

Alexander Central School

Smart Schools Bond Act

Investment Plan



New York State Smart Bond Act:

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. More information can be found at http://www.p12.nysed.gov/mgtserv/smart_schools/

The Alexander School district was allocated **\$961,925.00**

Plan Overview:

The Alexander School district was allocated \$961,925.00 as part of the Smart Schools Bond Act (SSBA.) After reviewing the district needs and meeting with the districts Technology Committee, it was determined that part of these funds will be initially used in the following manor:

1. Infrastructure upgrade to replace old switches throughout the district and provide the district with “power over Ethernet” switches to bring access points to classrooms for a wireless district network. New fiber terminations to the existing fiber in the district to allow for up to 10Gb connections to the Elementary and Edge closets on the network.
2. Install Cat 6a cabling to all the classrooms and high traffic areas like the Libraries and Auditorium in the district to provide higher bandwidth and power to these areas for a wireless network.
3. Purchase and install a wireless network throughout the district to allow for technology like iPads and Chromebooks to be accessible from anywhere in the district. The wireless network would also reduce the demand on the current wired network and allow for future technologies in the district.

Preconditions:

As a precondition to utilizing the SSBA funds the District has ensured that there is adequate Internet bandwidth in excess of 100 Mbps per 1,000 students to sustain the increase of more classroom devices. The Alexander School District exceeds this at 200 Mbps.

The proposed plan aligns closely with the current three year technology plan, and the current technology survey on file with the New York State Department of Education.

Allocation of Funds Summary:

Cabling installation, termination, testing, Cat 6a cable, raceways...etc.	\$89,786.00
Infrastructure upgrade including: 3 Cisco 3850 48port POE switches 3 Cisco 2960-X 24port POE switches 1 Cisco 3750X 48port POE switch 1 Cisco 3750X 48 port switch 1 Cisco 3650 24port POE switch 1 Cisco 3650 48port switch Installation, modules, and more.	\$99,203.00
Meraki Wireless Access Points including 88 Meraki MR42 Cloud Managed APs 20 Meraki MR32 Cloud Managed APs	\$72,084.00
Total	\$261,073.00

Plan Goals:

Over the course of several months the districts IT department and the Technology committee has been drafting this investment plan. The Alexander School Board gave approval of this final Investment plan during the board meeting on July 12th. The preliminary investment plan was posted on our website

for 30 days to give the stakeholders a chance to review the plan and attend an open hearing during the first board meeting in July. The approved plan will be submitted to the New York State Education Department and will be posted on the district website. The planning process has included consultation with parents, community members, teachers, students, district staff, and other stakeholders.

The cabling of Cat 6a wires to all our classrooms and high traffic areas like the libraries and Auditorium is the first district wide cabling project since the completion of the 2001 Building project. Currently the district has Cat 5e wiring throughout the district. The plan calls for new Cat 6a cabling to accommodate faster district wide connectivity including 1Gb connection speeds and 10Gb Wide Area Network connection speeds between the Elementary and High School fiber. The district will also see a 10Gb connection speed over the existing fiber between its edge switch closets. The Cat 6a wire will also provide the connection the Wireless APs will need for both their power and data needs.

The infrastructure upgrade will remove older switches; provide power as the districts first Power over Ethernet (POE) switches needed by the wireless access points, and help upgrade to the 10Gb connection speeds between the buildings and Edge wire closets. These switches will also provide 1Gb connection to each classroom.

The wireless network that will be implemented in this plan is the first for the district. The entire wireless network will use the 802.11ac wireless networking standard, and use wave 2 Meraki Access points that can reach 1.9Gbps. The district gave student access to the Google Apps for Education (GAFE) account access for students from 4th-12th grade in the 2015-2016 school year. The district also started 2 pilot programs in the 2015-2016 school year which included iPads in the Kindergarten classes and Chromebooks in three classrooms in the High School. The addition of a full district wireless network will allow us to use these modern and less expensive technologies throughout the entire district. This can bring the district closer to a 1:1 technology device to student ratio, and can allow students to bring their own device to Alexander.

For more information on the Alexander Technology initiatives over the next 3 years, and more information on the Smart Schools investment, please view our 2016 Technology Survey on our website or click this link below:

http://www.alexandercsd.org/files/TEJ0d/c01959f135a9d7143745a49013852ec4/2016_Technology_Survey.pdf

Any stakeholder or community member who would like to comment on this plan may contact:

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