Offices

	3yrs	4yrs
USF	X	
Private Institutions	44%	46%
All Institutions	31.6%	49.4%

Administrative Offices

	3yrs	4yrs
USF	X	
Private Institutions	38%	56%
All Institutions	26.5%	53.1%

It is problematic that these benchmarks do not separate laptop from desktop computers, given that laptops are generally acknowledged to have a shorter life cycle. ITS is, however, working again on strategies to extend the life of desktop machines to 4 years in some cases.

Plans for Improvement

ITS plans for improvement in these major service categories – Customer Service/Help Desk and Desktop Computing & Printing – are outlined in the current draft of the 07-10 IT Plan. This draft plan will go through a review and revision process over the course of this spring semester, to be finalized by June 2007. The current draft of plan in these service categories follow below.

Customer Service/Help Desk

- Accounts/Access Management
- Advice & Recommendations
- Troubleshooting
- Equipment Reservations
- Office Moves

The ITS Help Desk provides a central point of contact for all members of the community to request IT services or report an issue for resolution. The Help Desk has become a strength that the community would like to see ITS build upon with expanded hours and staff training and development.

Goal:

• ITS will expand the availability, scope and quality of customer service.

Steps, in Priority Order:

- 1. Adjust staff assignment and work schedules to cover all University in-class teaching hours
- 2. Develop and implement an online self-help knowledge base for self help and submitting help requests online during off hours
- Create a lower campus Help Desk location for use during peak periods and other times, as needed.
- 4. Clarify and communicate how support requests are prioritized.
- 5. Ensure coverage for new/significantly changed systems, such as the Administrative System Suite migration to SunGard Banner
- 6. Create a vibrant IT staff development program that supports the recruitment, retention, and continuous professional growth of ITS staff.
- 7. Hold a general invitation ITS Client Forum update presentation followed by an exchange of best practices and open discussion for each major role faculty, staff, and student each fall and spring semester.
- 8. Develop an ITS Liaison program to provide each school, college, or major administrative unit with a point of contact to proactively discuss IT needs and facilitate development of solutions.
- 9. Develop a student Residential Computer Consultant (RCC) program to provide technical support for students living in USF residence halls.

Success Metrics:

- Coverage of all in-class teaching hours
- Average help request resolution rates:
 - o Priority 1: 1 business day
 - o Priority 2: 2 business days
 - o Priority 3: 4 business days
- First call resolution rate of 65%
- Call abandon rate under 5%
- 85% Client Satisfaction

Cost Estimates:

- Potential 1 FTE for Banner support: \$75K
- Client Forums and Liaison Program: \$5K
- RCC program: \$175K

Desktop Computing & Printing Services

- Assistive Technologies
- Computer Labs
- Desktop Computer Hardware
- Desktop Computer Security (see Security Services)
- Desktop Computer Software
- Personal Computer Purchasing Program
- Printing
- Printing, High Volume Central (see Information Services)
- Storage & Backup

Desktop Computing and Printing services provide a basic infrastructure for faculty, staff and student productivity. The computer replacement program has served the University well in this area, producing strong satisfaction with hardware and software among faculty and staff. Areas of concern include central backup, streamlining the management of USF desktop hardware and software, computer lab size and capabilities, student computing, and assistive technology support.

Goals:

• ITS will develop Desktop Computing & Printing services to better steward and safeguard University assets and data, as well as offer expanded computing resources to students.

Steps, in Priority Order:

- 1. Carry out central backup pilot project to assess storage needs and develop a plan for full implementation, prioritizing laptops (due to encryption needs).
- Expand SAN as indicated by the central backup plan, and roll out central backup services to all faculty and staff.
- 3. Improve USF desktop and laptop asset management resources and practices to ensure accurate, timely tracking of asset location/user assignment, replacement and recovery, and software licensing compliance.
- 4. Revisit 4-year desktop lifecycle options in keeping with external benchmarks.
- 5. Identify space and plan for a Lone Mountain computer lab and printing resource. Implement plan when space is available.
- Explore potential for expanding and/or reconfiguring existing computer labs to improve their functionality as teaching and learning spaces, as well as accommodate additional computers for larger classes.
- Identify and implement a student laptop loan, lease or purchase program without negative financial impact on USF.
- 8. Document current assistive technology support and work with Disability Related Services to remedy any issues.
- 9. Explore other ways to facilitate convenient, cost effective student printing.

Success Metrics:

- Complete data backups on file for all full-time faculty and staff
- Containment of computer replacement costs under \$1.5M annually.
- TBD (#) students participating in laptop loan, lease, or purchase program.
- LM computer lab utilization on par with lower campus labs.
- 85% Client Satisfaction

Cost Estimates

- SAN expansion for central backup: TBD
- Asset management system: \$100K
- Computer lab construction and computers: \$200K