

HORSEHEADS CENTRAL SCHOOL DISTRICT DISTRICT WIDE TECHNOLOGY & SECURITY SCOPE



HUNT

ENGINEERS/ARCHITECTS/SURVEYORS

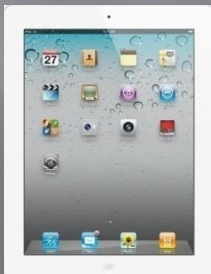
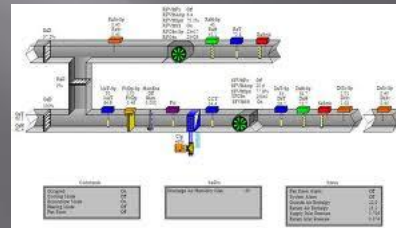
The Demands have changed



Adapting to More Devices

Your Network

Voice / Data / Video
Computer Based Testing
Security



Technology Scope

- ▣ Data Room Renovations
- ▣ Robust Network – 10 Gbps Backbone
- ▣ Network Electronics Upgrade
- ▣ 100% Wireless Coverage
- ▣ Office & Classroom Data Cabling Replacement
- ▣ VoIP Phone System
- ▣ Security
- ▣ Ceiling & Lighting Replacement
- ▣ IPTV – On Demand Educational Video

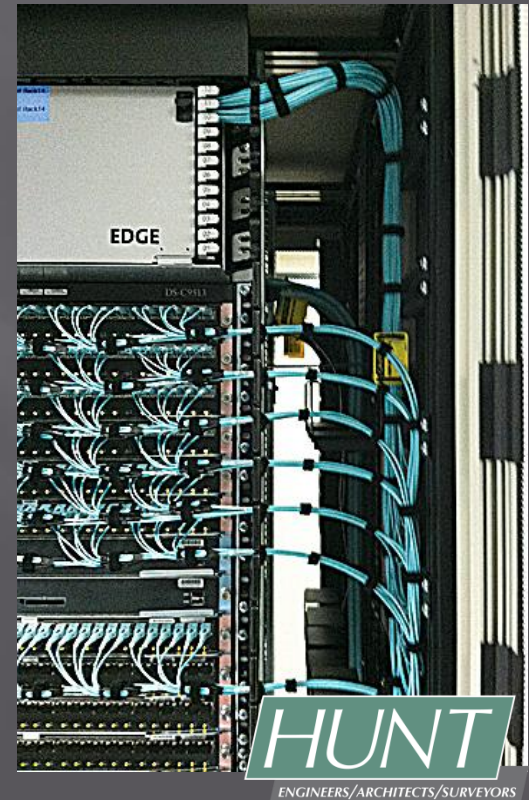
Robust Network

- ▣ Increased bandwidth
- ▣ New Network Operations Center
- ▣ Supports future one-to-one learning
- ▣ Supports many more devices that have come onto the network
- ▣ Foundation of all tech work
- ▣ PARCC Readiness

1 Gbps
1 inch water pipe

VS.

10 Gbps
10 inch water pipe



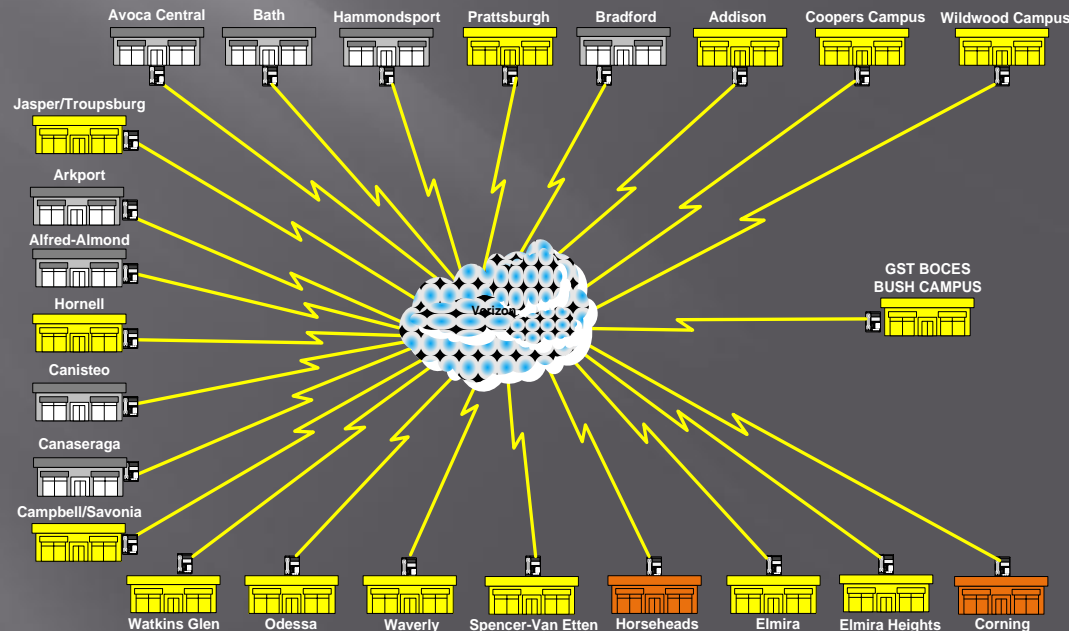
Wireless Network

- ▣ Full 100% coverage for high density user environment.
- ▣ Flexibility, the wireless network will support any path to one-to-one that the district takes.
- ▣ Design has brought the wireless into the classroom.
- ▣ High Density of Users.
- ▣ Load Balancing.



