

Wisconsin Association of School Business Officials



Security Assessment: Site Survey & Security Technology Threat Preparedness

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Howard-Suamico School District



HOWARD-SUAMICO
SCHOOL DISTRICT

SERVING • LEARNING • ACHIEVING • TOGETHER

2024 WASBO Facilities Management Conference

Wisconsin Act 143



Requires collaborative efforts between schools and law enforcement to conduct On-Site Safety Assessments

- ▶ Consulting with a local law enforcement agency to conduct a required on-site safety assessment of each school building, site, and facility that is regularly occupied by pupils.
- ▶ The on-site assessment should include playgrounds and athletic facilities or fields.
- ▶ The on-site safety assessment should be submitted to OSS annually, however, the assessment does not need to be conducted annually. OSS only needs to know the date of the last assessment when submitting the annual assessment. The due date for the first submittal was January 1, 2019.

Security Assessments

- A School Security Assessment is critical to identifying risks and security weaknesses for any organization.
- A School Security Assessment can help to identify gaps in a security program so that an organization can reduce risks and vulnerability.
- A School Security Assessment may identify policies, procedures, security hardware, and technology that can reduce risk.
- A School Security Assessment must be conducted to meet an adequate standard of preparedness.

Elements of a School Security Assessment

- Site Characteristics
- Emergency Operations Plan
- Response and Training
- Technology and Infrastructure
- Hazards and Threat Assessment
- Prevention Policies and Programs
- Recovery Planning

- Best conducted by third parties.



Assessment Categories

- ▶ Climate
- ▶ Emergency Operations Plan
- ▶ Preparation
- ▶ Training
- ▶ Teams & Roles
- ▶ Drills
- ▶ Visitors & Deliveries
- ▶ Threat & Risk Assessment
- ▶ Communications
- ▶ Monitoring & Surveillance
- ▶ Keys & ID's
- ▶ Building Access
- ▶ General Interior
- ▶ General Exterior

Security Assessment EXAMPLE- Exterior Doors



- Act 143 requires all exterior doors locked during the normal school hours.
- Exception is during times of high usage - e.g. student arrival.
- If doors are unlocked prior to, during or immediately after the regular school day, a designated staff member must be present to visually screen everyone entering the school.

CPTED

Physical Site Survey

Things to keep in mind:



Viewing Angle
Environment
Lighting type, level
Reflectance
Obstructions
Temperature
Humidity
Corrosives
Water
Vandalism

Mounting Conditions -
Cabling
Entry Requirements
Accessibility
“Special” Objects /
Scenes (some examples)
Vehicles
License Plates

Security
Camera
Systems

Physical Access Control Site Survey

Things to keep in mind



Points of Egress for public

Points of Entry for public

Special points of Entry

(I.E. Rec Dept., Fire Dept. Police Dept.)

Student Drop-off and Pick-up





Physical Access Control Site Survey

Things to keep in mind

- ▶ Doors for Employee use
- ▶ Doors requiring higher security
- ▶ Handicap Operation and Accessibility

What CCTV Used to Be



Who?



What?

