

# NMSU ALAMOGORDO TECHNOLOGY PLAN

## March 2014

### **Executive Overview**

#### **Purpose**

The purpose of Institutional Technology (IT) is to design, implement, maintain, and procure technology that will serve the needs of the students and support the primary administrative and business functions of New Mexico State University Alamogordo (NMSU-A). As part of technology planning, NMSU-A strives to complete relevant IT projects and to research new technology that will benefit the campus and system.

#### **Technology Issues**

In the 2008 *Current Issues Survey Report* by Educause (<http://www.educause.edu/ir/library/pdf/eqm0823.pdf>), the survey lists the major issues concerning college IT departments. When utilizing this document, IT departments have a better understanding of the current issues and are better equipped to handle ever-changing needs. The following summarizes the top five (5) issues facing IT departments:

1. **Security**. IT security has been one of the top 5 issues for several years. With more information being stored electronically, the risk of security breaches is increasing as are federal and state regulations that keep information safe. Security is a major challenge as universities attempt to balance freedom of information and decentralization.
2. **Administrative/ERP Information Systems**. High startup costs, increasing license fees and a shortage of personnel have kept Administrative/ERP Information Systems a concern for IT departments. Open source products have helped, but the total cost of ownership remains a concern.
3. **Funding IT**. Although the overall cost of hardware, software and upgrades have continued to decrease, the IT costs continue to consume a larger portion of a university's budget. With a multi-year technology plan, senior administrators are able to grasp the importance of IT, which has a positive impact on IT funding.
4. **Infrastructure**. This is the heart of a university's IT services. Infrastructure demands are being placed on IT departments to maintain the wired, wireless, VPN and voice services. Wireless, VPN and voice services increase the cost of IT budgets and cause additional security. Another emerging infrastructure is green computing which puts pressure on IT departments to find ways to decrease their carbon footprint.
5. **Identity/Access Management**. This issue refers to users having access to only the data they are authorized to access.

NMSU-A has made great strides in most of the Educause top 5 concerns. With the help of this document, NMSU-A strives to improve the effectiveness and better measure our goals in serving the campus community.

## **IT Staffing**

NMSU-A has committed the following to the staffing of IT:

- 1) *IT Director:* The IT Director is in charge of technology on the NMSU-A campus. The SAI maintains the integrity of the campus network including upgrading the NOS and backbone, working with the Las Cruces campus ICT department, maintaining backups, and coordinating and supervising the activities of the other IT staff.
- 2) *Computer Support Personnel:* The computer support personnel are responsible for running network cable, repairing, and setting up and upgrading campus computers. The computer support personnel are also in charge of the computer labs and the lab aides.
- 3) *Education Technology Specialist:* The specialist is responsible for assisting instructors and students with online and other distance education technologies.
- 4) STEM and Title V Grant funded personnel are supervised by respective grant coordinators and coordinate with central IT.

## **Campus Infrastructure**

The NMSU-A campus is tied together by a Cisco 3845-MB router running through Century Link at 30mbps to NMSU Las Cruces with a cost of \$3,724.00 per month. A gigabit fiber feed switch is connected to the router that feeds switches in all buildings.

In spring 2011, a student technology fee was implemented at \$2.00 per credit hour to assist the university in upgrading and replacing student technology.

All buildings on the campus (except Tays Center) have category 6 LAN cable. Tays has category 5 LAN cable. Wireless access is available in all buildings.

### **A. New building infrastructure:**

1. New building infrastructure will be handled by PPD, installed by ICT, and funded by new construction money, grants, or bonds.
2. Upkeep and replacement of LAN cable is the responsibility of ITS and funded by ITS, grant and/or student technology fees.
3. Upkeep and replacement of projectors are the responsibility of AV and funded by AV and/or student technology fees.
4. Purchase/upkeep of technology by departments/divisions is funded by those areas. All departments/divisions will submit to the IT Committee a 5-year plan of replacement of technology.
5. Electronic signs are funded by student fees and/or BR&R funds. Indoor signs are operated by Student Services and the outdoor sign is operated by the President's Office. In the event of an emergency, the indoor signs will be operated by security.
6. After grant funds come to an end, all technology repairs and upgrades become the responsibility of the department using the technology.
7. ITV systems are maintained and operated by the AV department.

