Smart Schools Investment Plan - 2016-17 Version (Original) - 0101917

SSIP Overview

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Institution ID

800000036818

1. Please enter the name of the person to contact regarding this submission.

Richard Pandolfo

1a. Please enter their phone number for follow up questions.

631-723-4700, ext. 2207

1b. Please enter their e-mail address for follow up contact.

rpandolfo@hbschools.us

2. Please indicate below whether this is the first submission, a new or supplemental submission or an amended submission of an approved Smart Schools Investment Plan.

Supplemental submission

3. 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.
By checking this box, you certify that the school district has an approved District Instructional Technology Plan survey on file with the New York State Education Department.

☑ District Educational Technology Plan Submitted to SED and Approved

4. Pursuant to the requirements of the Smart Schools Bond Act, the planning process must include consultation with parents, teachers, students, community members, other stakeholders and any nonpublic schools located in the district.
By checking the boxes below, you are certifying that you have engaged with those required stakeholders. Each box must be checked prior to submitting your Smart Schools Investment Plan.

☑ Parents
☑ Teachers
☑ Students
☑ Community members

4a. If your district contains non-public schools, have you provided a timely opportunity for consultation with these stakeholders?

☐ Yes
☐ No
☑ N/A

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5. Certify that the following required steps have taken place by checking the boxes below: Each box must be checked prior to submitting your Smart Schools Investment Plan.

- ☑ The district developed and the school board approved a preliminary Smart Schools Investment Plan.
- ☑ The preliminary plan was posted on the district website for at least 30 days. The district included an address to which any written comments on the plan should be sent.
- ☑ The school board conducted a hearing that enabled stakeholders to respond to the preliminary plan. This hearing may have occured as part of a normal Board meeting, but adequate notice of the event must have been provided through local media and the district website for at least two weeks prior to the meeting.
- ☑ The district prepared a final plan for school board approval and such plan has been approved by the school board.
- ☑ The final proposed plan that has been submitted has been posted on the district's website.

5a. Please upload the proposed Smart Schools Investment Plan (SSIP) that was posted on the district's website, along with any supporting materials. Note that this should be different than your recently submitted Educational Technology Survey. The Final SSIP, as approved by the School Board, should also be posted on the website and remain there during the course of the projects contained therein.

3_Smart Schools Investment Final Plan 051016.doc

5b. Enter the webpage address where the final Smart Schools Investment Plan is posted. The Plan should remain posted for the life of the included projects.

http://www.hbschools.us/curriculum/technology

6. Please enter an estimate of the total number of students and staff that will benefit from this Smart Schools Investment Plan based on the cumulative projects submitted to date.

2,400

7. An LEA/School District may partner with one or more other LEA/School Districts to form a consortium to pool Smart Schools Bond Act funds for a project that meets all other Smart School Bond Act requirements. Each school district participating in the consortium will need to file an approved Smart Schools Investment Plan for the project and submit a signed Memorandum of Understanding that sets forth the details of the consortium including the roles of each respective district.

- ☐ The district plans to participate in a consortium to partner with other school district(s) to implement a Smart Schools project.

8. Please enter the name and 6-digit SED Code for each LEA/School District participating in the Consortium.

Partner LEA/District	SED BEDS Code
(No Response)	(No Response)

9. Please upload a signed Memorandum of Understanding with all of the participating Consortium partners.

(No Response)

10. Your district's Smart Schools Bond Act Allocation is:

$494,867

11. Enter the budget sub-allocations by category that you are submitting for approval at this time. If you are not budgeting SSBA funds for a category, please enter 0 (zero.) If the value entered is $0, you will not be required to complete that survey question.

	Sub-Allocations
School Connectivity	47,277
Connectivity Projects for Communities	

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	Sub-Allocations
	0
Classroom Technology	0
Pre-Kindergarten Classrooms	0
Replace Transportable Classrooms	0
High-Tech Security Features	1,798
Totals:	**49,075**

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1. In order for students and faculty to receive the maximum benefit from the technology made available under the Smart Schools Bond Act, their school buildings must possess sufficient connectivity infrastructure to ensure that devices can be used during the school day. Smart Schools Investment Plans must demonstrate that:

- **sufficient infrastructure that meets the Federal Communications Commission's 100 Mbps per 1,000 students standard currently exists in the buildings where new devices will be deployed, or**
- **is a planned use of a portion of Smart Schools Bond Act funds, or**
- **is under development through another funding source.**

Smart Schools Bond Act funds used for technology infrastructure or classroom technology investments must increase the number of school buildings that meet or exceed the minimum speed standard of 100 Mbps per 1,000 students and staff within 12 months. This standard may be met on either a contracted 24/7 firm service or a "burstable" capability. If the standard is met under the burstable criteria, it must be:

1. Specifically codified in a service contract with a provider, and

2. Guaranteed to be available to all students and devices as needed, particularly during periods of high demand, such as computer-based testing (CBT) periods.

Please describe how your district already meets or is planning to meet this standard within 12 months of plan submission.