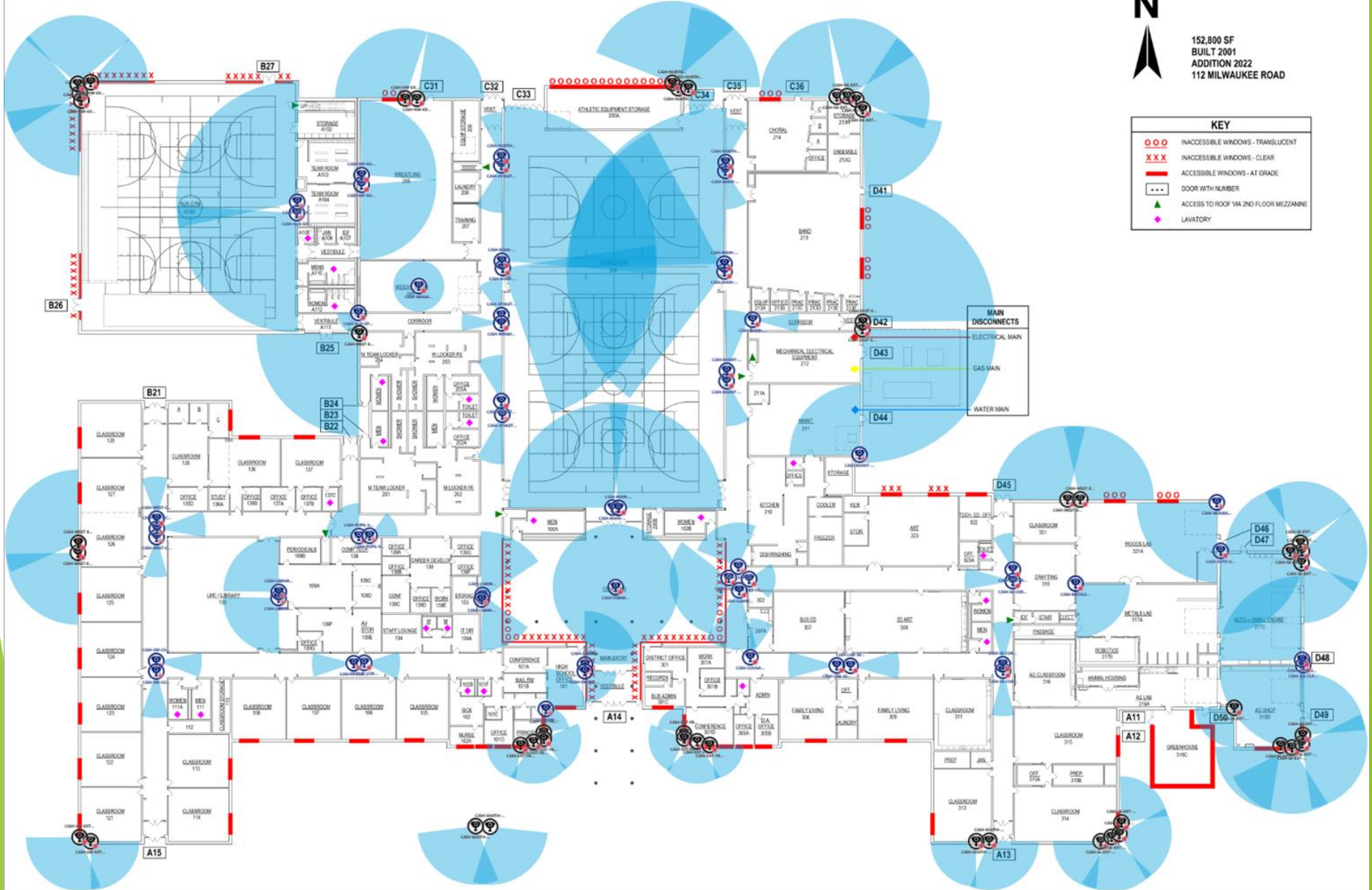
CLINTON HIGH SCHOOL

112 Milwaukee Road



152,800 SF
 BUILT 2001
 ADDITION 2022
 112 MILWAUKEE ROAD

KEY	
○○○	INACCESSIBLE WINDOWS - TRANSLUCENT
XXX	INACCESSIBLE WINDOWS - CLEAR
—	ACCESSIBLE WINDOWS - AT GRADE
—	DOOR WITH NUMBER
▲	ACCESS TO ROOF VIA 2ND FLOOR MEZZANINE
◆	LAVATORY



