



March 11, 2014 Governing Board Meeting

IT Infrastructure Modernization Initiative (ITIMI) Update

TUSD

Delivering Excellence in Education Every Day
Grow • Reach • Succeed

Agenda

- ITIMI Overview and Progress
- Core Network Needs
- Continuation of Consulting Services



IT Infrastructure Modernization Initiative (ITIMI)

ITIMI is a much needed district-wide upgrade of all data, telecommunications and networking infrastructure that will result in faster connectivity and improved access to the tools and resources required to improve student achievement and meet the District's vision of delivering excellence in education every day.



ITIMI Timeline



ITIMI Project Components and Progress

- ✓ Upgrade Local Area Networks (LAN)
- ✓ Upgrade Cabling Infrastructure
- ✓ Upgrade Wide Area Network (WAN)
- ✓ Upgrade Telephone System

Upgrade Local Area Network (LAN)



LAN Progress

Percentage of sites with upgraded network cabling:

78%



LAN Progress

Percentage of sites with
upgraded network
equipment:

69%



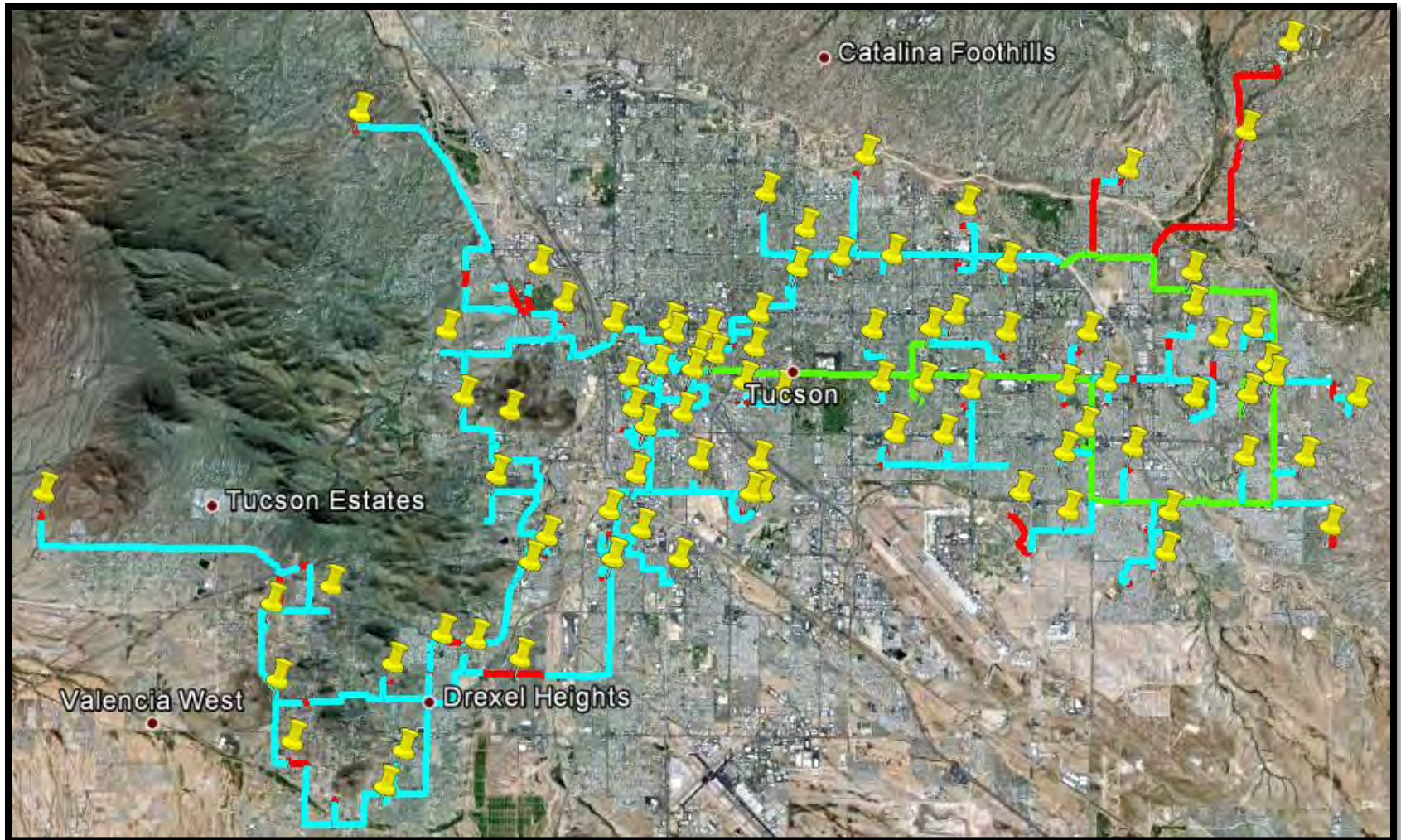
LAN Progress

Percentage of sites with
wireless access:

