

Smart Schools Bond Act

Presented by the Departments of:
Technology, Finance & Operations / Maintenance
Tuesday, April 17, 2018



Introduction

1

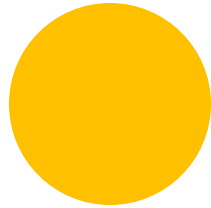
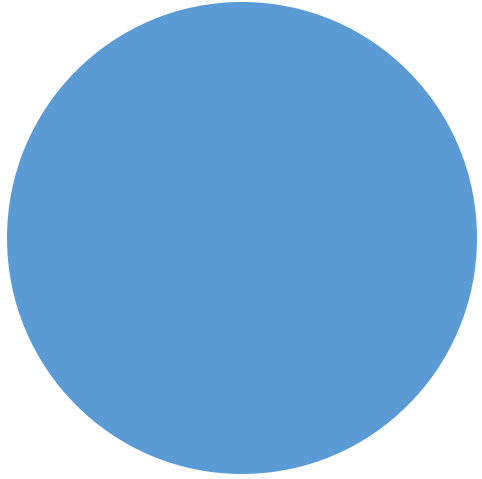
**Brief Review of
Smart Schools bond
Act**

2

**Implementation
Plan #1 - School
Connectivity**

3

**Implementation
Plan #2 – High-Tech
Security Features**



Smart Bond Act

Overview

Purpose

To improve educational technology & infrastructure to enhance learning & to provide opportunities for students throughout NYS.

Background

The Smart Schools Bond Act was passed in the 2014-15 Enacted Budget and approved by the voters in a statewide referendum held during the 2014 General Election on Tuesday, November 4, 2014.

The Smart Schools Bond Act (SSBA) authorized the issuance of \$2 billion of general obligation bonds to finance improved educational technology and infrastructure to improve learning and opportunity for students throughout the State.

The SSBA requires that a Review Board review and approve districts' Smart Schools Investment Plans before any funds may be made available for the program.



\$502,942

Pelham's Allocation

Six Allowable Expenditure Categories

1. School Connectivity

Install high-speed broadband or wireless internet

2. Classroom Technology

Acquire learning technology equipment or facilities, including but not limited to interactive whiteboards, computer servers, and desktop, laptop, and tablet computers;

3. Connectivity Projects for Community

Connectivity for communities

Six Allowable Expenditure Categories

4. Pre-Kindergarten Classrooms

Construct, enhance, and modernize educational facilities to accommodate pre- kindergarten programs and to provide instructional space to replace classroom trailers; and/or

5. Replace Transportable Classrooms

6. High-Tech Security Features

Install high-tech security features in school buildings and on school campuses, including but not limited to video surveillance, emergency notification systems, and physical access controls

Expenditure Restrictions

- The SSBA funding cannot be used for
 - **Professional Development:** Please note that Smart Schools Bond funds may not be used for professional development.
 - **Technical Support:** Please note that Smart Schools Bond funds may not be used for technical support. Districts are encouraged to work through BOCES for technical support.

Pelham Investment Plan #1

School Connectivity - Districtwide Network refresh including new network switching and routing equipment

Network Refresh

Goal

- To design, fund, acquire, and maintain an infrastructure that will make connectivity a reality for every teacher and student in every learning environment.

Rationale

- Upgraded switches as well as consolidation are needed, to ensure that we have enough bandwidth and solid connections within our District to maintain a more efficient level of use and integration of our resources.



NEW YORK STATE
SMART SCHOOLS BOND ACT
DISTRICT-WIDE IMPROVEMENTS



NETWORK
INFRASTRUCTURE



Core Business Technology Solutions

IT Starts Here.



	<p>15 Offices 9 States 350+ Employees</p> <p>National Reach Local Expertise</p>		<p>25+ Years of Experience</p> <p>Partnerships with leading industry experts.</p>		<p>2500+ Active Customers</p> <p>Healthcare Education Finance Manufacturing Gaming/Hospitality</p>
<p>Professional Services</p> <p>Envision Execute Empower</p>		<p>IT Assessments</p> <p>Network Cloud Security</p>		<p>Network Operations Center</p> <p>24x7x365 USA based</p>	

Core BTS is a customer-centric technology consulting company dedicated to helping organizations achieve their business objectives.