### **B. Office technology:**

1. Copy machines for divisions are handled by the NMSU-A Business Office. All repairs and maintenance are the responsibility of each division.
2. All purchases and repairs of area printers are funded by the requesting department.

## IT Plan Implementation for FY 09-10

- Media Center purchased a new video camera.  
Status: Completed Fall 2009  
Cost: \$3,749.95 (funding source Media Center)
- Campus president and the head of the IT department spoke to Student Government about implementing a \$2.00 per credit campus technology fee to help in replacing and purchasing new technology equipment for students.  
Status: Survey completed by students Spring 2009; fee approved by Regents Spring 2010; fee implemented summer 2010.
- Media Center replaced projector system with large screen television in the music room.  
Status: Completed Summer 2010  
Cost: \$2,876.89 (funding source ProTech & Media Center)
- Replaced 12 computers in CB 402.  
Status: Completed Fall 2009  
Cost: \$15,359.76 (funding source Title V)
- Replaced 15 computers in ASC.  
Status: Completed Fall 2009  
Cost: \$20,170.80 (funding source Title V)
- Installed three new wireless access points in Science Center.  
Status: Completed Fall 2009  
Cost: \$3,810.00 (funding source ITS)
- LTC purchased 20 laptops for faculty check out.  
Status: Completed Fall 2009  
Cost: \$30,616.00 (funding source Title V)
- Increased internet bandwidth from 3 MBPS to 10 MBPS.  
Status: Completed Fall 2009  
Cost: \$3,533.00 per month (funding source ITS)
- Purchased anti-spyware license to install on campus computers.  
Status: Company no longer supporting software  
Cost: \$444.69 (funding source ITS)
- E-mail system was moved to a new server.  
Status: Completed Spring 2009
- Installed a new file server to replace the three old servers.  
Status: Completed Spring 2010  
Cost: \$14,487.12 (funding source ITS and Title V)

- Replaced network printer in SC 104.  
Status: Completed Spring 2010  
Cost: \$1,472.63 (funding source ITS)

### **IT Plan Implementation for FY 10-11**

- Moved ProTech Rooms 102 and 105 from Windows XP to Windows 7.  
Status: Project put on hold per request of Computer Science Coordinator.  
Cost: MLA (funding source ITS)
- Redesigned SC103 into a multi-use classroom.  
Status: Completed Summer 2010  
Cost: \$13,932.00 (funding source BR&R)
- Media Center upgraded studio lights.  
Status: Completed Fall 2010  
Cost: \$4,470.00 (funding source Media Center)
- Replaced 24 computers in ABE/Trades lab at Tays Center.  
Status: Completed Spring Semester 2011  
Cost: \$40,068.48 (funding source G. O. Bond)
- Evaluated instructional technology across the campus to determine potential upgrades of equipment using Student Technology funds.  
Status: Completed Spring 2011
- Computer labs upgraded from Microsoft Office 2007 to Microsoft Office 2010.  
Status: Completed Summer 2011  
Cost: MLA (funding source ITS)
- Moved campus network from NetWare to Windows Server 2008.  
Status: Completed Summer 2011  
Estimated Cost: \$594.00 (funding source ITS)
- Converted Tays Center to wireless access.  
Status: Completed Fall semester 2011  
Cost: \$26,953.63 (funding source BR&R)
- Provided technical assistance for the Mescalero Education Center.  
Status: Completed  
Cost: none
- Replaced instructional computers in CB 601, 603, 701, 703, and 704, SC 115, 118, and 125.  
Status: Completed May 2011  
Cost: \$6,906.90 (funding source VPAA and student technology fee)