49%



Upgrade Wide Area Network (WAN)



WAN Progress

Percentage of sites
connected to high speed
fiber network:

59%



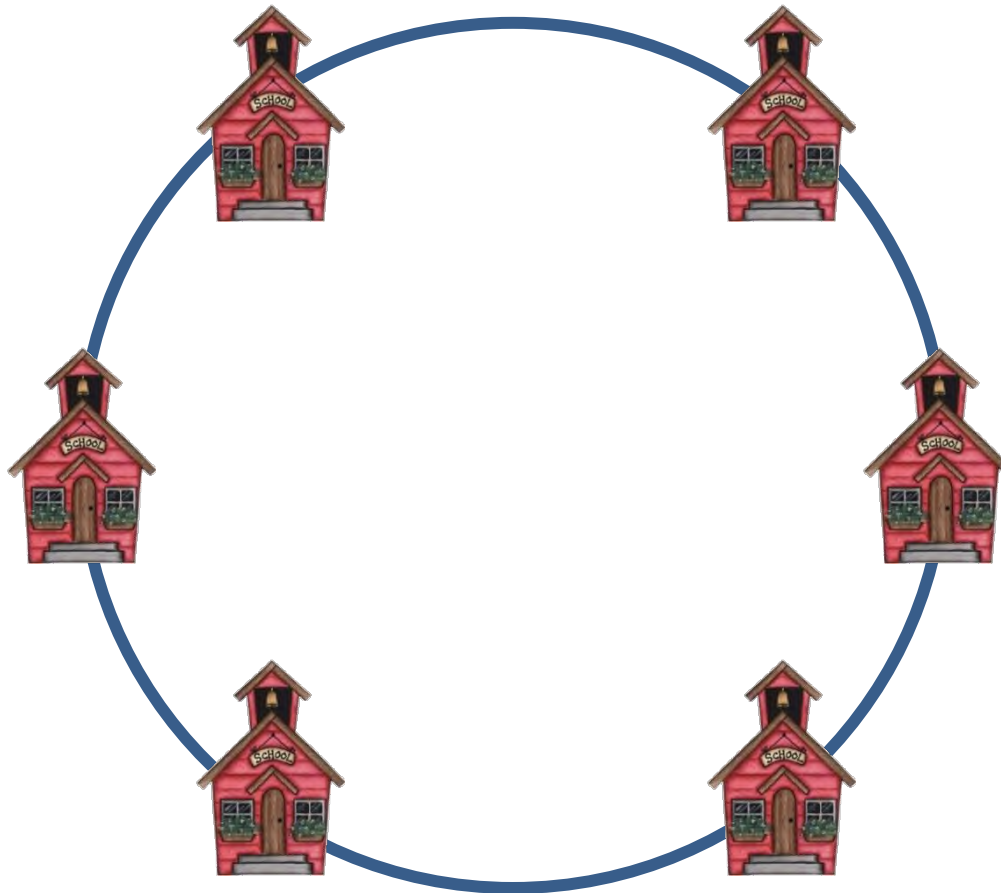
WAN Progress

Percentage of sites converted to VoIP phone system on high speed network:

