

COLLEGE OF
MARIN

2013-2017 Technology Plan

Computer, Server & Infrastructure Improvements



Department of Information Technology

Critical Infrastructure Projects:

- **Faculty & Staff Computer Replacement (11.C.1)**
- **Upgrade Server Infrastructure (II.D.1)**
- **Replace Aging Voice Mail System (II.D.4)**
- **Network Upgrades & Wi-Fi Implementation (II.D.2 & II.D.3)**

Faculty & Staff Computer Replacement (II.C.1)

Problem Statement (p.1)

- Computers beyond normal end-of-life
- Many are 6+ years old
- No longer under any service warranty
- Cannot support current operating systems and software
- Loss of productivity
- Point of frustration

Faculty & Staff Computer Replacement (II.C.1)

Specifications

- Service & Support
 - 4 Year Hardware Protection Warranty.
 - Priority Customer Service & Support.
 - Next Day On Site Replacement Service Level Agreement.
 - 24x7 Call Center Support.
- High Level Computing Platform
 - Intel i5 VPro 4 Core 64bit CPU to support Virtual Desktop Infrastructure (VDI) via VMCS Shadowing.
 - Preferred All-In-One Computer Platform Architecture.
 - Large Screen LCD Monitor.
 - Multiple USB including USB 3.0 ports.
 - Wireless G & N Support.
 - Optional Touch Screen Monitor Available.

Upgrade Server Infrastructure (II.D.1)

Problem Statement (p.5)

Critical applications running on inadequate servers:

- End of life over four years ago
- No longer eligible for maintenance support (after 2013)
- Cannot support being upgraded to the most current OS version
- Backup and disaster recovery protection is minimal
- High risk that a failure would result in principal applications completely unavailable for an extended period of time, with a very high emergency replacement cost
- Domain structure is not functional for the organization

Upgrade Server Infrastructure (II.D.1)

Specifications

- Service & Support
 - 5 year / 4 hour 24x7 Hardware Support
 - Turnkey Installation
- High Availability Server Configuration
 - Two SAN's (storage area network), one for the KTD campus and one for the failover site
 - Tape library (tape carousel) with a server
 - Internal network switches
- Data Centers
 - Move Primary to KTD
 - High Availability for backup
 - Real-time Replication between primary & backup

* Designed to serve needs for 7 years

Replace Aging Voice Mail System (II.D.4)

Problem Statement (p.14)

Current voice mail system:

- Frequent outages, often weekly
- Down for two days in July 2013
- Loses messages when system goes down
- Can't support modern features such as robust auto attendant & unified communications
- Phone System end of life in 2 years

Replace Aging Voice Mail System (II.D.4)

Specifications

- Easy to setup Automatic Attendant to walk callers thru protocol to get to right number based on answers to questions
- Voice messages can be sent to email & can be listened to via email
- Urgent voice messages can be escalated if not answered within a specified time period
- “Find Me/Follow Me” function to ring other specified numbers until someone answers the phone
- “0” out option, where a specified number is called, per user
- Speech Recognition
- Replaces portions of phone system

Network Upgrades & Wi-Fi Implementation (II.D.2 & II.D.3)

Problem Statement (p.19)

Current network:

- End of life - hardware no longer supported
- Extremely slow when someone transfers a large file or streams video
- High risk of outage
- Wireless covers only part of the campus
- Wireless limits number of users

Network Upgrades & Wi-Fi Implementation (II.D.2 & II.D.3)

Specifications

- Upgrade both the KTD and IVC campuses
- Move to a POE network (Power Over the Ethernet)
- Add additional ports
- Replace wireless with latest wireless technology (802.11n)



2013-2017 Technology Plan

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COST SUMMARY (including contingency)

Project	One-Time Costs (rounded)	Annual Costs (rounded)	Duration	Funding Source
PC Upgrades*	\$50,000	\$130,000	3 to 4 months	Operating Budget
Server Upgrades	\$450,000	\$20,000	4 to 6 months	Bond
Voice Mail Replacement	\$75,000	\$3,000	1 to 2 months	Bond
Network Upgrades	\$300,000	\$25,000	2 to 3 months	Bond
TOTALS	\$875,000	\$178,000		

* Assumes lease rather than purchase