

## Smart Schools Investment Plan

## SSIP Overview

Page Last Modified: 06/14/2016

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

Marc Epstein

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

516-441-4088

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

mepstein@greatneck.k12.ny.us

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

First 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

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 occurred 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.

## Smart Schools Investment Plan

## SSIP Overview

Page Last Modified: 06/14/2016

- 5a. Please upload the proposed Smart Schools Investment Plan (SSIP) that was posted on the district's website. 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.

SmartSchoolsInvestmentPlan1-8-16.pdf

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.

8,000

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:

\$851,730

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	383,941
Connectivity Projects for Communities	0
Classroom Technology	294,420
Pre-Kindergarten Classrooms	0
Replace Transportable Classrooms	0
High-Tech Security Features	173,354
<b>Totals:</b>	851,715.00

## Smart Schools Investment Plan

## School Connectivity

Page Last Modified: 06/10/2016

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.

Our district is committed to meeting or exceeding the Federal Communications Commission (FCC) standard of 100 Mbps per 1,000 students as a future goal to be implemented when our district demand for bandwidth necessitates it. Our current district enrollment is 6,420 students so meeting the FCC standard would require us to increase our Internet bandwidth to 650 Mbps, or 325 Mbps using the oversubscription ratio for large districts. We have already taken proactive steps to move towards this standard on our own prior to the enactment of the Smart Schools Bond Act. Three years ago, we doubled our Internet bandwidth from 50 Mbps to 100 Mbps, and last year, we tripled our Internet bandwidth from 100 Mbps to 300 Mbps. Our current bandwidth utilization is still well below our current bandwidth level of 300 Mbps. We achieved our current bandwidth level by subscribing to the Nassau BOCES Bo-TIE network. This network gives us the ability to burst our bandwidth speed when needed beyond our current bandwidth level and beyond the FCC standard. Based on the Connectivity Speed Waiver Criteria and the Oversubscription Ratio for Large Districts, Nassau BOCES has assured us that we have sufficient infrastructure to support the larger bandwidth requirement -- when it becomes necessary and available. Our plan to meet or exceed the FCC standard when our bandwidth demand requires it will most likely not occur within a 12 month period, so we e-mailed the NYSED on 12/23/15 to indicate our intention to apply for the waiver mentioned below when the waiver becomes available. The response from NYSED is that our waiver request would be granted.

- 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	6,420	642,000	642	300	300	7/1/17

**Smart Schools Investment Plan**

## School Connectivity

Page Last Modified: 06/10/2016

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

We intend to use Smart Schools Bond Act funds to improve high-speed broadband and wireless connectivity in our buildings by replacing network switches in all of the wiring closets in our district which will provide increased bandwidth between buildings and between wiring closets in the form of 10 GB or 20 GB links and Power-Over-Ethernet functionality. We will also use Smart Schools Bond Act funds to replace the 802.11n wireless access points (WAPs) in our secondary schools with the newer 802.11ac standard for faster wireless network connectivity in all secondary classrooms. This will free up a portion of the existing WAPs currently in use in our secondary schools for relocation to our elementary schools to increase our classroom to wireless ratio from 2:1 (2 classrooms to 1 WAP) to 1:1 (1 WAP for each classroom) which will improve wireless density, coverage, and connectivity at the elementary school level. In order to accomplish this latter goal, we will also use Smart Schools Bond Act funds to wire the remaining elementary classrooms currently without a WAP with Cat. 5e cabling to enable them to accept the relocated WAPs from our secondary schools. These expenditures are E-Rate Eligible so we have included them in our Category 2 E-Rate application with an E-Rate Discount Percentage of 40%, and applied for the non-E-rate portion of the cost associated with these expenditures in our Smart Schools Investment Plan for the remaining 60%.

4. **Briefly 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?")**

Our Instructional Technology Plan and the high-speed broadband and wireless connectivity projects described above are inextricably intertwined. Both our wired and wireless networks facilitate access to network-based and online educational resources that are part of our curriculum and are used to enhance and support instruction throughout the district. Our Instructional Technology program, our technology standards, and access to online resources as stated in our Technology Plan, Question 1, Part E. Curriculum and Instruction, cannot be achieved in a district our size with the large number of computers, laptops and tablets we have without a modern and robust infrastructure. The upgrades included in the projects listed above will provide us with the infrastructure we need to implement our technology plan in order to enhance student achievement and support the Common Core Standards.