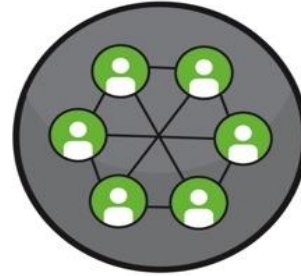


What We Do - Technologies



DATA CENTER

- » Compute, Storage, Virtualization
- » Hyper-Converged Infrastructure
- » **Networking Infrastructure**
- » Archiving, Backup, De-Duplication
- » Business Continuity & Disaster Recovery
- » Physical Data Center Design



COLLABORATION

- » **Unified VoIP Communications
(practice established in 2001)**
- » Web & Video Conferencing
- » Mobility & Presence
- » Digital Content Sharing
- » Social Technologies
- » Collaboration as a Service (HVS)



SECURITY & COMPLIANCE

- » **Assessments / Consulting**
Compliance Expertise in HIPAA, PCI-DSS, SOX, FFIEC, NCUA, Audit
- » **Infrastructure Security Architecture**
- » Security Posture Testing - Penetration Testing, Vulnerability Scanning, Social Engineering
- » Business Continuity & Disaster Recovery
- » IT Security Monitoring 24x7x365



Core BTS – Strategic Partnerships

We Partner with Global Industry Leaders who Provide Information Technology Solutions

Core holds top-level certifications with our Top-Tier partners allowing us to provide our customers with expertise across multiple technologies.



Certified Professional Engineers | Certified Sales Professionals





Core BTS – Cisco Partnership

- Core BTS has been a Cisco Gold Certified Partner since 1998 (20+ years) and a Cisco Authorized Reseller since 1994 (24+ years)
- Core BTS is ranked in the top 25 of Cisco's largest US Channels Partners and is a Cisco Nationally Managed Partner
- Core BTS has achieved & maintains several Cisco Master & Advanced Technology Specializations including Advanced Enterprise Network Architecture and Advanced Security Architecture specializations.
- Core BTS senior leadership team members sit on Cisco strategic counsel/advisory board
- Core BTS Board of Directors Vice Chairman served for more than a decade at Cisco as Senior VP of World Wide Channels



Core BTS – New York Footprint



Our New York Team

- 135 Employees

Physical Office Locations

- Albany / Clifton Park
- Manhattan
- Garden City
- Hauppauge



Core BTS K-12 Knowledge & Experience

- Dedicated K-12 Educational Technologies Consulting Practice Established in **1992**
- Providing Solutions to **250+ School Districts, BOCES & RIC's** across New York State & throughout the country
- We understand the trends in K-12 Education and the impact they have on District Technology Plans & Budgets
- In-depth knowledge & understanding of K-12 budgeting & funding sources including Capital Projects, **E-Rate, Smart Schools Bond**, Grants, BOCES aid and the general fund.
- Our solutions are available via **NYS contracts and Federal GSA contracts**
- NYSCOSS Diamond Level Sponsor, NYSASBO sponsor & sponsor of NYSSBA annual conference
- Capital Project Experience & Knowledge – for more than 20 years we have partnered with Architects, Engineering & Construction Management Firms working with K-12 School Districts



Sampling of
our New
York K-12
Educational
Clients ...

ALBANY CSD
BALLSTON SPA CSD
BEDFORD CSD
BELLMORE UFSD
BERNE-KNOX WESTERLO CSD
BETHPAGE UFSD
BRUNSWICK-BRITTONKILL CSD
CAPITAL REGION BOCES
CORINTH CSD
DUANESBURG CSD
EASTERN SUFFOLK BOCES
FORT EDWARD CSD
GALWAY CSD
GREATER JOHNSTOWN CSD
GREENPORT UFSD
HUDSON CITY SCHOOL DISTRICT
HUDSON FALLS CSD
HOOSIC VALLEY CSD

HYDE PARK CSD
KINGSTON CSD
LANSINGBURGH CSD
LHRIC
LIBERTY CSD
LIVINGSTON MANOR CSD
LYNBROOK UFSD
MECHANICVILLE CSD
MIDDLEBURGH CSD
MIDDLETOWN ENLARGED CSD
MINEOLA UFSD
MONROE-WOODBURY CSD
NASSAU BOCES
NERIC
NEWBURGH CSD
NEW LEBANON CSD
NORTH BABYLON UFSD
NORTH COLONIE CSD
ORANGE-ULSTER BOCES