Currently, the District's broadband capacity is 400 Mbps, however we only are required to have 211.4 Mbps. Installing the proposed infrastructure will provide a more efficient use of our wireless platform. On a daily basis, the current use between students and staff spikes toward 100% several times a day. In a 42-minute class period, when a teacher and students are pressed for time, the technology infrastructure must be able to deliver expeditiously and consistently if we hope to move confidently to the cyber-platform.

The proposed expenditures above intend to double to amount of Wireless Access Points (WAPs). As we move to a wireless 1:1 device in grades 5-12,we will increase the amount of devices in use by 77 percent. Increased WAPs are critical to the success of this initiative. In addition, the District will consider the purchase of additional Internet lines from Cablevision, our provider, if they do not increase from 100 Mbps, or what each line currently offers.

Hampton Bays has taken an aggressive approach to building to scale our instructional technology program. In 2008, through a rebate with PSEG (then, the Long Island Power Authority), the district received a $300,000 rebate for its efforts in building the first energy-efficient, LEED-certified new school in New York State. The Board of Education decided to use that rebate to invest in SmartBoards for its middle school classrooms. It wasnot long before the elementary and high schools were outfitted, as well. Today, every classroom has a SmartBoard of SmartPanel television. The High School has a device ratio (desktop, Chromebook, iPad, tablet, laptop) of 2.3:1. The Middle School's ratio is 1.4:1 and in our Elementary School,the ratio is 2.6:1.

1a. If a district believes that it will be impossible to meet this standard within 12 months, it may apply for a waiver of this requirement, as described on the Smart Schools website. The waiver must be filed and approved by SED prior to submitting this survey.

☐ By checking this box, you are certifying that the school district has an approved waiver of this requirement on file with the New York State Education Department.

2. Connectivity Speed Calculator (Required)

	Number of Students	Multiply by 100 Kbps	Divide by 1000 to Convert to Required Speed in Mb	Current Speed in Mb	Expected Speed to be Attained Within 12 Months	Expected Date When Required Speed Will be Met
Calculated Speed	2,114	211,400	211.4	400	400	currently met

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3. Describe how you intend to use Smart Schools Bond Act funds for high-speed broadband and/or wireless connectivity projects in school buildings.

The initial SSIP submission (092916) called for a scaling of our instructional technology program by include new switches, wireless access points, and the necessary components to help support a wireless 1:1 device initiative in the HB schools.
This supplemental submission is for the installation of a Dell PowerEdge Server to act as virtual host for various virtual instructional servers. The district currently has two virtual hosts containing all the virtual servers used by the district. However, both are maxed out and cannot be expanded any further. This server will work in conjunction with the SAN described below to provide additional file, application and instructional virtual servers. Additionally, an EqualLogic storage area network will be installed. Currently, the district has two small SAN's containing all the data used by the district. However, we are out of storage space and the hard drive slots in these SAN's are full and cannot be expanded. This SAN will work in conjunction with the Virtual Host described above to provide additional file, application and instructional data storage with room for growth. Additionally, with this third SAN, we will be able to setup "clustering" which will provide High Availability (HA) in the event of a failure of any one SAN so that data is always accessible.

4. Describe the linkage between the district's District Instructional Technology Plan and the proposed projects. (There should be a link between your response to this question and your response to Question 1 in Part E. Curriculum and Instruction "What are the district's plans to use digital connectivity and technology to improve teaching and learning?)

The proposed projects intend to support a 1:1 device initiative that will enhance teaching and learning for Hampton Bays students with more on-going and fluid communication with teachers on the work product, on submitting assignments and staying organized, and in preparing students for college and career in a 21st century digital world.
Currently, the District's broadband capacity is 211.4 Mbps per 1,000 students. Installing this infrastructure, as listed above, will provide a more efficient use of a virtual platform. Currently, use spikes toward our 100% capacity several times a day. In a 42-minute class period, when a teacher and students are pressed for time, the technology infrastructure must be able to deliver expeditiously and consistently if we hope to move confidently to the cyber-platform. This includes actual storage capability and network operation speed.
As we move to a wireless 1:1 device in grades 5-12,we will increase the amount of devices in use by 77 percent, including what gets stored and accessed on our servers, both physical and virtual. In addition, our expectation of communication, both in the district and outside with partners, including parents, community members, NYSED, businesses, etc. has increased exponentially. Outages where we are unable to communicate not only hamper efficiency and production, but also increase anxiety and frustration with the school district.

5. If the district wishes to have students and staff access the Internet from wireless devices within the school building, or in close proximity to it, it must first ensure that it has a robust Wi-Fi network in place that has sufficient bandwidth to meet user demand.

Please describe how you have quantified this demand and how you plan to meet this demand.

Currently our middle and high schools each have 25 wireless access points each. They are located in the hallways with an approximate one WAP to 3 classroom ratio. As expressed in our first submission, general fund expenditures will increasre our DEVICE usage by 77 percent. Therefore, the SSIP projects will double our wireless connectivity, through the use of Wireless A/C, by placing a WAP in each classroom, giving each instructional space an "independent cloud-based platform" from which to work. This submission will give the district additional storage capacity to support this shift to a virtual learning environment.