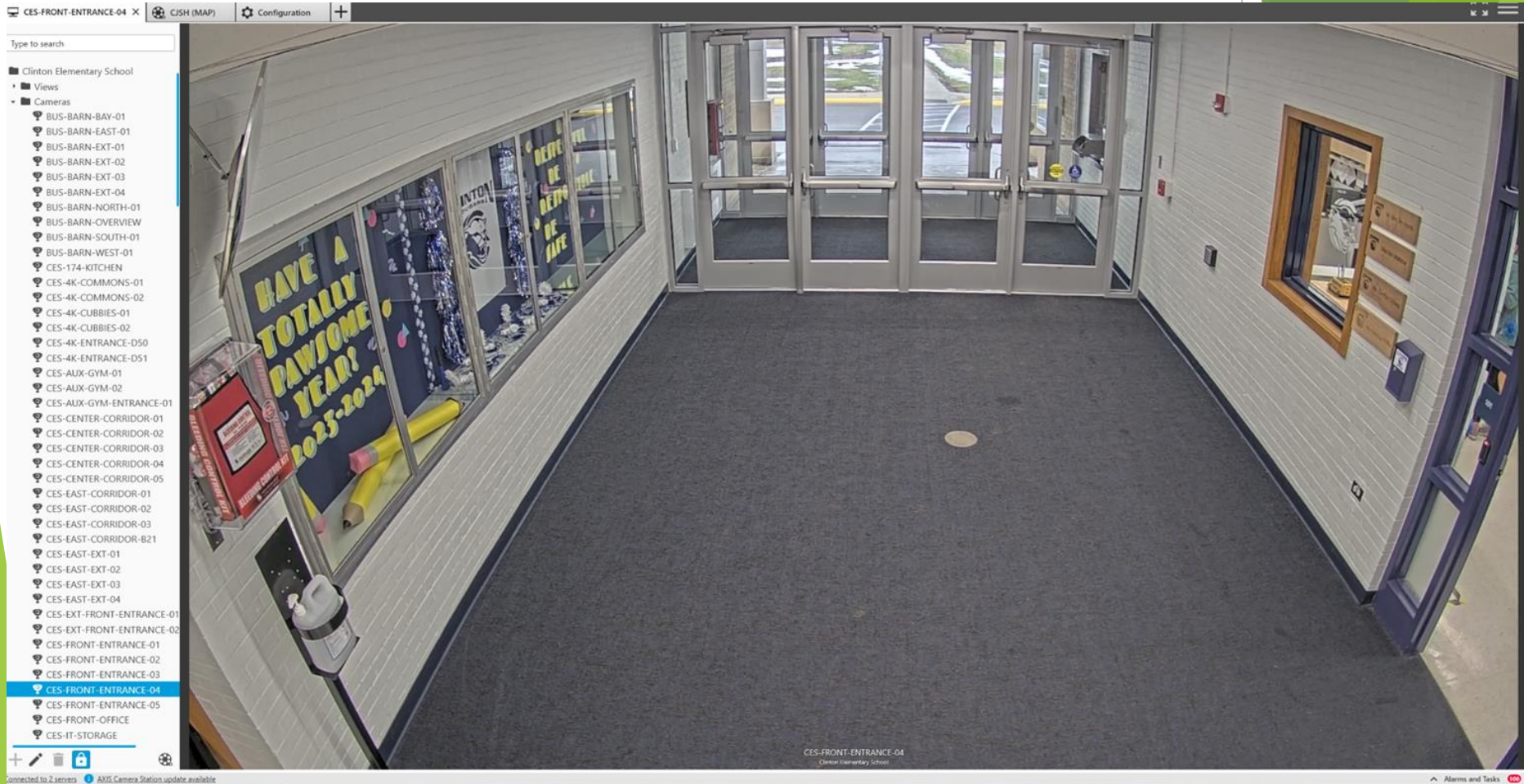
IT Video Surveillance



- **Benefits of Megapixel Cameras**
 - Increased resolution
 - Enhanced digital zooming features
 - All Network Based
 - More adjustability
 - Forensic Digital zoom capabilities
 - Flexible expandability