PATCHOGUE-MEDFORD UFSD
PLAINEDGE UFSD
PINE BUSH CSD
ROCKVILLE CENTRE UFSD
ROCKY POINT CSD
ROSLYN UFSD
SARATOGA SPRINGS CSD
SCHOHARIE CSD
SCHUYLERVILLE CSD
SHENENDEHOWA CSD
SMITHTOWN CSD
SOUTH LEWIS CSD
SOUTHERN WESTCHESTER BOCES
SYRACUSE ACADEMY
STILLWATER CSD
VOORHEESVILLE CSD
WESTERN SUFFOLK BOCES
WSWHE BOCES
WYANDANCH UFSD

Large Scale K-12 Project Experience

Newburgh City School District – 10,600 Students

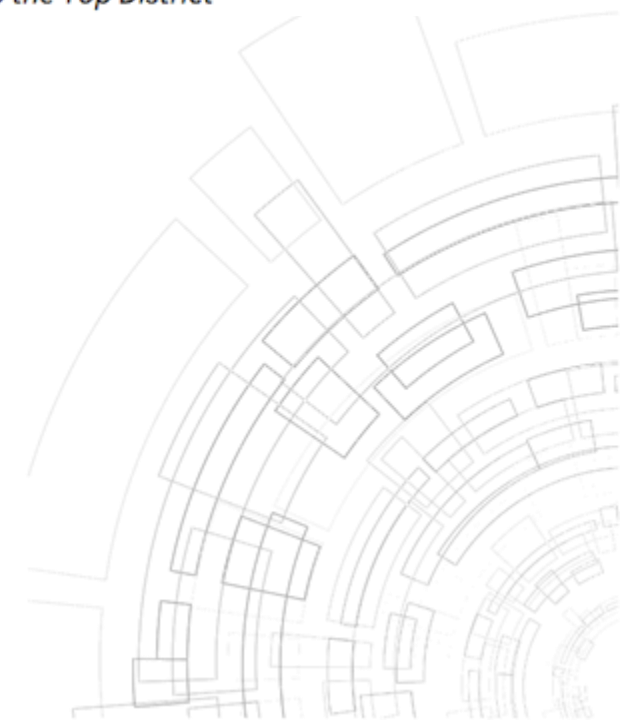
- Smart Schools/E-rate planning
- Design/Implementation/Support of:
 - LAN/WAN
 - Wireless
 - Data Center (Compute / Storage)
 - Disaster Recovery Site



Large Scale K-12 Project Experience

Middletown City Schools – 7,500 Students (18+ year client)

- Smart Schools/E-rate planning
- Design/Implementation/Support of:
 - LAN/WAN
 - Wireless
 - IP Telephony
 - Data Center (Compute / Storage)
 - Virtual Desktop
 - Collaboration Workspaces
 - Public Address System
- Network Security
- Supplemental Staffing



01

Complete network
switch
replacement

- Core switches
- Edge switches

02

10Gb network
infrastructure

03

Port density to
address security
project
requirements

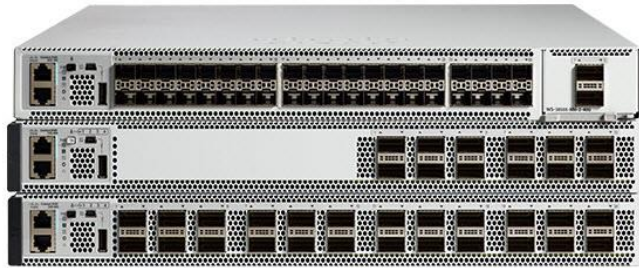
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Cable
Management

Project Highlights

Cisco Catalyst 9000 Series Switches

Catalyst 9500 Series / Core



Catalyst 9500 Series / Edge



The Catalyst 9000 Series was recognized as
CRN's* 2017 **Overall Network Product of the Year.**

**CRN is the top news source for solution providers and the IT channel, providing up-to-date technology news, IT vendor and product reviews, channel partner resources and more.*





District Network Upgrades

Network/Access Costs (Equipment)	\$268,805.00
Outside Plant Costs	N/A
School Internal Connections and Components (Wiring Construction)	\$60,295.00
Professional Services (Engineering)	\$
Testing	N/A
Other Upfront Costs	N/A
Other Costs	\$18,110.50
TOTAL	\$347,210.5

Pelham Investment Plan #2

High-Tech Security

Enhance and Improve our Security cameras and Systems

High Tech Security

Goal

- To improve safety with high-tech security systems across the district to include state of the art surveillance.