6. As indicated on Page 5 of the guidance, the Office of Facilities Planning will have to conduct a preliminary review of all capital projects, including connectivity projects.
Please indicate on a separate row each project number given to you by the Office of Facilities Planning.

Project Number
58-09-05-02-7-999-BA1

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7. Certain high-tech security and connectivity infrastructure projects may be eligible for an expedited review process as determined by the Office of Facilities Planning.

Was your project deemed eligible for streamlined review?

Yes

7a. Districts that choose the Streamlined Review Process will be required to certify that they have reviewed all installations with their licensed architect or engineer of record and provide that person's name and license number. The licensed professional must review the products and proposed method of installation prior to implementation and review the work during and after completion in order to affirm that the work was code-compliant, if requested.

☑ I certify that I have reviewed all installations with a licensed architect or engineer of record.

8. Include the name and license number of the architect or engineer of record.

Name	License Number
Roger P. Smith	165141

9. If you are submitting an allocation for School Connectivity complete this table.
Note that the calculated Total at the bottom of the table must equal the Total allocation for this category that you entered in the SSIP Overview overall budget.

	Sub-Allocation
Network/Access Costs	41,997
Outside Plant Costs	0
School Internal Connections and Components	5,280
Professional Services	0
Testing	0
Other Upfront Costs	0
Other Costs	0
Totals:	**47,277**

10. Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category. This is especially important for any expenditures listed under the "Other" category. All expenditures must be eligible for tax-exempt financing to be reimbursed through the SSBA. Sufficient detail must be provided so that we can verify this is the case. If you have any questions, please contact us directly through smartschools@nysed.gov.
NOTE: Wireless Access Points should be included in this category, not under Classroom Educational Technology, except those that will be loaned/purchased for nonpublic schools.
Add rows under each sub-category for additional items, as needed.

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
Network/Access Costs	Dell PowerEdge Server w/ Dual XEON CPU, 192 GB Ram, 400 GB SS/SATA	1	8,542	8,542

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Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
	HD (R730)			
Network/Access Costs	EquaLogic SAN w/ 24 1.2 TB SAS 2.5	1	33,455	33,455
Connections/Components	Server & SAN installation, configuration and integration, 53 hours (I&C)	4	1,320	5,280

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1. Describe how you intend to use Smart Schools Bond Act funds to install high-tech security features in school buildings and on school campuses.

This intended project is for the installation of a redundant phone server to preserve communications during a power outage. This phone server will be installed in our high school and will handle approximately 80 Cisco IP phones in the HS and DO. It will also serve as a Cisco Survivable Remote Site Telephony server (SRST) in the event of a failure of our other Cisco phone server located in our middle school.

2. All plans and specifications for the erection, repair, enlargement or remodeling of school buildings in any public school district in the State must be reviewed and approved by the Commissioner. Districts that plan capital projects using their Smart Schools Bond Act funds will undergo a Preliminary Review Process by the Office of Facilities Planning.
Please indicate on a separate row each project number given to you by the Office of Facilities Planning.

Project Number
58-09-05-02-7-999-BA1

3. Was your project deemed eligible for streamlined Review?

☑ Yes
☐ No

3a. Districts with streamlined projects must certify that they have reviewed all installations with their licensed architect or engineer of record, and provide that person's name and license number. The licensed professional must review the products and proposed method of installation prior to implementation and review the work during and after completion in order to affirm that the work was code-compliant, if requested.

☑ By checking this box, you certify that the district has reviewed all installations with a licensed architect or engineer of record.

4. Include the name and license number of the architect or engineer of record.

Name	License Number
Roger P. Smith	165141

5. If you have made an allocation for High-Tech Security Features, complete this table.
Note that the calculated Total at the bottom of the table must equal the Total allocation for this category that you entered in the SSIP Overview overall budget.

	Sub-Allocation
Capital-Intensive Security Project (Standard Review)	(No Response)
Electronic Security System	1,798
Entry Control System	(No Response)
Approved Door Hardening Project	(No Response)
Other Costs	(No Response)
Totals:	**1,798**

6. Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category. This is especially important for any expenditures listed under the "Other" category. All expenditures must be capital-bond eligible to be reimbursed through the SSBA. If you have any questions, please contact us directly through smartschools@nysed.gov.
Add rows under each sub-category for additional items, as needed.

High-Tech Security Features

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Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
Electronic Security System	Cisco Business Edition 6000M Svr (BE6M-M4-K9), eRate discount also applied	1.00	1,054	1,054
Electronic Security System	sntc-8X5XNEO CISCO B.E. 6000 SVR (M4), E (CON-SNT-BE6M4M4K), eRate discount also applied	1.00	45	45
Electronic Security System	Cisco Phone Svr Install and Configuration (PS-SNY-ENC), eRate discount also applied	1.00	699	699