

Information Technology Services (ITS) Update
for Bond Oversight Committee 7/25/07

The Measure B new construction projects and facility renovations require technology improvements in the data network and computer equipment within these buildings. The Information Technology Services (ITS) Equipment fund includes all computer equipment, network devices, or communication equipment to support data, video, or voice used to support the instructional environment.

There are several categories of hardware and software improvements included in this fund: desktop or laptop computers, printers, servers, network switches and routers, firewalls, network performance monitoring and testing tools, wireless local area network, video conferencing, streaming media services, upgrades to T1 lines connecting District and College Sites, power generators and uninterruptible power supply (UPS), network and system redundancy, and District wide software applications for Room Scheduling, Luminus Portal, and Document Imaging.

The primary focus to-date for ITS equipment has been the replacement of all old PCs, MACs, and printers at the colleges. District configuration standards were established and the cumulative number of units that have been installed as of June 2007 are as follows:

Desktop/Laptops:	Chabot 1,115	Las Positas 822	Total: 1,937
MACs:	Chabot 120	Las Positas 91	Total: 211
Printers:	Chabot 81	Las Positas 44	Total: 125

As existing facilities are renovated and new facilities are occupied, the installation of new PCs and peripheral equipment will increase significantly over the next 2 years to provide Smart Classrooms throughout. Completion of this milestone for up-to-date equipment establishes a baseline for the computers which allows Chabot-Las Positas to implement a Total Cost of Ownership (TCO) model for installation, maintenance, and training that is promoted by the State Chancellor's Office. Chabot-Las Positas has adopted a 4-year cycle for PC replenishment instead of a 3-year cycle to achieve additional cost savings.

Another significant network infrastructure upgrade that was completed in phases from 2005 through 2007 was the replacement of the Cisco switches and routers at all sites. The previous network infrastructure equipment was obsolete and could not meet the increased performance demands of the Measure B planned expansion. The new network infrastructure now provides a faster and more reliable network with several years growth allowance. For advancements in our security environment, all PIX firewall hardware and software was replaced and improved network monitoring tools were installed to identify intrusions, proactively resolve outages, and track performance.

Hardware and software for servers that support the District and College critical applications are being gradually replaced with District-wide standard configurations that provide expanded capacity and meet new stringent performance specifications. Servers

that support applications that require a 24/7 operation will also be mirrored using redundant servers when failures occur. New tape backup hardware and software was purchased to provide consolidated backups for all District critical enterprise systems. In addition, phone system expansions were purchased for each college campus to support at least the next 3 years of new building occupancy.

New software applications were installed to improve District-wide services to the colleges. Scheduling software by CollegeNet provides automatic room assignment tracking for both academics and events, which facilitates the management of building space while Measure B construction is underway. To improve the Internet access and system navigation for students and faculty, Luminus portal was purchased and will be operational in 2008. Finally, a centralized Document Imaging system will be purchased next year to automate all paper files and reduce physical file storage space.

Two important projects that will be the main focus for the next year is expanding the Wireless Connectivity on the campuses and upgrading the T-1 data lines connecting the three District sites to each other for enterprise services. Wireless capability has been installed at each college campus at key locations for student access, but the expansion of wireless to all classrooms will be implemented as buildings are renovated or new buildings become available for instruction. Currently, the Internet access at each of the colleges is achieved through DS-3 lines that are 15 times faster than the T-1 lines used for non-Internet access. All connections between Chabot, Las Positas, and the District will be upgraded to a minimum of DS-3. Redundant lines will also be provided at all links between the sites.

In addition to these college support activities, there will be activity to purchase the required equipment such as generators and UPS to support the new centralized Data Center in the IT Building at LPC scheduled for completion in 2009. Upgrades to the remote centers at the colleges will be done simultaneously. Video conferencing and Streaming media services will be expanded as required for instructional purposes. Network infrastructure enhancements and upgrade to monitoring tools will be pursued as needed to support facility expansions. Finally, next generation storage solutions that provide consolidation of server data where appropriate will be implemented.

Information Technology Equipment Budgets and Expenditures through June 2007:

<u>Location</u>	<u>Budgets</u>	<u>Expenses 6/07</u>
Chabot	\$11,738,117	\$1,949,288
Las Positas	\$ 8,315,719	\$1,300,411
District	\$12,231,946	\$1,278,479
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Totals	\$32,285,782	\$4,528,178