



NMSU fiber optic cable

## ***What we do...ICT supports over ninety 24x7 applications, running on 300 servers...***

...using 240 terabytes of storage across a network infrastructure that consists of over 150,000 miles of fiber and we handle over 8 million email messages. That's on a slow day.

ICT is a multifunctional organization whose purpose is to support New Mexico State University's computing technology, network, and telecommunication's needs. ICT is responsible for NMSU's central software systems such as Banner, which makes up the university's HR, finance, and student systems; email; Canvas --- the online Learning Management System; COGNOS, the application from which most university reporting originates; and a multitude of other systems on which the university relies to conduct its day-to-day operations.

Almost all of the central software systems run on computer servers that are

under the direct control and supervision of ICT staff and are housed securely in two separate locations on the Las Cruces Campus.

Critical data and related information services are passed throughout NMSU on an advanced wired and wireless network that stretches across the university's system of local and regional campuses, as well as around the state. In addition, university telecommunications, and fire and life safety systems also reside on an ICT-controlled network of switches, routers, and fiber optical cable.

ICT supports student, faculty and staff computing with computer labs, computer repair, help desk and related data and technology services. In addition, it provides central systems disaster recovery, university data security/integrity, and information technology compliance services.

## **INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT)**

## **Projects Completed and Underway**

### **Major Projects Completed FY12**

- DARS Degree Audit System
- Instructure Canvas Learning Management System
- Eastern Fiber Loop Project
- Ad Astra Course Schedule 7 upgrade
- Platinum Analytics Planning and Retention System
- Course Approval Form (CAF) System
- Direct Deposit enhancement
- Saba Training Management System - Phase 1
- myNMSU upgrade
- Oracle 11G upgrade
- Live@edu email enhancements

### **Major Projects Underway FY13-14**

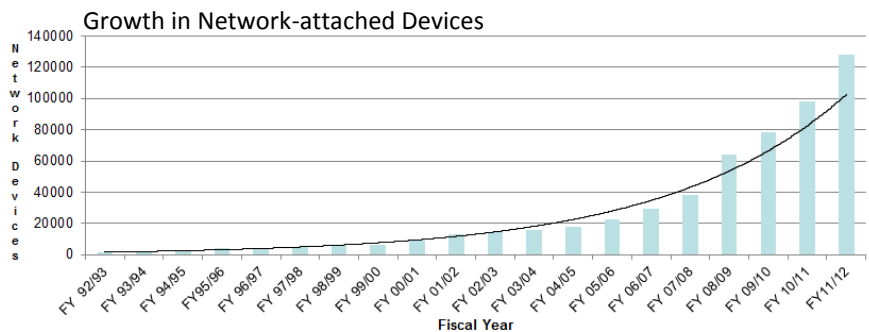
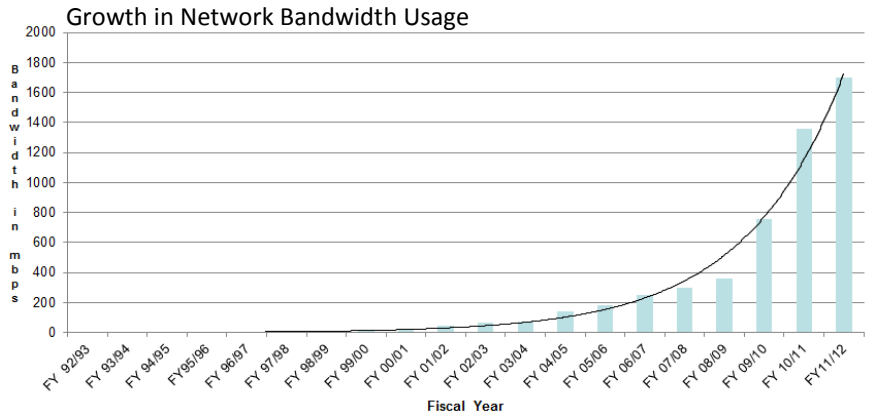
- Campus EAI mobile application release
- Live@edu to Office 365 upgrade
- Mobile Apps deployment
- EPAF System
- People Admin 7.x implementation
- Internet upgrade from 1 to 10Gb
- Employment Authorization Form
- Department Course Evaluation
- University Data Dictionary
- Disaster Recovery Plan revision
- Banner 9.x upgrade



# Challenges Facing ICT in FY14

ICT faces many challenges as fiscal year 2014 unfolds. One such challenge is the flattening of IT staffing levels at a time when information technology services are expanding into almost all aspects of NMSU business. The need for information technology solutions continues to grow while IT staffing levels do not.

Directly related to growing information technology need is the acceleration in student use of mobile devices on campus. At the start of the Spring 2013 semester alone, NMSU experienced a 20% increase in the number of network connected, wireless devices. Growth in the number of wireless devices, which results in an increase in demand for wired and wireless services as well as an increase in bandwidth requirements, necessitates that ICT actively and continuously anticipates future need and takes action to ensure service availability.



## FY13 Budget and Capital Outlay Request

### FY13 Budget

	ICT	Telecom
Salary	\$6,510,076	\$2,284,713
Maintenance	2,488,265	592,479
Operational	2,638,603	1,744,198
Resale Inventory	142,302	1,075,806
Student Tech Fee	1,911,100	0
Other	39,060	0
<b>TOTAL</b>	<b>\$13,729,406</b>	<b>\$5,697,196</b>

### Capital Outlay Request - \$3,747,000

<b>Network and Wireless</b>	NMSU Alamogordo
Network and Wireless Infrastructure	\$130,000
	NMSU Carlsbad
Network, Data Center and Voice	\$82,000
	NMSU Doña Ana
Network and Wireless Infrastructure	\$235,000
	NMSU Grants
Network and Wireless Infrastructure	\$300,000
	NMSU Las Cruces
Network and Wireless Infrastructure	\$1,200,000
<b>Phone System</b>	NMSU Las Cruces
Phone System Replacement	\$1,800,000



# ICT Quick Facts

*Effort*

*Dedication*

*Results*

1	Department
3	Super computer clusters supported
5	Database administrators
8	System administrators
24	Software and report developers
60	Databases maintained
90	Applications maintained
99	Uptime percentage for production Banner is 99.99+
100	DBA supported software applications
230	Technology classrooms supported
371	Servers administered
394	Non-server devices monitored
400	Servers backed up each night
528	SAN disks maintained
716	Active running jobs monitored with 337 active process flows
1,500	Upgrades/patches/fixes performed by DBAs in FY 2011
1,895	Switch ports monitored
3,500	Concurrent online database users or connections
3,766	Daily job-related service functions overseen
19,900	Individual jobs executed each week
100,000	Database tables maintained
148,203	Network connected devices
1,980,000	Feet of fiber optic cable on Las Cruces campus
8,000,000	Email messages scanned each day
12,000,000,000	DBA supported rows/records of online data
11,000,000,000,000	Average bytes of nightly backups
16,000,000,000,000	Bytes of allocated database storage
290,000,000,000,000	Bytes of SAN storage
564,000,000,000,000	Bytes of backup data

# ICT Organizational Chart