Main Entry Security



Customized Views



AXIS Camera Station Client

Configuration +

Type to search

- Clinton Elementary School
- Clinton Junior / Senior High School
 - Views
 - CJSH (MAP)
 - CJSH (All)
 - CJSH (MAIN GYM)
 - CJSH (FRONT ENTRANCE)
 - CJSH (COMMONS)
 - CJSH (AUX GYM)
 - CJSH (MULTI-PURPOSE ROOM)
 - CJSH (LIBRARY)
 - CJSH (AUTO & METALS)
 - Cameras
 - CJSH-AG-CLASSROOM-01
 - CJSH-ART-CORRIDOR-01
 - CJSH-ATHLETIC-CORRIDOR-01
 - CJSH-ATHLETIC-CORRIDOR-02
 - CJSH-ATHLETIC-CORRIDOR-03
 - CJSH-ATHLETIC-CORRIDOR-04
 - CJSH-AUTO-SHOP-01
 - CJSH-AUTO-SHOP-02
 - CJSH-AUX-GYM-01
 - CJSH-AUX-GYM-02
 - CJSH-AUX-GYM-VESTIBULE-01
 - CJSH-BAND-CORRIDOR-01
 - CJSH-BAND-CORRIDOR-02
 - CJSH-COMMONS-EAST-01
 - CJSH-COMMONS-EAST-02
 - CJSH-COMMONS-EAST-CORR
 - CJSH-COMMONS-EAST-CORR
 - CJSH-COMMONS-ENTRANCE-01
 - CJSH-COMMONS-NORTH-01
 - CJSH-COMMONS-OVERVIEW
 - CJSH-COMMONS-SOUTH-01
 - CJSH-COMMONS-WEST-01
 - CJSH-SE-EXT-BREKHOUSE
 - CJSH-SE-EXT-GREENHOUSE
 - CJSH-SE-EXT-GREENHOUSE
 - CJSH-SE-EXT-GREENHOUSE
 - CJSH-SE-EXT-GREENHOUSE
 - CJSH-SE-EXT-WOODS-01
 - CJSH-SOUTH-EXT-DROP-01
 - CJSH-SOUTH-EXT-DROP-02
 - CJSH-SOUTH-EXT-PARKING
 - CJSH-SOUTH-EXT-PARKING
 - CJSH-SW-CORRIDOR-01
 - CJSH-SW-CORRIDOR-02
 - CJSH-COUGAR-CAVE-307A
 - CJSH-EAST-EXT-GENERATOR-01
 - CJSH-EAST-EXT-GENERATOR-02
 - CJSH-EXT-FRONT-ENT-EAST-01
 - CJSH-EXT-FRONT-ENT-EAST-02
 - CJSH-EXT-FRONT-ENT-EAST-03
 - CJSH-EXT-FRONT-ENT-EAST-04
 - CJSH-SW-EXT-01
 - CJSH-SW-EXT-02
 - CJSH-WEIGHT-ROOM-ENTR
 - CJSH-WOODS-SHOP-OVER
 - CJSH-WEST-CORRIDOR-01
 - CJSH-WEST-CORRIDOR-02
 - CJSH-WEST-CORRIDOR-03
 - CJSH-WEST-EXT-ADMIN-01
 - CJSH-WEST-EXT-ADMIN-02
 - CJSH-WEST-EXT-BBALL-COL
 - CJSH-WEST-EXT-ENTRANCE
 - CJSH-WOODS-SHOP-01