- Student Technology Fee Use fiscal year 2010 – 2011.  
Increased internet bandwidth. Cost: \$11,000.00 per year to assist.  
Replaced 10 computers in Testing Center. Cost: \$7,413.00  
Purchased Minitab Stat Software. Cost: \$1,296.00 per year.  
Purchased AutoCAD License. Cost: \$5,400.00 per year.
- Purchased 24 laptop computers and cart for developmental math.  
Status: Completed Summer 2011  
Cost: \$27,251.32 (funding source Title V)

### **IT Plan Implementation for FY 11-12**

- Purchased 24 laptops for developmental reading/writing.  
Status: TBA  
Cost: \$26,000.00 (funding source Title V)
- Replaced 3 wireless access points in CB Area.  
Status: Completed Summer 2011  
Cost: \$4,071.66 (funding source ITS)
- Replaced 29 computers in SC 135 lab.  
Status: Completed Summer 2011  
Estimated Cost: \$37,000.00 (funding source student technology fee)
- Divisions, Student Services, PPD, Academic Support, Library, Business Office and HR must submit five-year repair and replacement plans for technology used by employees. Plan must include current configurations, timelines, and estimated costs.  
Status: TBA
- Designed and implemented wireless scheme for Rohovec.  
Status: Completed Summer 2011  
Estimated cost: \$16,000.00 (funding source BR&R funds)
- Met with Department/Division Heads to discuss technology upgrades in their areas.
- Upgraded campus internet bandwidth from 10 Mbps to 30 Mbps.  
Status: Completed Fall 2011  
Cost: \$6,281.00 (funding source student technology fee)
- Replaced instructor computer in ProTech Room 105.  
Status: Completed Spring 2012  
Cost: \$859.60 (funding source student technology fee)
- Replaced wireless access point in Student Union Bldg.  
Status: Completed Spring 2012  
Cost: \$1,352.00 (funding source ITS monies)

- Installed 10 computers for STEM staff.  
Status: Completed Summer 2011  
Cost: (funding source STEM grant)

### **IT Plan Implementation for FY 12-13**

- Replaced 20 computers and RAIDs in Mac lab.  
Status: Completed Summer 2012  
Cost: \$111,940.00 (funding source STEM grant)
- Replaced 23 Computers in SC 104.  
Status: Completed Fall 2012  
Cost: \$24,682.45 (funding source student technology fee)
- Evaluated instructional technology for replacement.  
Status: Completed  
Cost: (funding source student technology fee)
- Met with Department/Division Heads to discuss technology upgrades in their areas.
- Replaced feed and 7 LAN switches in Science Center.  
Status: Completed Summer 2012  
Cost: \$21,332.58 (funding source IT monies)
- Replaced LAN feed and student union switches.  
Status: Completed Summer 2012  
Cost: \$12,000.00 (funding source student technology fee)
- Replaced 29 computers in SC 135.  
Status: Completed Summer 2012  
Cost: \$27,750.10 (funding source STEM grant)
- Installed 4 new computers in HSSE 119 for tutoring lab.  
Status: Completed Summer 2012  
Cost: \$3,000.00 (funding source Title V grant)
- Installed 25 new computers in CB 402.  
Status: Completed Summer 2012  
Cost: 13,080.50 (funding source Title V grant)
- Installed 23 new computers in CB 602.  
Status: Completed Summer 2012  
Cost: 12,034.06 (funding source Title V grant)
- Replaced 25 laptops in SC 130.  
Status: Completed Fall 2012  
Cost: 29,289.00 (funding source STEM grant)