Rationale

- The current surveillance system has reached its end of life and analog based.
- The current surveillance system is comprised of multiple manufacturers recording equipment, so there is also no centralized viewing platform for video surveillance.
- There is a high failure/replacement rate of cameras currently.

High Tech Security

Proposed System

- Will allow for high resolution, 4K, IP video surveillance of critical student areas.
- Include a new software platform that enables viewing of all cameras at all school locations from any location in the school district.
- The new video storage server will allow for at least 30 days of storage with some spare capacity and the ability to expand by adding additional servers.

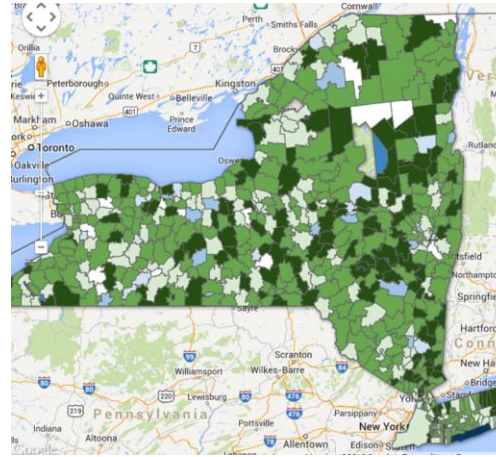
Celebrating
Over 40 Years
of Service



- Over 120 Employees in NY State
- HP, Aruba & Cisco Certified Staff
- Offices – New Paltz, Rochester, Syracuse, Albany, Elmira
- 24/7 Service 800-836-0969
- NYS OGS Contract
- OGS - 27000 Items and 70 Installation Partners

Over 225 School Districts

1100+ BUILDINGS



Day Automation
dayautomation.com



We deploy
responsibly in your
network.



Hewlett Pack
Enterprise

Avigilon Physical Security Clients



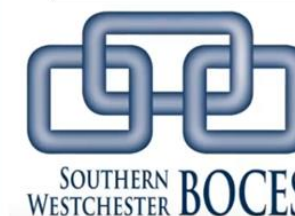
Hastings-on-Hudson
UNION FREE SCHOOL DISTRICT
Creating a vibrant learning community!