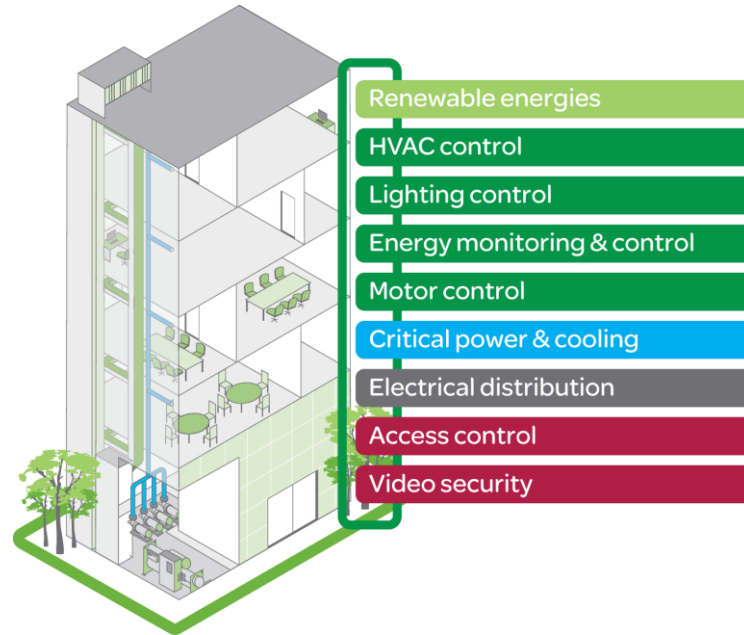
Access Control

- ▶ CCURE 9000 system
- ▶ Mixture of topologies
 - ▶ Many Doors terminated at 1 controller
 - ▶ iSTAR Pro
 - ▶ Up to 16 doors to 1 controller
 - ▶ Four wires from each door location back to controller (up to 400 ft)
 - ▶ One or two doors to each controller
 - ▶ iSTAR Edge
 - ▶ Controller mounted at door
 - ▶ POE device
 - ▶ Short wire runs from door to controller
 - ▶ No power supply needed at location, just a single cat5
 - ▶ Wireless
 - ▶ Schlage AD400
 - ▶ One access point can handle up to 16 doors
 - ▶ No wiring needed, just replace door hardware

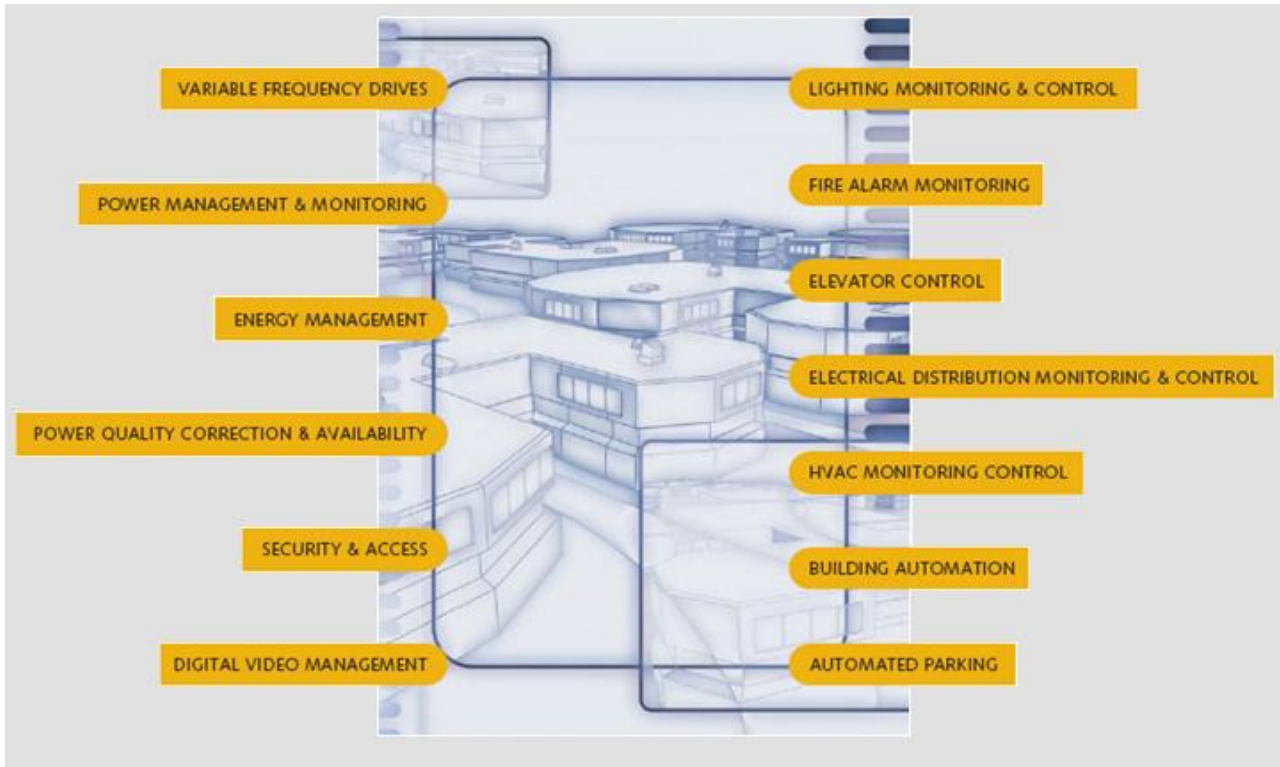
Evaluate System Capabilities (Integration)



