Appendix C: Systematic Planning, Acquisition, Maintenance and Upgrades


Wireless Network (2006)
Implemented wireless data network (Wi-Fi) in targeted campus areas including the student cafeteria, Library, Writing Center, Basic Skills Lab, the Administrative Center, the new PE and Fine Arts buildings at the Kentfield campus, and the main building and the Transportation Technology Education Complex at the IVC campus.

Server Infrastructure (2008-2012)
The college has been moving server-based applications to virtual servers since 2008. Of the 46 servers that the College is supporting, 22 servers are virtual. Server consolidation and virtualization has many benefits including reduction in space and energy requirements, increased utilization of resources, and decrease in the time required to bring up new servers, prepare upgrades, and recover from problems. All physical servers are on maintenance contracts with either 4-hour or 24-hour replacement required depending on the level of criticality of the applications supported on the server. The physical servers supporting virtual servers are high-end servers with redundant key elements such as power supplies and RAID arrays.

College of Marin implemented AlertU, an emergency notification system. AlertU is a text message alert system that sends emergency information and updates to the mobile devices of participating students, faculty, staff, and community members in real-time.

Classroom Technology
The College has a stated goal of equipping all classrooms with appropriate instructional technology. During recent years, the College has made steady progress toward reaching this goal. On the Kentfield campus, 40% of classrooms have an installed projector and 33% of classrooms have an installed computer and projector. On the IVC campus, 39% of the classrooms have an installed computer and projector. Additionally, the College supports approximately 200 portable classroom technology carts; this includes TVs, traditional overhead projectors, and other media. Some carts are stored in classrooms, some in locations near classrooms, and some in a central location.
These technology carts are heavily used by faculty with more than ninety deliveries in a week at the Kentfield campus and four deliveries per week at IVC.

Through the College’s Modernization program, more than 10 smart classrooms have been added recently. These include classrooms in the Diamond PE complex and the Fine Arts building at the Kentfield campus and Main Building (#27) at the IVC campus.

**Student Computer Labs**

The College supports eighteen open or specialized student computer labs housing a total of 550 Windows and 110 Macintosh systems. A list of student computer labs appears in the Technology Plan, Appendix 2.

Following are recent additions and upgrades to student computer classrooms and labs.

- **Library Information Literacy Classroom at Kentfield (new lab 2010).** Equipped with 22 Windows computer systems, a projector, and instructor computer system, this lab is primarily used for information literacy instruction including student orientation to library resources and development of student research skills. At other times, the lab is also utilized for faculty, staff, and class training sessions.

- **Multimedia Studies at IVC (upgraded 2011).** Equipped with 26 Macintosh computer systems, this studio supports the Multimedia Studies program.

- **Language and Culture Lab at Kentfield (upgraded 2011).** Equipped with 29 Windows computer systems, this lab is used by students in ESL and modern language classes to practice their language skills.

- **Fine Arts Lab at Kentfield (upgraded 2011):** Equipped with 26 Macintosh computer systems, this lab supports music, digital photography, desktop audio, ear training, film, and architecture courses.

**Wired Data Network Infrastructure (2009-2011)**

A key element of the College’s strategy for maintaining a reliable, yet cost effective, data network infrastructure has been choosing a vendor whose network devices are covered by lifetime warranty. This strategy enables the College to target replacement of network devices based on the need for additional capacity, not age of equipment. In addition, the College has coordinated upgrades to its cable plant and network devices with new buildings and building renovations. During the past technology planning cycle, the College has upgraded and expanded its data network in the following areas:

- **Core network switches:** Replaced on both Kentfield and IVC campus.
- **Kentfield campus building network switches:** Replaced network switches in the Dance Center, Fine Arts, Grounds Shop, Health Center, second floor of the Learning Resource Center, and Physical Education.
• **IVC campus building network switches:** Replaced network switches in Business Services, Information Technology, Transportation Technology Education Complex, and Main Building #27.

**Network Monitoring Tool (2012)**

The College recently installed a network monitoring and management tool that allows the IT staff to be more proactive in responding to network problems and implementing changes needed to support instruction and administration.

**Telephone System Upgrade (2012)**

The College recently enhanced the capabilities of its Mitel 3300 telephone system by upgrading the system controllers to support E911 to comply with federal regulations. With the upgraded system, the physical location of the telephone is transmitted when a 911 call is made. Additionally, the upgraded telephone system is now on a maintenance contract. The upgrade also enables the College to expand its deployment of IP-based phones to new buildings. Adoption of this IP-based technology will reduce the costs and complexity of new building network infrastructures because voice services will be supported on the data network infrastructure. Currently voice services require a separate network infrastructure.