



*Our mission is to empower all students to be self-directed, lifelong learners, who willingly contribute to their community and lead passionate, purposeful lives.*

## Arlington Central School District Finalized Smart Schools Investment Plan



Arlington Community, please email feedback to: [keycommunicator@acsdny.org](mailto:keycommunicator@acsdny.org)

To learn more about the Smart School Bond Act, go to:

NYSED SSBA FAQs (10/27/15): <http://www.p12.nysed.gov/mgtserv/documents/SSBAQuestionsASBO102615edited102815AL.pdf>

NYSED SSBA FAQs (7/16/15): <http://www.p12.nysed.gov/mgtserv/documents/FAQsforSmartSchoolsBondAct.pdf>

NYSED SSBA Guidelines: [http://www.p12.nysed.gov/mgtserv/documents/SmartSchoolsBondActGuidance\\_AL5-16-16.pdf](http://www.p12.nysed.gov/mgtserv/documents/SmartSchoolsBondActGuidance_AL5-16-16.pdf)

NYSED SSBA Website: [http://www.p12.nysed.gov/mgtserv/smart\\_schools/home.html](http://www.p12.nysed.gov/mgtserv/smart_schools/home.html)

## Smart Schools Plan Overview

In November 2014, New York State's voters approved the Smart Schools Bond Act (SSBA).

The purpose of the Smart Schools Bond Act is to improve learning and opportunity for students by funding capital projects to:

1. Install high-speed broadband or wireless internet connectivity for schools and communities;
2. Acquire learning technology equipment or facilities, including but not limited to interactive whiteboards, computer servers, and desktop, laptop, and tablet computers;
3. Construct, enhance, and modernize educational facilities to accommodate pre-kindergarten programs and to provide instructional space to replace classroom trailers; and/or
4. 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.



The Arlington Central School District is eligible to receive **\$5,218,541** in Smart School funds. The process requires the district to create and submit a Smart Schools Investment Plan. Our goal is to use these funds to purchase systems and equipment that will have longevity and align with our technology plan.

The ACSD plan includes establishing one security and communication system district-wide that will integrate security cameras, phones and public address systems. In addition, it will expand current wireless systems in elementary schools to provide students with full wireless access.

| Smart Schools Categories                                 | Summary            |
|--|--------------------|
| School Connectivity                                      | 1,591,873          |
| Community Connectivity                                   | 0                  |
| High Tech Security                                       | 2,984,377          |
| Classroom Learning Technology                            | 0                  |
| Replacement Classrooms Trailers                          | 0                  |
| Pre-Kindergarten Classrooms                              | 0                  |
| <b>SSBA Allocation</b>                                   | <b>\$5,218,541</b> |
| <b>Estimated Total Proposed ACSD SSIP#1 Expenditures</b> | <b>\$4,576,250</b> |
| <b>SSBA Remaining Balance</b>                            | <b>\$ 642,291</b>  |



- Vision
  - One security and communication system district-wide
  - Integrate security cameras, phones and public address systems
  - Full wireless access at the elementary level

### Smart Schools Investment Plan Guidelines

All New York State public school districts are required to complete and submit a District Instructional Technology Plan survey to the New York State Education Department in compliance with Section 753 of the Education Law and per Part 100.12 of the Commissioner's Regulations. Districts that include investments in high-speed broadband or wireless connectivity and/or learning technology equipment or facilities as part of their Smart Schools Investment Plan must have a submitted and approved Instructional Technology Plan survey on file with the New York State Education Department (NYSED). Our district submitted the required Instructional Technology Plan survey to NYSED in June 2015 and received approval in August 2015.

Pursuant to the requirements of the Smart Schools Bond Act, the planning process must include consultation with parents, teachers, students, community members, other stakeholders. The 35-member District Level Technology Team is comprised of community members, parents, teachers, students, and administrators. This team reviewed the Arlington Technology Plan and the SSBA guidelines and determined that using the SSBA funds for infrastructure, wireless connectivity, and security systems would produce the best long-term and effective results.

In addition to working with the District Level Technology Team, we worked with the District Emergency Response Team to review the proposed infrastructure upgrades and high tech security features. The District Emergency Response Team is comprised of local emergency responders and law enforcement, administrators, teachers, school nurses, social workers, and psychologists, as well as John LaPlaca, CEO of the Altaris School Safety and Security Consulting Group. Arlington contracts with Altaris to review our emergency plans and to train staff on how to protect students in an emergency.

## Smart Schools Investment Plan Goals and Fund Allocation



The graphic titled "Smart Schools Proposed Scope" features a laptop on the left with several orange circular icons floating above it, including symbols for email, social media, and connectivity. To the right of the laptop, the title "Smart Schools Proposed Scope" is written in orange. Below the title, a bulleted list outlines the scope of the proposal, divided into two main categories: School Connectivity and High Tech Security Features. To the right of the list, there is a collection of images representing various smart school technologies, including security cameras, VoIP phones, and public address speakers.

**Smart Schools Proposed Scope**

- What is the scope of the proposal?
  - School Connectivity
    - Cabling
    - Switch technology
    - Wi-Fi Access Points
  - High Tech Security Features
    - Security cameras (interior/exterior)
    - VoIP phones mounted in classroom safe zone
    - IP Public address speakers
    - Video recording servers
    - Lockdown panels

### Category 1: School Connectivity

The Arlington Central School District intends to use the Smart Schools Bond Act funds to expand wireless access and update the network infrastructure.