- HVAC points and sequences
- Power metering and reporting
- Security and CCTV
- Lighting control
- IT health monitoring
- Fire alarm system monitoring
- 3rd Party HVAC equipment integration (LonWorks, BacNET, Modbus)



Intelligent Schools



Intelligent Schools



- **Integrated HVAC Control**
 - **Common Graphical Software**
 - **Bacnet Enabled**
 - **Lon Enabled**
 - **Modbus Enabled**
 - **Integrated VFDs**
 - **HVAC systems with interfaced controls** **MULTI VENDOR**
- **Integrated Surveillance/Security**
 - **Shared Graphical Software**
 - **Video embedded in Graphics**
 - **Automatically adjust Recording FR**
 - **Integrated with Card Access**
 - **Integrated with Lighting Control System**
 - **Integrated with door status**

Intelligent Schools



- **Integrated Lighting Control**
 - **Share Graphical Software**
 - **Share common protocol with Low Voltage Lighting System**
 - **Integrate with Security**
 - **Integrate with Terminal DDC Control**
- **Power Monitoring**
 - **Why monitor your electrical services**
 - **What information can you see**
- **Integrated IT Systems**
 - **Share Graphical Software**
 - **Integrated with Security**
 - **IT System Health Monitoring**
 - Servers**
 - Hard Drives**
 - IP Cameras**



Communication Technology

- ▶ Information is the key to good decisions
- ▶ Information should flow in all directions
- ▶ Provide as much initial information as possible to as many people as possible
- ▶ Use any and all available means: text messages, PA system, digital signage, Internet, Twitter, Facebook, bells, etc.
- ▶ We use our phone system and/or push buttons to trigger an ALERT
- ▶ Also need call 9-1-1 for further details

Alert TECHNOLOGY





Alert TECHNOLOGY

- ▶ Uses Cisco phone system - VoIP phone in every classroom
- ▶ ***Any staff member can initiate***
- ▶ Triggers an automatic announcement over intercom system at school and notifies all staff.
- ▶ Automatically locks any electronic latch in the building

INFORM



Using any means necessary to pass on real-time information

► Plain Language

- Who, what, where, when and how
- Can be used by people in the area or who may come into it to make common sense decisions



Inform TECHNOLOGY

Camera System

- ▶ More than 3,500 cameras at 40 buildings
(Average of 87.5 cameras per building)
- ▶ Elementary Schools: 25-50 cameras
- ▶ Middle Schools: 50-150 cameras
- ▶ High Schools: 150+ cameras



Inform TECHNOLOGY

Camera Access

- ▶ Locally at school
- ▶ Educational Support Center via command interface
- ▶ On the Cloud via laptop, tablet, and smartphone
- ▶ Local authorities (command unit, dispatch, squad cars)
- ▶ **LIMIT EXPORTING VIDEO !**

Network Access



A screenshot of a network monitoring software interface titled "MAIN ENTRANCES". The interface displays a grid of 30 camera feeds arranged in 5 rows and 6 columns. Each feed shows a different interior location, such as hallways, doors, and rooms. Above each camera feed, there is a small status bar containing a camera icon, a red dot, a letter (e.g., E, D, H, L, N, P, Pr, R, Ri, Si, St, Ti, Vi, B), and a timestamp (e.g., 1/27/2015 8:28:14 AM). Below each camera feed, there is a line of text providing technical details, including the camera name (e.g., "Esc Door 1 Main Ent.", "Rose Door 1 Main Ent.", "Brass Rm 232 Hall South"), the data rate (e.g., "0 ips - 20 kb/s"), and the timestamp. The interface also includes a "NAVIGATION" sidebar on the left, a "Logical - Main Entrances" header, and a "Kevin" user name in the top right corner. At the bottom, there is a control bar with various icons for navigation and settings.