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SCHOOLS**



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THE BEST EVIDENCE™



South Orangetown Central School District



Brewster Central School District



WALLKILL
CENTRAL SCHOOL DISTRICT



KATONAH - LEWISBORO SCHOOL DISTRICT



Highland Central School District
Excellence in Education

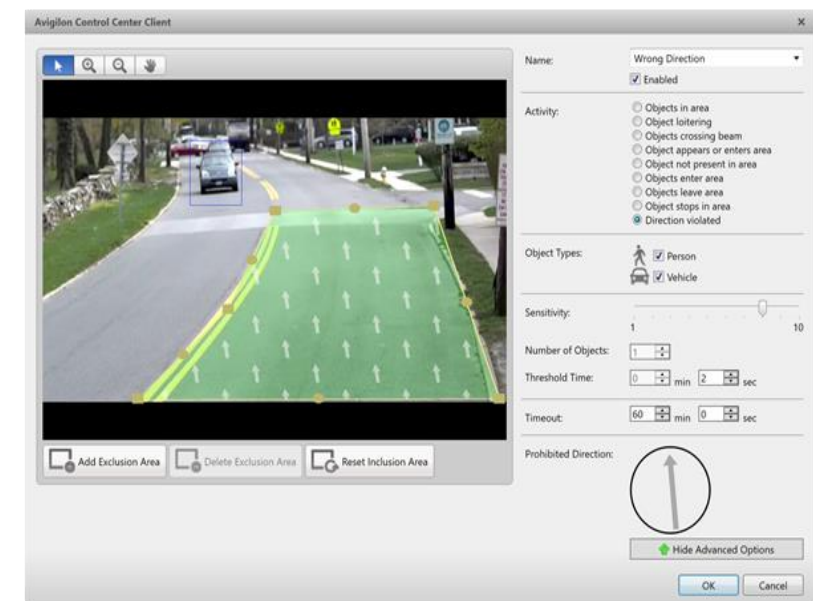
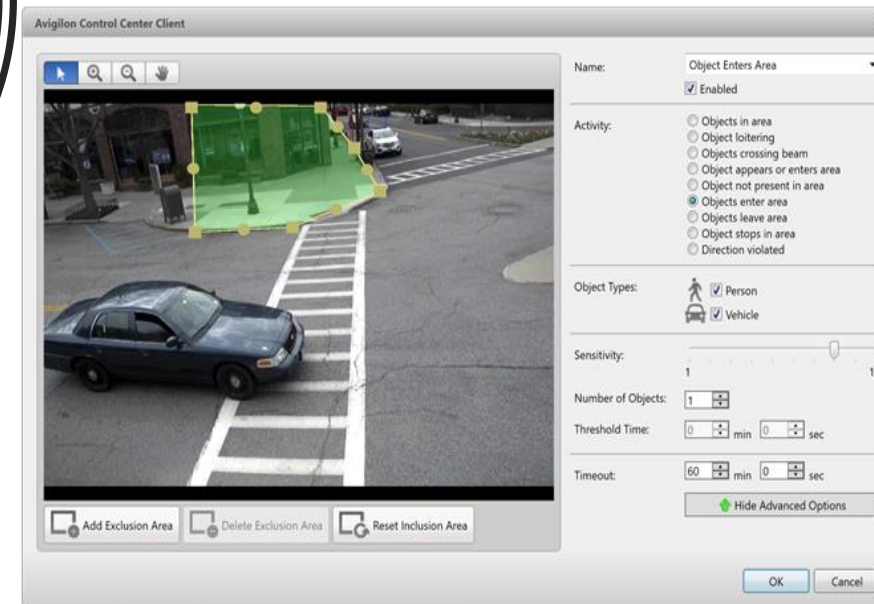
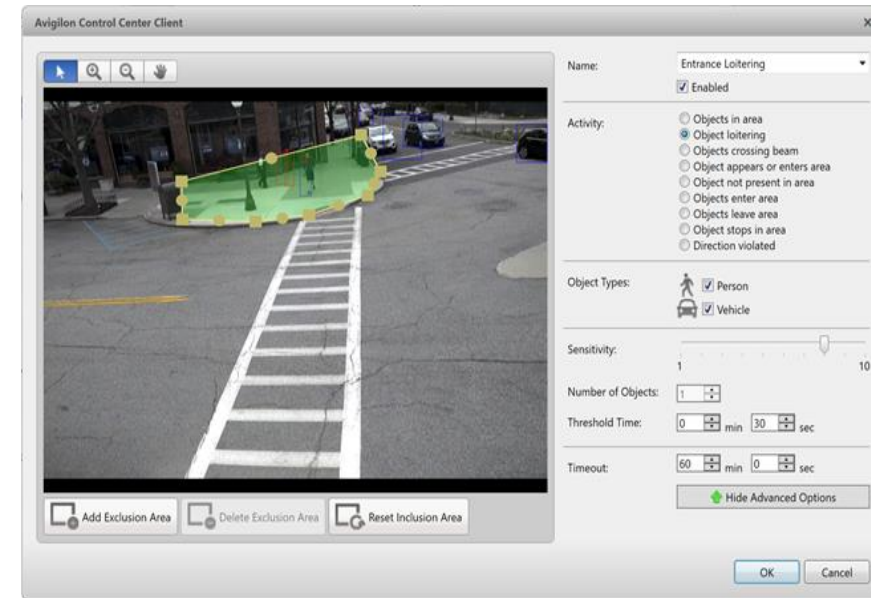
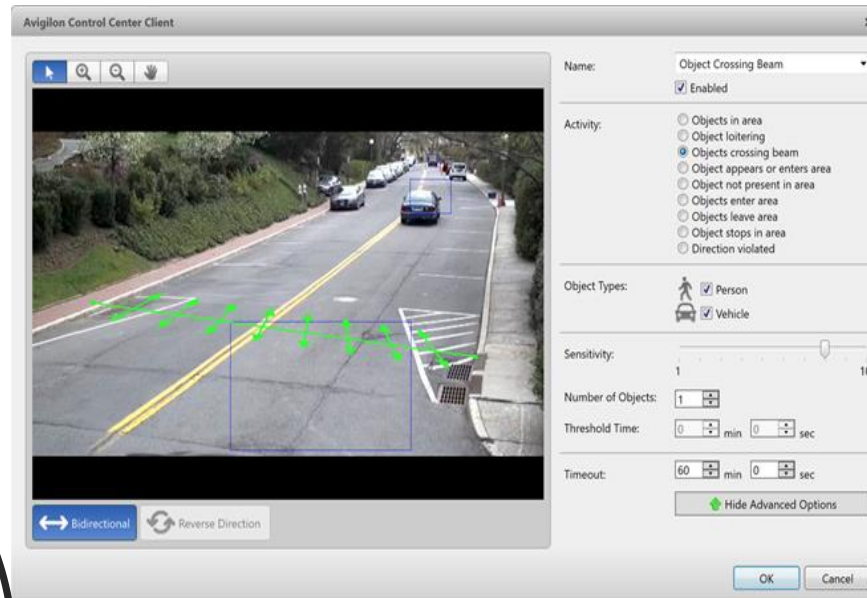