- Installed fiber from the Student Union Bldg. to the Rohovec.  
Status: Completed Fall 2012  
Cost: \$15,000.00 (funding source BRR)
- Purchased 7 Acrobat sight-impaired screens.  
Status: Completed Spring 2013  
Cost: \$18,530.00 (funding source student technology fee)
- Replaced 2 computers in Language Lab.  
Status: Completed Fall 2012  
Cost: \$1,310.40 (funding source student technology fee)

#### **IT Plan Implementation for FY 13-14**

- Replace 21 computers in library lab.  
Status: TBA  
Estimated Cost: \$21,000.00 (funding source student technology fee)
- Replaced 25 computers in TE 105.  
Status: Completed Fall 2013  
Cost: \$25,993.00 (funding source student technology fee)
- Evaluated instructional technology for replacement.  
Status: Completed Fall 2013  
Cost: (funding source student technology fee)
- Meet with Department/Division Heads to discuss technology upgrades in their areas.  
Status: TBA
- Replaced 15 switches in ProTech.  
Status: Completed Fall 2013  
Cost: \$27,903.97 (funding source state monies)
- Installed 48-Port PoE switch in Science Center.  
Status: Completed Fall 2013  
Cost: \$3,191.98 (funding source state monies)
- Installed 48-Port PoE switch in HSSE.  
Status: Completed Fall 2013  
Cost: \$3,191.98 (funding source state monies)
- Replaced 3 switches in HSSE.  
Status: Completed Summer 2013  
Cost: \$5,210.36 (funding source student technology fee)
- Replaced switch in PPD.  
Status: Completed Fall 2013  
Cost: 999.19 (funding source student technology fee)

- Replaced 3 switches in Library.  
Status: Completed Fall 2013  
Cost: \$6,746.75 (funding source state monies)
- Replaced 4 switches in Tays Center.  
Status: Completed Fall 2013  
Cost: 5,135.15 (funding source state and student technology fee monies)
- Replaced switch in Art Building.  
Status: Completed Fall 2013  
Cost: \$999.19 (funding source state monies)
- Replaced wireless access point in Art Building.  
Status: Completed Fall 2013  
Cost: 692.62 (funding source IT monies)
- Replaced LAN cable in HSSE.  
Status: Completed Summer 2013  
Cost: \$2,300.00 (funding source IT monies)
- Move Data Center in Administration.  
Status: In Progress  
Cost: TBA (funding source state monies)
- Update Data Center in Student Services.  
Status: In Progress  
Cost: TBA (funding source state monies)

#### **IT Plan Implementation for FY 14-15**

- Replace 20 computers in TE 102.  
Status: TBA  
Cost: \$20,000.00 (funding source student technology fee)
- Replace 20 computers in ASC.  
Status: TBA  
Cost: TBA (funding source student technology fee)
- Evaluate instructional technology for replacement.  
Status: TBA  
Cost: TBA (funding source student technology fee)
- Meet with Department/Division Heads to discuss technology upgrades in their areas.  
Status: TBA



## **IT Plan Implementation for FY 15-16**

- Evaluate instructional technology for replacement.  
Status: TBA  
Cost: TBA (funding source student technology fee)
- Meet with Department/Division Heads to discuss technology upgrades in their areas.  
Status: TBA
- Poll student body for an increase in technology fee from \$2.00 to \$4.00 per credit.  
Status: TBA

## **NMSU-A Disaster Recovery Plan**

The purpose of a Disaster Recovery Plan is to be able to respond to a disaster that would significantly disrupt critical and non-critical computing systems and the daily business of the campus.

The recovery process would rely on vendors to quickly provide replacement technologies. In the event replacements cannot be procured in a timely manner, equipment substitutions will be made until the proper equipment is received.

Data recovery relies entirely on backup tapes used to store data from server hard drives. Any data stored on a user's personal drive is the responsibility of the user to back-up in the event of a failure.

Data on tape is stored off campus.

## **NMSU-A Computer Salvage Plan**

All computers that go to salvage must go through IT to make sure hard drives have been properly wiped.