Phones

- ❑ Cisco Voice over IP Hosted Phone Solution
- ❑ Soft phones / Unified Communications
- ❑ Integrates well with other building systems
- ❑ Stability
- ❑ Security Features
- ❑ e911 feature
 - Paging System Integration
 - Call Location
 - Emergency Contact List



Security

- ▣ 1&5 Megapixel IP Security Cameras
 - Higher quality than the existing analog cameras due to number of Pixels
 - Corridors, Stairwells
 - Spaces of Assembly (Gyms, Auditorium, Library)
 - Exterior Locations (Entrances, Parking lots, Sidewalks)



2012 Study

- ▣ \$12 Million estimated to complete district wide technology & Security project in one phase.
- ▣ \$1.3 Million already on IP Security Camera Equipment, Secured Entrances, Intruder Locksets & Network Equipment.

Smart School Bond Act

- ▣ \$2,929,862 Allocation Awarded to Horseheads
- ▣ Acquire learning technology equipment or facilities including, but not limited to,
 - Interactive whiteboards,
 - Computer servers, and
 - Desktop, laptop, and tablet computers;
- ▣ High-speed broadband and wireless internet connectivity for schools and communities.
- ▣ Accommodation of pre-kindergarten programs and provide instructional space to replace transportable classroom units.
- ▣ High-tech security features in school buildings and on school campuses.

Project Phasing



District Wide Technology & Security System Improvements

December 18th, 2014

		Total Construction Cost	Total OGS	5% Design Contingency	2% Inflation Per Year	10% Construction Contingency	20% Incidentals	Total Project Cost
Phase 1 (Smart Schools Bond Act)	<u>High School Data Rooms, Cabling, Wireless & Security</u> 1. All High School Closets 2. Recabling, Cable tray, Ceilings & Lighting. 3. Wireless network. 4. Security cabling & cameras. 5. Network Switches OGS	\$1,737,700	\$308,000	\$102,285	\$42,960	\$219,094	\$482,008	\$2,892,047
Phase 2 (Public Referendum May 19 th , 2015)	<u>Middle/Intermediate School Data Rooms, Cabling, Wireless & Security</u> 1. All Middle & Intermediate School Closets 2. Recabling, Cable tray, Ceilings & Lighting. 3. Wireless network. 4. Security cabling & cameras. 5. Network Switches OGS	\$1,349,200	\$320,000	\$83,460	\$70,106	\$182,277	\$401,009	\$2,406,052
Phase 3 (Future Public Referendum)	<u>Elementary Data Rooms</u> 1. All elementary School Closets 2. Recabling, Cable tray, Ceilings & Lighting where Closets are being relocated. 3. Wireless where Closets are where data room is being relocated. 4. Security cabling in zones where data room is being relocated. 5. Network Switches	\$875,103	\$503,000	\$68,905	\$86,820	\$153,383	\$337,442	\$2,024,653
Phase 4 (Future Public Referendum)	<u>Elementary Cabling (Classroom, Wireless, Security)</u> 1. Elementary Classroom & Office Cabling (Minus Phase 1 Cabling). 2. Elementary Wireless Cabling (Minus Phase 1 Cabling). 3. Elementary Security Cabling (Minus Phase 1 Cabling). 4. Elementary Ceilings, Lights & Cable Tray (Minus work in Phase 1) 5. Wireless & Security OGS	\$1,320,500	\$391,000	\$85,575	\$143,766	\$194,084	\$426,985	\$2,561,910
Phase 5 (Future Public Referendum)	<u>VoIP & IP Video</u> 1. Voice over IP Phone System 2. IP Video Distribution		\$888,500	\$44,425	\$74,634	\$100,756	\$221,663	\$1,329,978
Totals		\$5,282,503	\$2,410,500	\$384,650	\$418,287	\$849,594	\$1,869,107	\$11,214,640
Total Construction & OGS			\$7,693,003					

Next Step...

- ▣ Phase 1 - \$2,892,047 in Smart Schools Bond Act when the process is defined by the state.
- ▣ Phase 2 - \$2,406,052 Public Referendum May 19th, 2015 for construction in 2016.
- ▣ Phases 3-5 - Future Public Referendums. This provides district with time to determine elementary school technology plan based on the district's building decisions.

Project Incidentals Budget

- ▣ Lawyer Fees
- ▣ Construction Manager Fees
- ▣ Testing Costs
- ▣ Architect & Engineering Fees
- ▣ Bid Advertisement
- ▣ Printing Costs
- ▣ Insurance
- ▣ General Administration cost

Additional Savings Opportunities

- ▣ NYSERDA Grant
- ▣ Vendor Equipment Trade-Ins
- ▣ E-Rate
- ▣ Annual Power Savings from LED Lighting

Thank You

