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)
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.
  – 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.
  – Optional Touch Screen Monitor Available.

* Designed to serve needs for 4 years
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
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)
# COST SUMMARY

(including contingency)

<table>
<thead>
<tr>
<th>Project</th>
<th>One-Time Costs (rounded)</th>
<th>Annual Costs (rounded)</th>
<th>Duration</th>
<th>Funding Source</th>
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<tbody>
<tr>
<td>PC Upgrades*</td>
<td>$50,000</td>
<td>$130,000</td>
<td>3 to 4 months</td>
<td>Operating Budget</td>
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<tr>
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<td><strong>TOTALS</strong></td>
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<td><strong>$178,000</strong></td>
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* Assumes lease rather than purchase