- **Goal 1:** Update wireless coverage for six elementary schools to include all classrooms
- **Goal 2:** Upgrade network infrastructure switching at 11 school buildings to support 10 gigabit closet uplinks and redundant 10 gigabit aggregation cores
- **Goal 3:** Increase internet bandwidth for the district from 600 Mbps to 850 Mbps

The district subscribes to several services through BOCES to provide digital connectivity (network and internet access) to all school buildings. Students, teachers and staff use several resources for connecting to online learning opportunities. As part of the Technology Plan, the district will continue to foster student learning via digital and collaborative learning environments by expanding wireless access.

Over the next two years, the goal is to expand the mobile learning environment to all elementary classrooms by installing an access point in every elementary classroom. During the past year, 22 elementary teachers participated in a pilot using Chromebooks and tablets. Teachers helped design and develop curricula activities and projects using these devices, and each class was outfitted with six mobile devices. In accordance with our computer replacement cycle, all elementary classrooms will receive six mobile devices. In order to implement this new model, it is necessary to update the elementary schools from basic to full wireless access.

At the high school and middle school, students use their own devices (Bring Your Own Device) for inquiry, communication, and creation, as well as to demonstrate learning. Additionally, Virtual Desktop Interface (VDI) is the District's new initiative that provides a private cloud based computing experience. The District will implement this strategy over three years. This interface provides full access to a virtual Windows computer from any type of device. This technology promotes efficiency, productivity and provides remote access.

| Items                                      | Sub-Allocation     |
|--|--------------------|
| Network/Access Costs                       | 0                  |
| Outside Plant Costs                        | 0                  |
| School Internal Connections and Components | 1,290,218          |
| Professional Services                      | 301,655            |
| Testing                                    | 0                  |
| Other Upfront Costs                        | 0                  |
| Other Costs                                | 0                  |
| <b>Estimated Proposed Total</b>            | <b>\$1,591,873</b> |

#### Category 4: High Tech Security Features

The Arlington Central School District intends to use the Smart Schools Bond Act funds to make improvements to the security of our schools and integrate our emergency communication systems.

- **Goal 1:** Install lockdown panels and security cameras in all school buildings
- **Goal 2:** Install and mount safe zone VoIP phones in classrooms at eight elementary schools and two middle schools to integrate with security system
- **Goal 3:** Update public address system to integrate with new security system features

We will install high-tech security systems in each of our eleven schools. This technology will include interior and exterior surveillance cameras and a highly reliable emergency communication system. Most importantly, this security technology will enable a school to lockdown and secure students and staff within seconds of identifying imminent danger. Anyone witnessing a safety threat will be able to initiate a lockdown by pressing a panic alarm mounted in the hallway, entering a code on the classroom phone, or utilizing a cell phone application. Once initiated, a prerecorded message will be disseminated throughout the school via the IP speaker system, swipe card access to the school will be disabled, and exterior strobe lights will be activated to indicate that the building is in lockdown. Law enforcement will automatically be notified and a message will be sent to parents indicating that there is a lockdown at their child's school.

The proposed plan includes mounting a Voice over IP phone (VoIP) in the safe zone for all elementary and middle school classrooms. (The safe zone area in the classroom is the location where people cannot be seen from the window on the door.) The plan includes installing IP speakers in K-12 classrooms for mass notifications during an emergency.





### Lockdown Panel

- Initiates lock down process
  - Notifies emergency services
  - Disables swipe card access
  - Makes a PA announcement
  - Activates the exterior strobe lights
  - Sends automated message



| Items                              | Sub-Allocation      |
|------------------------------------|---------------------|
| Capital-Intensive Security Project | 640,610             |
| Electronic Security System         | 2,143,767           |
| Entry Control System               | 0                   |
| Approved Door Hardening Project    | 0                   |
| Testing                            | 0                   |
| Other Upfront Costs                | 0                   |
| Other Costs                        | 200,000             |
| <b>Estimated Proposed Total</b>    | <b>\$ 2,984,377</b> |

## Proposed Implementation Timeline

### 2017-18

#### Project I

Run cabling and install infrastructure components (switches) in all school building wiring closets

#### Project II

Install wireless access points in 6 elementary schools: Noxon, Traver, Overlook, Beekman, Arthur S. May and Vail Farm

#### Project III

Install high tech security system at **high school**

- DVR Servers
- Security Cameras/Strobe Lights
- Lockdown Panels
- IP Speakers

### 2018-19

#### Project IV

Install high tech security system at **middle schools**

- DVR Servers
- Security Cameras/Strobe Lights
- Safe Zone VoIP phones in every classroom
- Lock Down Panels
- IP Speakers

#### Project V

Install high tech security system at **8 elementary schools**

- DVR Servers
- Security Cameras/Strobe Lights
- Safe Zone VoIP phones in every classroom
- Lock Down Panels
- IP Speakers

## Sustainability and Maintenance

The replacement cycle for the items we are proposing is 7-10 years. As we need to replace these items, they will be added to the district replacement cycles as part of the annual technology budget and technology plan. The cost for maintenance and licensing is approximately \$50,000 per year and will be budgeted through the annual technology budget.