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.**

We certify that we already have a robust, district-wide wireless network in place in all of the schools in our district and plan future upgrades through the Smart Schools Bond Act and our own budget to improve performance and coverage in future years. We currently have Alcatel wireless access points and controllers that support the use of over 5,000 iPads with WiFi access. We have quantified the wireless demand based on class size and assuming maximum access of one device per student. Every secondary school classroom is wired for wireless and has its own Alcatel wireless access point which provides a density of coverage in all of our secondary schools that meets all of the current wireless needs of our district's secondary 1:1 initiative. At the elementary school level, one out of every two classrooms are similarly outfitted, so two classrooms are sharing the wireless bandwidth available from a single wireless access point. This is currently sufficient to meet our needs because elementary classrooms have much smaller class sizes than secondary classrooms. Money requested in our Smart Schools Bond Act Investment Plan will allow us to wire the remaining elementary classrooms sharing wireless bandwidth with a neighboring classroom, and then outfit those rooms with their own wireless access point as well. The wireless access points needed for these elementary classrooms will be redistributed from our secondary classrooms, where they will be freed up when we purchase newer and faster wireless access points for our secondary classrooms, which is also being requested in our Smart Schools Bond Act Investment Plan. Once this is done, all secondary classrooms will have received a wireless network upgrade and all elementary classrooms in the district will have a dedicated wireless access point.

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.**

## Smart Schools Investment Plan

## School Connectivity

Page Last Modified: 06/10/2016

Project Number
28-04-07-03-7-999-SB1
28-04-07-03-7-999-006

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?

No

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

Name	License Number
Roger A. Smith, A.I.A., of Burton, Behrendt and Smith (BBS)	16514

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	363,583
Outside Plant Costs	0
School Internal Connections and Components	17,168
Professional Services	2,590
Testing	600
Other Upfront Costs	0
Other Costs	0
<b>Totals:</b>	383,941.00

10. To the extent possible, please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category.

## Smart Schools Investment Plan

## School Connectivity

Page Last Modified: 06/10/2016

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
Professional Services	Elementary Wiring Project Management, Engineering and Documentation (Non-Erate Portion)	5	518	2,590
Connections/Components	Elementary Wiring 24000 Feet of Cat 5e Plenum Cable (Non-Erate Portion)	1	3,068	3,068
Connections/Components	Elementary Wiring Cat 5e RJ45 Insert and 1 Port Biscuit Enclosure (Non-Erate Portion)	100	4	400
Connections/Components	Elementary Wiring 48-Port Cat 5e Patch Panel Rack Mount (Non-Erate Portion)	5	150	750
Connections/Components	Elementary Wiring 7 Foot Green Cat 5e Patch Cords Booted (Non-Erate Portion)	200	1	200
Connections/Components	Elementary Wiring Miscellaneous Installation Hardware (Non-Erate Portion)	5	150	750
Testing	Elementary Wiring Labor to Certify Cat 5e Cabling (Non-Erate Portion)	100	6	600
Connections/Components	Elementary Wiring Labor for Cable and Patch Panel Installation and Termination (Non-Erate Portion)	100	120	12,000
Network/Access Costs	SFP-10G-LR 10 GB Single Mode Optical Transceivers (Non-Erate Portion)	50	342	17,100
Network/Access Costs	SFP-10G-LRM 10 GB Multi Mode Optical Transceivers (Non-Erate Portion)	70	179	12,537
Network/Access Costs	OS6450-P48 POE Network Switch (Non-Erate Portion)	56	1,297	72,643
Network/Access Costs	OS6860-P48 POE Network Switch (Non-Erate Portion)	53	2,128	112,796
Network/Access Costs	OAW-4650-US Wireless LAN Controller 4650 (Non-Erate Portion)	1	8,413	8,413
Network/Access Costs	OV-NM-EX-100-U OV2500 Network Management Software 100 Node Extension (Non-Erate Portion)	1	900	900
Network/Access Costs	AP205 Wireless Access Point 802.11ac (Non-Erate Portion)	440	229	100,914
Network/Access Costs	AP 205 Wireless Access Point Mounts	150	17	2,475