## **NMSU-A Institutional Data Security**

All data located on network servers is accessible only by those persons who have rights to access such data. If rights to data are requested by any user, a call is made to their supervisor to authenticate the request before rights are granted.

Data stored on desktop computers is at a higher risk of being stolen, so users must take measures to ensure data is not copied or stolen. To help ensure this, every user is required to enter a password anytime a computer is booted up or restarted. When a computer is taken out of service, it is wiped according to federal guidelines.

## Student Lab Technology Equipment

Science Center 104	Dell OptiPlex 990	23	October 2012
Science Center 135	Dell OptiPlex 390	29	July 2011
Science Center 103	Dell Latitude E 5520	24	April 2011
Science Center 134	Dell Precision M 4700	25	August 2013
Pro Tech 105	Dell OptiPlex XE2	25	December 2013
Pro Tech 102	Dell OptiPlex 755	20	March 2009
Learning Technology Centr	Dell Precision T3400	15	June 2009
Classroom Building 402	Dell OptiPlex 390	25	August 2012
Testing Center	Dell OptiPlex 380	10	March 2011
Academic Support Center	Dell Precision T3400	21	June 2009
Library	Dell OptiPlex 390	20	July 2011
Classroom Building 702	Dell Latitude E5420	30	July 2011
Classroom Building 602	Dell OptiPlex 390	23	August 2012
Classroom Building 201	Dell Precision T3400	1	May 2009
Science Center 130	Dell Latitude E6530	24	August 2012
Nursing	Dell Latitude E5420	24	September 2012

## Instructional Technology Equipment

CB 701	Dell OptiPlex 380	1	March 2011
CB 703	Dell OptiPlex 380	1	March 2011
CB 704	Dell OptiPlex 380	1	March 2011
CB 705	Dell OptiPlex 380	1	March 2011
CB 601	Dell OptiPlex 380	1	March 2011
CB 603	Dell OptiPlex 380	1	March 2011
CB 801	Dell OptiPlex 380	1	March 2011
SC 115	Dell OptiPlex 380	1	March 2011
SC 125	Dell OptiPlex 380	1	March 2011
SC 118	Dell OptiPlex 380	1	March 2011

## Classroom Equipment

Classroom	Projector	Starboard	Elmo	TV	DVD	VCR
CB 704	Yes	Yes	Yes	Yes	Yes	Yes
CB 802	Yes	Yes	No	Yes	Yes	Yes
CB 705	Yes	Yes	No	Yes	Yes	Yes
CB 801	Yes	No	No	Yes	Yes	Yes
CB 703	Yes	No	No	Yes	Yes	Yes
CB 701	Yes	No	No	Yes	Yes	Yes
CB 604	Yes	No	No	Yes	Yes	Yes
CB 602	Yes	No	No	No	No	No
CB 601	Yes	Yes	Yes	Yes	No	Yes
SC 360	Yes	No	No	Yes	Yes	Yes
SC 361	Yes	No	No	No	No	No
SC 364	Yes	No	No	No	No	No
SC 363	Yes	No	No	No	No	No
SC 270	Yes	No	No	Yes	Yes	Yes
SC 260	No	No	No	Yes	No	No
SC 261	Yes	No	No	No	No	No
SC 109	No	No	No	Yes	No	Yes
SC 114	Yes	No	No	Yes	Yes	Yes
SC 115	Yes	Yes	Yes	Yes	No	No
SC 118	Yes	Yes	Yes	Yes	Yes	Yes
SC 122	Yes	No	No	Yes	Yes	Yes
SC 125	Yes	Yes	Yes	Yes	No	No
SC 127	Yes	No	No	Yes	No	No
SC 130	Yes	No	No	Yes	No	Yes
SC 134	Yes	No	No	Yes	Yes	Yes
SC 135	Yes	No	No	Yes	No	No
SC 103	Yes	No	No	Yes	No	No