Avigilon Surveillance & Access Control

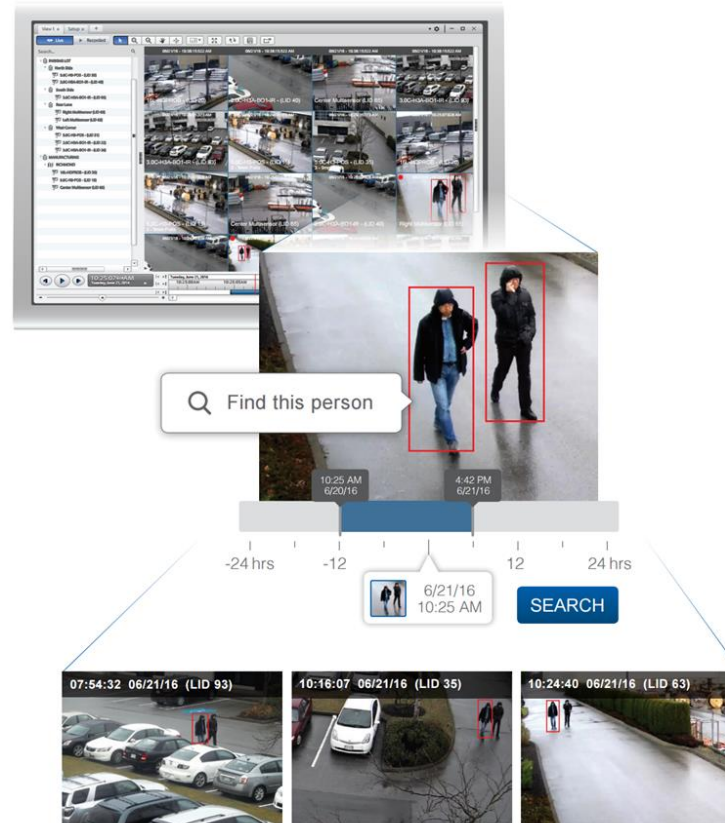
- 1, 3, 5, 8, 16, 24 & 30 Megapixel Camera Options
- Thick Client, Web Browser & Mobility – iOS / Android
- No Per Seat Software License
- Avigilon Camera Warranty – 3 Year Next Business Day
- Included Video Analytics