52%



ITIMI Addresses Connectivity

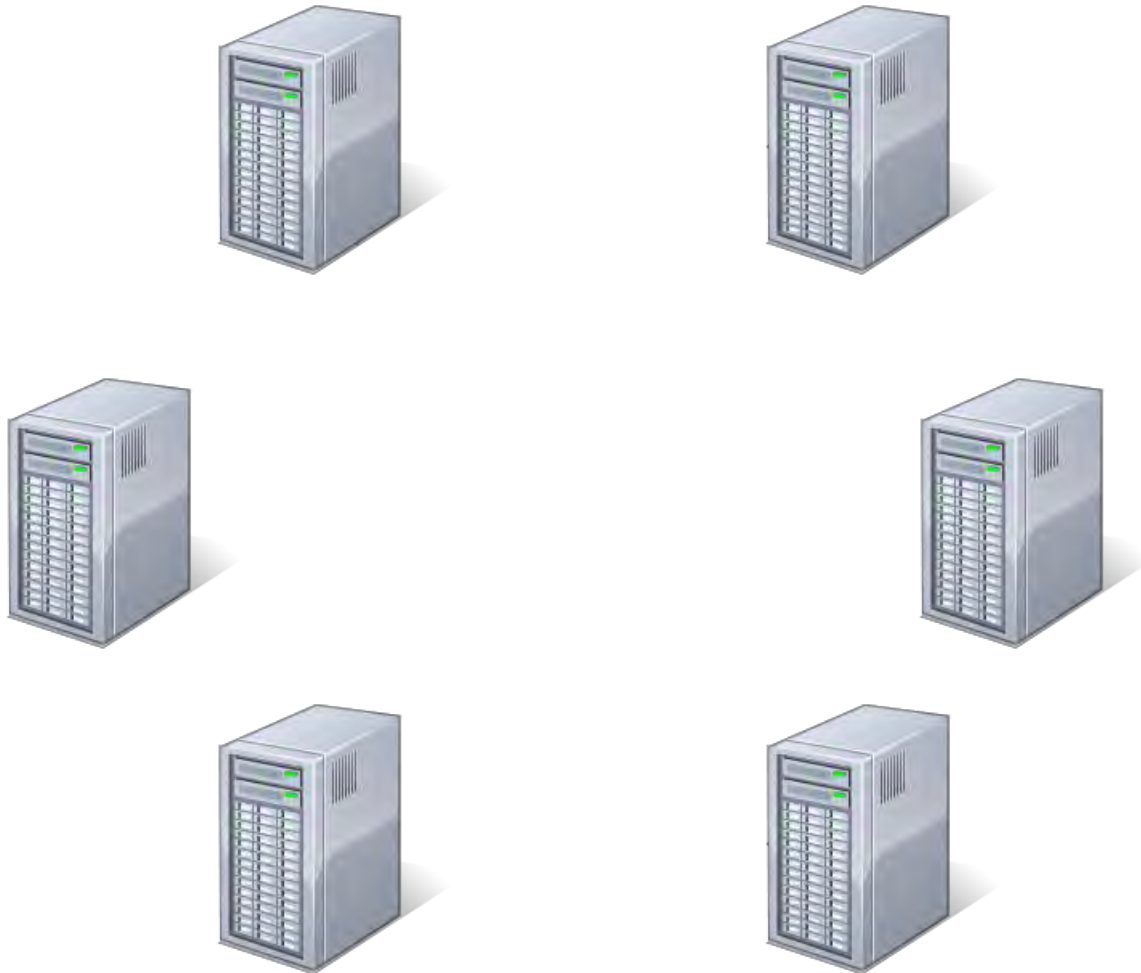


New LAN + New WAN = Faster Connection to the World Wide Web

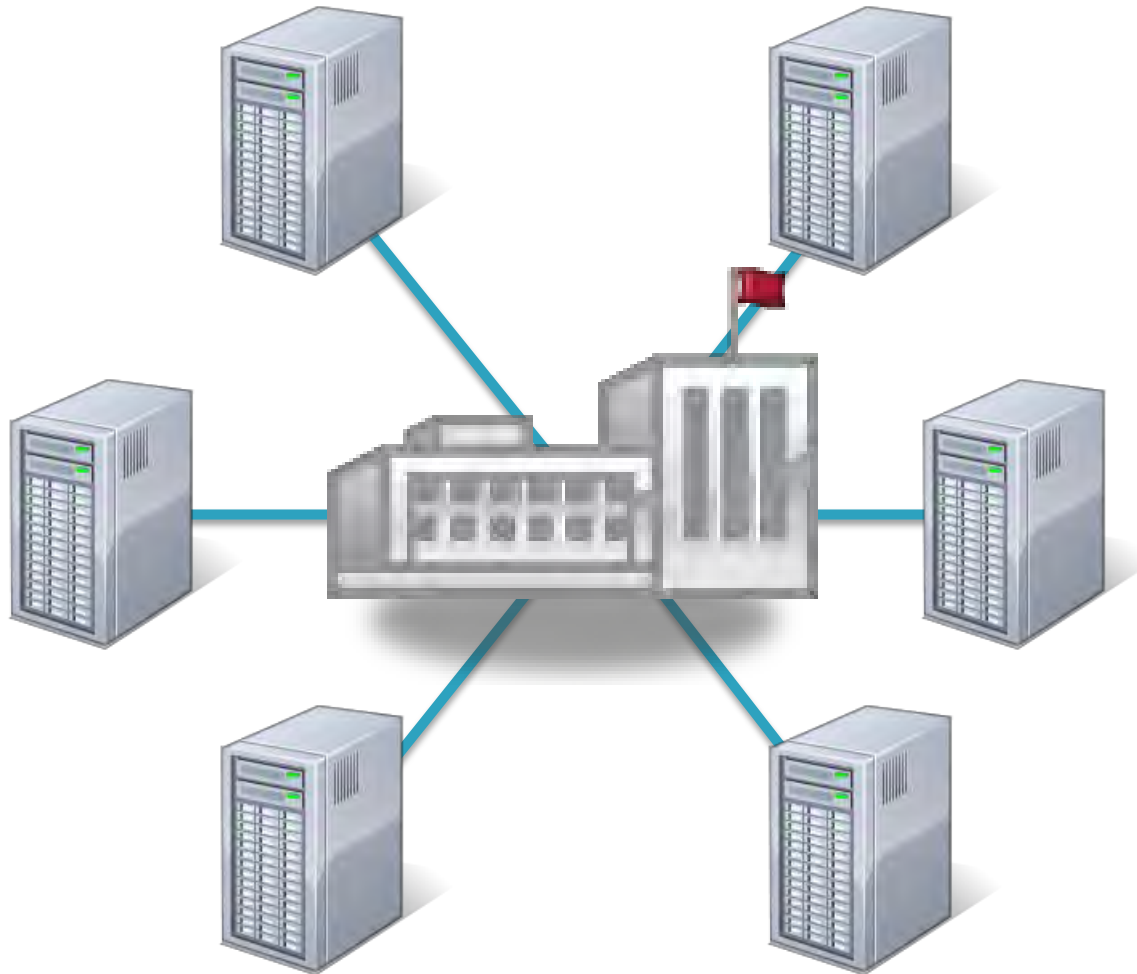


Current Generation Network Service Model

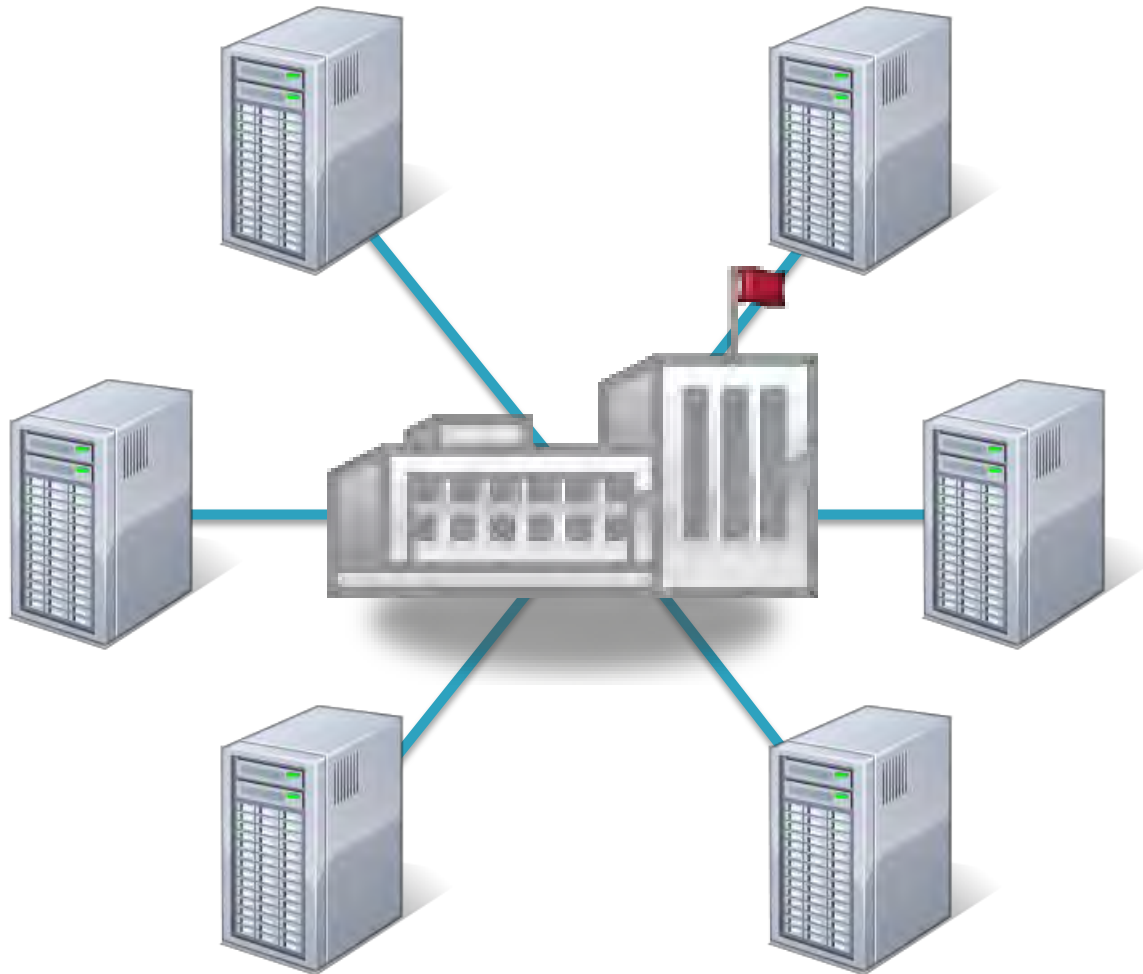
Existing Network Model



Existing Network Model



Current Generation Network Model



Data Center Assessment

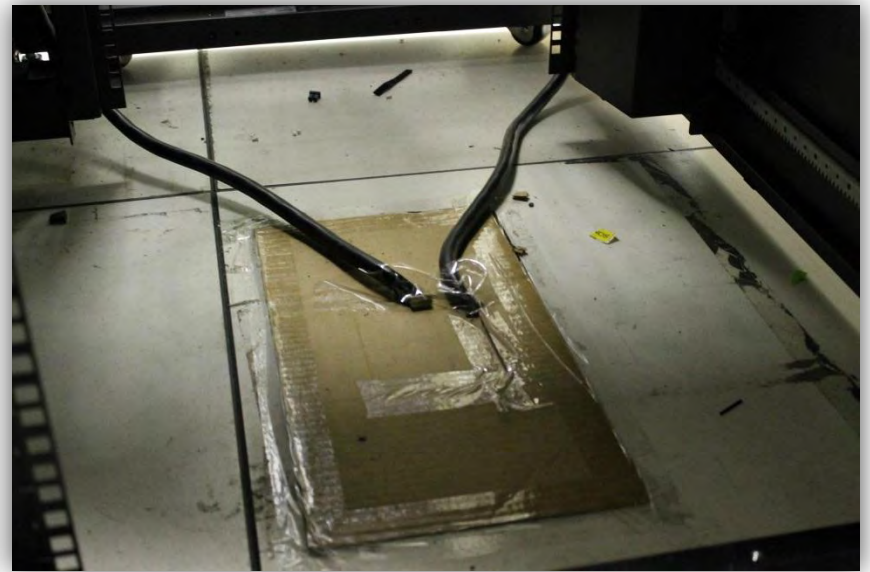
TUSD engaged Hye Tech to assess the following and determine how to achieve a current generation network model:

- Data Center and Core Network
- Server and Storage Infrastructure
- Virtual Infrastructure
- Enterprise Applications
- Web Security, Certificate Authority, and Content Filtering System

Current Data Center Conditions



Current Data Center Conditions



Current Data Center Conditions



Current Data Center Conditions



