

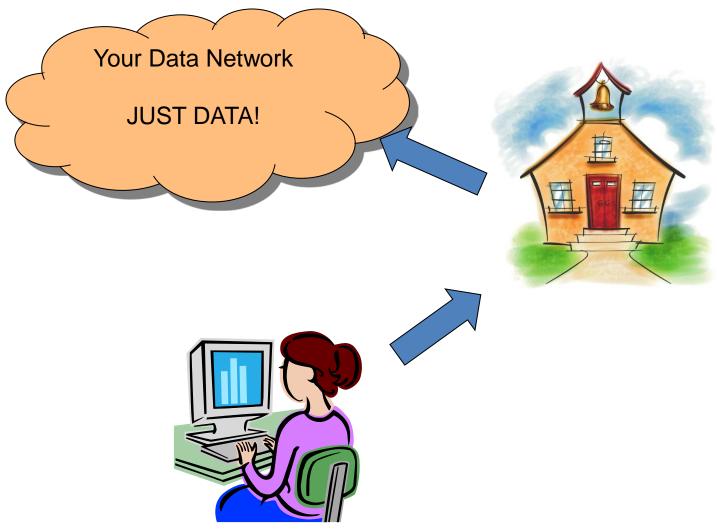
Horseheads Central School District

# District Wide Technology & Security System Improvements





# The Demands have changed











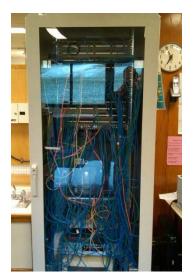




## **Communications Equipment Rooms**

Recommendation:

- Modify or relocate the existing spaces and update to conform to today's standards.
- Adequate Secure Space Properly Size
- Proper Cooling, Power, Grounding
- PARCC, 1 to 1, Security







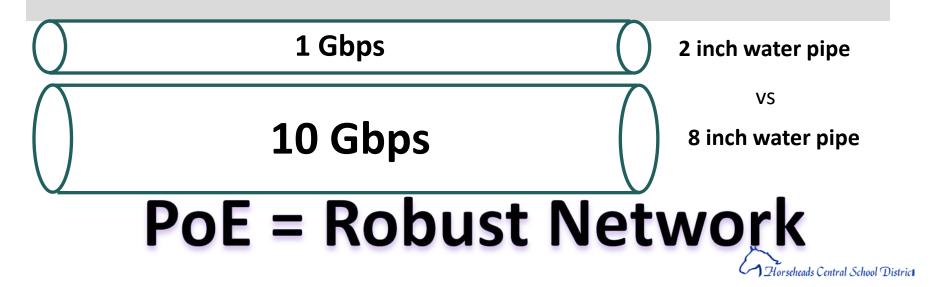




# Communications Cabling and Network Equipment

### Recommendation:

- Replace the cabling with Category 6 using cable trays
- Replace the fiber optic cable allow higher bandwidth.
- Replace the network switches with chassis based PoE switches with 10Gig uplinks
- Install UPS Equipment at all locations to prevent network disruption
- PARCC, 1 to 1, Security







*Recommendation:* 

Upgrade the wireless access points to the latest 802.11ac protocolto leverage newer technologies that support today's high speed demands in a building wide high density, high usage wireless environment. In addition, this upgrade will be critical for the PARCC readiness, 1 to 1, and Security.

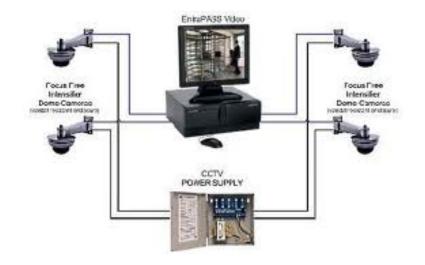




### **Security Cameras**

### *Recommendation:*

- Replace the existing analog with IP cameras to minimize the failure rate and allow increased image performance
- Install additional cameras as required.
- Security





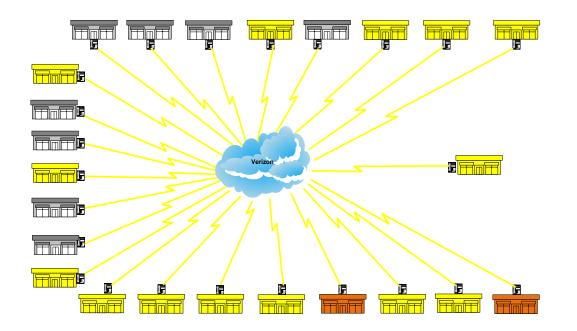


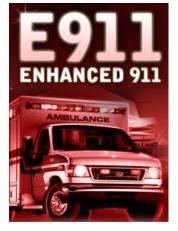


### **Phone System**

Recommendation: Replace the existing phone systems with a Cisco VoIP solution Added features:

Unified Messaging
E 911 - Security
Call Accounting
Smart Phone applications
Soft Phones
BOCES hosted and supported











## Video Distribution System

- The existing video distribution system is using coaxial cabling throughout the district for delivery
  - This system is feeding older model television sets which are more difficult to view in environment due to the small display size

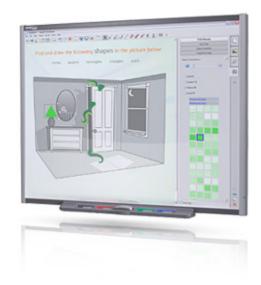
#### Recommendation:

Install an IP distributed video system with content servers to leverage the existing interactive displays that are in place.





