

Niskayuna Central School District



Smart Schools Investment Plan

Phase One

**Approved by the Board of Education
April 11, 2017**

Introduction

The SMART SCHOOLS BOND ACT OF 2014 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 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 purpose of the Smart Schools Bond Act is to improve learning and opportunity for public and nonpublic school 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 Smart Schools Bond allocation for Niskayuna Central School District is \$1,494,855. Over the past year, the Technology Services department engaged in conversations with district and building administrators, Operations and Maintenance staff, and an outside technology consultant to determine priorities for the use of these funds.

Of primary concern was ensuring the funding is used for long-term investments, which will position the district to grow technology offerings in the future. In particular, the district intends to use Smart Schools funds to implement initiatives that would be impossible solely with local funds.

The district plans to utilize this funding to improve high-speed broadband and wireless internet connectivity for our schools, and to install high-tech security features in school buildings and on school campuses. Phase One of the Smart Schools Implementation Plan will be focused on high-tech security, specifically the replacement of an aging video surveillance system.

Rationale

In 2015, the district contracted with an outside vendor to do an assessment of our existing security system. This involved a walkthrough of the all district buildings, as well as interviews with building administrators to identify areas of concern. This evaluation identified the existing video-surveillance system as in need of replacement, and provided a list of specific locations identified as needing better video coverage.

The current video-surveillance system was originally installed as part of a capital project, but is nearing the end of its usable life. Replacement of camera failures has become too costly, relative to the quality and feature set of the existing system. The Network Video Recorders (NVRs) are running an out of date operating system, which will no longer receive security

updates after 2017. The system currently stores video for 14 days, which can result in loss of video in situations which are not identified immediately.

It is critical that the district have an effective video-surveillance system to ensure the safety of our staff and students. Cameras are used in conjunction with an intercom system to ensure only authorized visitors are allowed in district buildings. In addition, district staff have come to rely on the video-surveillance system to adequately respond to safety concerns, and properly monitor student behavior.

Each year, all school districts in New York State complete the Violent and Disruptive Incident Report (VADIR). The following table provides publicly available data on the district-wide tally of all reported incidents at Niskayuna Central School District.

Tally of All VADIR Incidents

2010-11: 108
2011-12: 109
2012-13: 140
2013-14: 117
2014-15: 188

These incidents highlight the need for a video-surveillance system, to better prevent the situations that lead to them, and ensure an appropriate response when they do.

Benefits

A new video-surveillance system will provide a number of direct benefits to the district:

- Higher resolution video, with improved low-light coverage.
- Longer retention of video archive. (Minimum of 30-days.)
- Replacement of existing damaged cameras, delayed in anticipation of this project.
- Better coverage on building exteriors by installing units with a 180-degree field of view.
- Capacity for additional camera locations, to be purchased with local funds.
- An easier to use interface, with support for both a mobile app and web client.

The selected system is also supported by the Northeast Regional Information Center (NERIC), including use of a Health Monitoring server to track potential issues with cameras or servers.

All 4,172 district students and 760 district staff will benefit from this replacement system, as it will improve safety and security in all district buildings, ensuring a comfortable instructional and work environment for all.

Scope of Work

The proposed plan will include replacement of all existing cameras at each district building, the installation of new server and storage hardware, and configuration of central portal for accessing and reviewing video district-wide.

In order to streamline this project, no new cabling will be installed, as cameras will be replaced only in existing locations. This will provide the district with a strong platform to build out additional coverage by adding additional camera locations through the use of local funding, supported by State Aid.

The plan calls for the purchase, configuration, and installation of the following items:

Item: Network Video Recording Server (60TB)

Replacing: 8 Network Video Recording Servers (3TB)

Quantity: 7

Item: 3MP IP Camera

Replacing: <1 MP Cameras (interior)

Quantity: 85

Item: 5MP IP Camera

Replacing: 1 MP Cameras (exterior)

Quantity: 83

Item: 8 MP IP Camera

Replacing: <1 MP Cameras (exterior)

Quantity: 15

Item: 12MP Fisheye 360 Camera

Replacing: <1 MP Cameras (interior)

Quantity: 3

Item: Exterior IP 30MP Camera

Replacing: <1 MP Camera (exterior)

Quantity: 1

Item: Exterior IP 8MP Camera

Replacing: <1 MP Camera (exterior)

Quantity: 1

Item: Exterior Multi Sensor IP 9MP Camera

Replacing: 1 MP Pan-Tilt Zoon Cameras (exterior)

Quantity: 32

(MP = Megapixel)

The total cost for this phase of the project, including all necessary parts and installation, is \$487,700.

Next Steps

In the next several months, Phase One of our SSIP will be presented to the Board of Education in an open hearing, to enable stakeholders to respond to our preliminary plans. This draft plan

will be posted on the district website for a minimum of thirty days, to allow for comments from the community. Community members, parents, teachers and students will be notified of the meeting and comment window via the district website and mass communication systems, to ensure adequate opportunity for input from all stakeholders.

Once the comment window has passed, the district will make any necessary updates to the draft plan, and present it to the Board of Education for final approval. The final adopted plan will then be submitted to the NYS Education Department for review.

Ongoing Maintenance

The district is eligible for state-aid on up to \$35,000 of security cameras each year. In order to ensure this system remains viable over the long term, the district will be allocating additional funding, starting in the 17-18 school year, specifically for the addition of cameras in priority locations, as well as ongoing maintenance and improvements to the video-surveillance system as a whole.

Timeline

February 2017: Draft Smart Schools Investment Plan (SSIP) presented to community and Board of Education.

February 2017: Meet with nonpublic school representatives

March 2017: Submit Letter-of-Intent to NYS Office of Facilities Planning, for streamlined review.

Feb-Mar 2017: 30-day comment period on draft plan

March 2017: Final plan presented to Board of Education

March 2017: SSIP submitted to NYS for approval

Sep-Oct 2017: SSIP approved (est.)

November 2017: Work begins (est.)