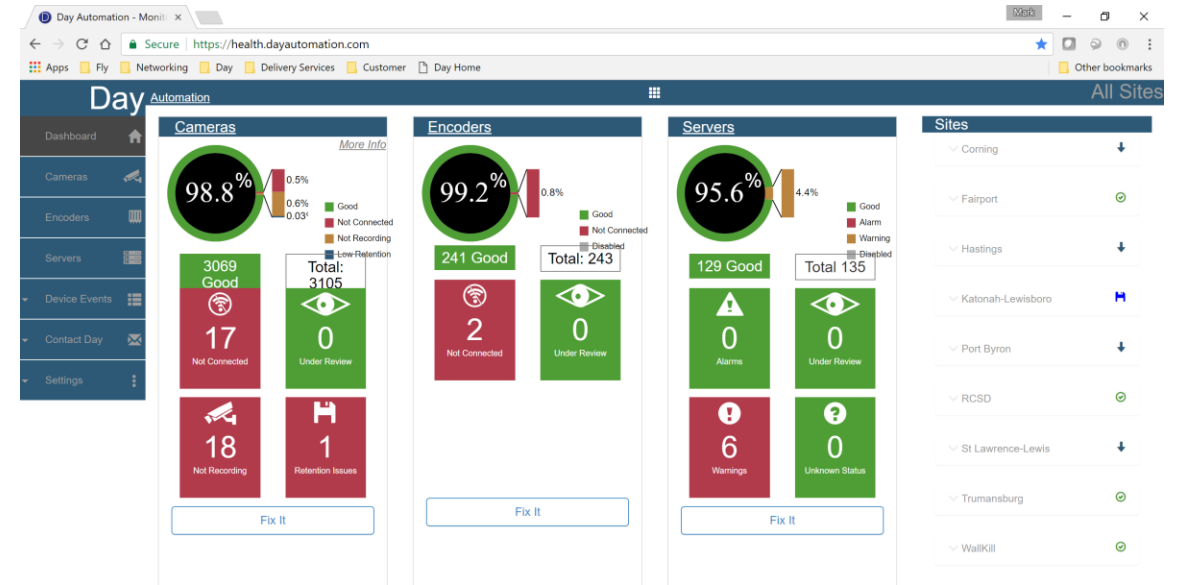
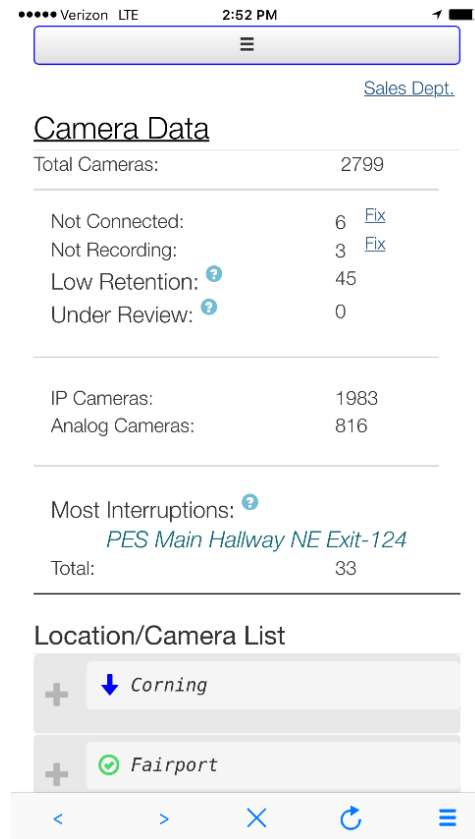
Avigilon Self-Learning Video Analytics



Avigilon Appearance Search

Face & Vehicle Search





System Health Monitoring Included !!!

Camera Locations and Quantities

- **Main Campus**
(15) – 8MP Cameras & (2) – 4 Port Encoders
- **Colonial**
(5) – 8MP Cameras & (1) – 4 Port Encoders
- **Hutchison**
(3) – 8MP Cameras & (1) – 4 Port Encoders
- **Prospect**
(5) – 8MP Cameras & (1) – 4 Port Encoders
- **Siwanoy**
(5) – 8MP Cameras & (1) – 4 Port Encoders

Video Storage Server

84 Terabytes of Storage

- 10GB Network Card with (2) SFP Ports
- Up to 1100 Mbps Throughput
- Up to 128 Cameras Based on Storage

8MP Cameras - 33

- 80.32 Terabytes of storage
- 274 Mbps throughput

Analog Camera Connection Ports 48

- 3.7 Terabytes of Storage
- 120 Mbps Throughput

High-Tech Security

SSBA High-Tech Security Features High-Tech Security Features Sub-Allocations	SSBA Connectivity Projects for Schools Sub-Allocations
Capital-Intensive Security Project (Standard Review)	\$142,231.50
Electronic Security System	\$0.00
Entry Control System	\$0.00
Approved Door Hardening Project	\$0.00
Other Costs	\$13,500.00
TOTALS	\$155,731.5

Next Steps

1

Submit Three Year District Technology Plan to the State – **Approved December 2015**

2

Board of Education approves **preliminary** plan (Tonight's Meeting, **April 17th 2018**).

3

SSIP's are published on the district web site with an email address for public comments for 30 days. (**April 18th 2018**)

4

Architect (TetraTech) submits SSBA Letters of Intent for each Plan and Detail Pages to the Office of Facilities and Planning (OFP)

5

OFP determines if projects are streamlined or requires a full project submission. OFP issues project numbers.

6

SSIP public hearing by the Board of Education and **Final** Plan is Board approved (**May 22nd 2018**)

7

Approved plan submitted to NYSED. (**May 23rd 2018**)

Questions & Answers