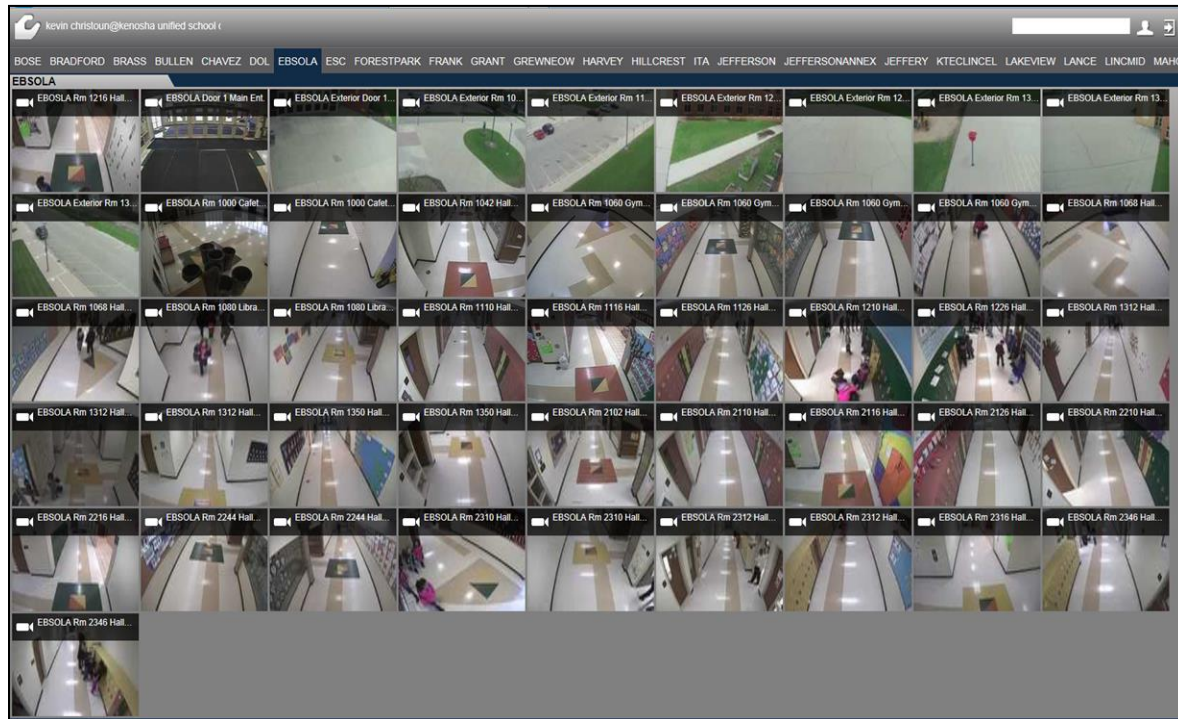
Network Access

- ▶ Up to 640 cameras can be shown at once in command center
- ▶ Easy to use - point and click
- ▶ Able to save videos as MP4 or other format
- ▶ Interfaces with the Informacast System



Cloud Access

(Ex: Eagle Eye and Verkada)





Remote Intercom Access

- ▶ System allows us to **INFORM** our staff, students and visitors remotely of what the active threat is and where they are in the building
- ▶ Staff in building then can make decisions to change their response to the threat (i.e. may go from **LOCKDOWN** to **EVACUATE**)
- ▶ Do you have staff practice making announcements ?



Technology Considerations

- ▶ When evaluating systems be sure to price out systems over a 7 year period. (annual licensing)
- ▶ Be sure vendors clearly identify features and functions in base cost vs. extra Cloud costs
- ▶ Open architecture
- ▶ Mobility Features
- ▶ Is there an app for that ?



WISCONSIN ASSOCIATION OF SCHOOL BUSINESS OFFICIALS



► Questions?

Resources: (links or flash drive)

- Crime Prevention Through Environmental Design Guidebook
- School Security Technologies
- School Grounds and Site Survey
- School Safety Inspection Checklist

Available online: US Department of Education Vulnerability Assessment: <https://www.hsdl.org/?view&did=232984>



THANK YOU !