#### Instructional Benefit









## Secured Building Entryways

- The existing building entry ways are inconsistent throughout the district
- No means to easily identify and manage visitors AFTER entry into the building

Recommendation: Reconfigure the building main entrances to have a secure vestibule which has access only to the main office.

### Security









### Security Locksets for Classrooms

- The existing classroom locksets do not currently allow for teachers to lock the doors from inside the classroom
- In the event of a lockdown, teachers would need to go outside of the classroom and use keys to activate the locks

Recommendation:

Upgrade the existing classroom locksets to allow the ability to lock the doors from inside the classrooms during a lockdown or other emergency.

Security









### Update student computers

• Recently, minimum requirements for student computers have been set forth by PARCC (Partnership for Assessment of Readiness for College and Careers)

Recommendation: Replace the student computers that do not currently meet the minimum requirements set forth by PARCC.



### **Cost Summary**



Horseheads Central School District

#### District Wide Technology & Security System Improvements

#### January 25, 2013

HUNT

Option	A	В		С	D	Ε	F	G		1	1	J	K	L	M	N	0	P	
	Data Room Upgrades	10 Gigabit Network Switch Gear	Power Backup (UPS)	Voice / IP Phone System	Security Camera Upgrade	Wireless System Upgrade	IP Video Distribution System	Cable Tray in Corridors	Data Cabli Office Areas, Comp. Labs, Librarys, etc.	ng Upgrade to 2 Cables per Classroom	4 Cables per	Tiles Only	Corridor Ce ADD Grid	iling Replace ADD Lights	ment *ADD PoE L.E.D. Lights	Secured Building Entryways	Classroom Security Locksets	Computers to meet the PARCC Requirements	Building Totals
High School	\$162,375	\$235,000	\$55,000	\$249,000	\$249,500	\$224,000	\$240,000	\$55,400	\$290,700	\$139,400	\$278,800	\$69,250	\$77,906	\$129,844	\$86,563	\$130,000	\$49,200	\$105,000	\$2,826,938
Middle School	\$119,148	\$150,000	\$40,000	\$137,250	\$90,500	\$152,000	\$7,500	\$43,773	\$218,025	\$130,900	\$261,800	\$54, <b>716</b>	\$61,556	\$102,593	\$68,395	\$246,000	\$46,200	\$85,000	\$2,015,354
Big Flats Elem.	\$80,975	\$125,000	\$25,000	\$51,000	\$46,500	\$56,000	\$3,500	\$12,483	\$90,950	\$51,000	\$102,000	\$15,604	\$17,555	\$29,258	\$19,505	\$127,000	\$18,000	\$80,000	\$951,329
Center Street Elem.	\$40,838	\$80,000	\$15,000	\$60,000	\$50,500	\$51,200	\$3,500	\$12,304	\$88,825	\$49,300	\$98,600	\$15,380	\$17,303	\$28,838	\$19,225	\$86,000	\$17,400	\$65,000	\$799,212
Gardner Road Elem.	\$49,075	\$105,000	\$20,000	\$52,500	\$46,500	\$56,000	\$3,500	\$15,011	\$90,950	\$51,000	\$102,000	\$18,764	\$21,110	\$35,183	\$23,455	\$69,000	\$18,000	\$65,000	\$842,047
Ridge Road Elem.	\$52,490	\$105,000	\$20,000	\$50,250	\$42,500	\$52,800	\$3,500	\$10,344	\$84,575	\$45,900	\$91,800	\$12,930	\$14,546	\$24,244	\$16,163	\$100,000	\$16,200	\$80,000	\$823,242
Broad Street Bidg.	\$27,763	\$75,000	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$117,763
Bus Garage	\$6,300	\$8,000	\$1,000	\$13,500	\$75,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$103,800
Maintenance	\$6,040	\$5,000	\$1,000	\$4,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,540
Total	\$545,003	\$888,000	\$192,000	\$618,000	\$601,000	\$592,000	\$261,500	\$149,315	\$864,025	\$467,500	\$935,000	\$186,644	\$209,975	\$349,958	\$233,305	\$758,000	\$165,000	\$480,000	
										Ceiling Replacement w/ L.E.D. Total \$979,881									

Other Technology Items

Middle School LGI \$100,000 (Included in Total)

\* Funding possibly available through NYSERDA (20% or more) Over 65% Energy Savings per L.E.D. light fixture vs. T-8

Total Construction Cost	\$8,596,224				
5% Design Contingency	\$429,811				
10% Construction Contingency	\$902,603				
20% Incidentals	\$1,985,728				

Total Project Cost \$11,914,366

## Building Aid and Costs Summary HUNT

- Project Cost \$11,914,366
- 95% of scope aidable except:
  - PARCC Computers
  - Broad St.
  - Maintenance Bldg Totaling \$614,309
- Aidable Balance \$11,300,057
- At 82.9% BA \$9,367,747
- \$172,400 enhanced 10% BA for Security
- Total Potential BA = \$9,540,147
- District Cost = **\$2,374,219 +/-**





# Additional Savings Opportunities

- NYSERDA
- CISCO Buy Back of the Wireless Gear
- CISCO Trade in of Existing Phone System
- E-Rate
- Potential Annual Savings with Energy Efficient Lighting