Assessment Findings

- Critical issues with facility, including power, cooling, space
- Recommended that the data center be relocated to a colocation facility
 - Board approved Involta



Assessment Findings

Core networking and server equipment is approaching end-of-life and not designed to support a centralized model.



Assessment Findings

Sample Critical Priorities and Associated Risks:

- TUSD utilized Exchange 2003, which will reach end-of-life in April.
 - TUSD will essentially be using an unsupported e-mail system and will be vulnerable to security threats.
- TUSD utilizes versions of SQL that are no longer supported or running on hardware that has reached end-of-life.
 - TUSD is at higher risk to security threats as security patches are no longer released for these products.
- Not all TUSD databases are being backed up.
 - If the associated servers fail, no backups exist to recover the databases and TUSD could lose all related data.





The core network infrastructure is the foundation for bringing technology and 21st century learning into the classroom and must be upgraded to minimize security threats and meet current generation standards.

Upgrading the Core Network

- Per the recommendation of the Technology Oversight Committee, TUSD is entering a formal procurement process for the equipment and will request approval to purchase the equipment at the April 15th board meeting.
 - The budget is expected to be approximately \$3,500,000.



Implementing the Upgrades

- In order to effectively implement the core network upgrades, TUSD is requesting approval to continue consulting services with Hye Tech.



Questions?

TUSD

Delivering Excellence in Education Every Day
Grow • Reach • Succeed