## Smart Schools Investment Plan

## School Connectivity

Page Last Modified: 06/10/2016

	(Non-Erate Portion)			
Network/Access Costs	OS6450-XNI-U2 10 GB Stacking Module (Non-Erate Portion)	56	138	7,728
Network/Access Costs	OS6450S-CBL-60 Stacking Cables (Non-Erate Portion)	46	41	1,904
Network/Access Costs	OS6450-SW-PERF Performance Software License (Non-Erate Portion)	34	469	15,953
Network/Access Costs	OS6900-X20-F 10GB Ethernet Chassis	1	3,510	3,510
Network/Access Costs	OS6900-BP-F Modular AC Backup Power Supply	1	233	233
Network/Access Costs	OS6450S-CBL-1M Stacking Cables (Non-Erate Portion)	14	41	580
Network/Access Costs	OS6860-CBL-100 Stacking Cables (Non-Erate Portion)	12	105	1,260
Network/Access Costs	OS6860-CBL-40 Stacking Cables (Non-Erate Portion)	46	82	3,767
Network/Access Costs	OV-NM-EX-50-U OV2500 Network Management Software 50 Node Extension (Non-Erate Portion)	1	600	600
Network/Access Costs	SFP-10G-C1M 10 Gigabit direct attached copper cable (Non-Erate Portion)	10	27	270

## Smart Schools Investment Plan

Community Connectivity (Broadband and Wireless)

Page Last Modified: 12/23/2015

1. Briefly describe how you intend to use Smart Schools Bond Act funds for high-speed broadband and/or wireless connectivity projects in the community.

(No Response)

2. Please describe how the proposed project(s) will promote student achievement and increase student and/or staff access to the Internet in a manner that enhances student learning and/or instruction outside of the school day and/or school building.

(No Response)

3. Community connectivity projects must comply with all the necessary local building codes and regulations (building and related permits are not required prior to plan submission).

☐ I certify that we will comply with all the necessary local building codes and regulations.

4. Please describe the physical location of the proposed investment.

(No Response)

5. Please provide the initial list of partners participating in the Community Connectivity Broadband Project, along with their Federal Tax Identification (Employer Identification) number.

Project Partners	Federal ID #
(No Response)	(No Response)

6. If you are submitting an allocation for Community 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	(No Response)
Outside Plant Costs	(No Response)
Tower Costs	(No Response)
Customer Premises Equipment	(No Response)
Professional Services	(No Response)
Testing	(No Response)
Other Upfront Costs	(No Response)
Other Costs	(No Response)
<b>Totals:</b>	

7. To the extent possible, please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category.

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
(No Response)	(No Response)	(No Response)	(No Response)	(No Response)



## Smart Schools Investment Plan

### Classroom Learning Technology

Page Last Modified: 06/14/2016

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.

Our district is committed to meeting or exceeding the Federal Communications Commission (FCC) standard of 100 Mbps per 1,000 students as a future goal to be implemented when our district demand for bandwidth necessitates it. Our current district enrollment is 6,420 students so meeting the FCC standard would require us to increase our Internet bandwidth to 650 Mbps, or 325 Mbps using the oversubscription ratio for large districts. We have already taken proactive steps to move towards this standard on our own prior to the enactment of the Smart Schools Bond Act. Three years ago, we doubled our Internet bandwidth from 50 Mbps to 100 Mbps, and last year, we tripled our Internet bandwidth from 100 Mbps to 300 Mbps. Our current bandwidth utilization is still well below our current bandwidth level of 300 Mbps. We achieved our current bandwidth level by subscribing to the Nassau BOCES Bo-TIE network. This network gives us the ability to burst our bandwidth speed when needed beyond our current bandwidth level and beyond the FCC standard. Based on the Connectivity Speed Waiver Criteria and the Oversubscription Ratio for Large Districts, Nassau BOCES has assured us that we have sufficient infrastructure to support the larger bandwidth requirement -- when it becomes necessary and available. Our plan to meet or exceed the FCC standard when our bandwidth demand requires it will most likely not occur within a 12 month period, so we e-mailed the NYSED on 12/23/15 to indicate our intention to apply for the waiver mentioned below when the waiver becomes available.

- 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	6,420	642,000	642	300	300	7/1/17

**Smart Schools Investment Plan**

## Classroom Learning Technology

Page Last Modified: 06/14/2016

3. **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.**

We certify that we already have a robust, district-wide wireless network in place in all of the schools in our district and plan future upgrades through the Smart Schools Bond Act and our own budget to improve performance and coverage in future years. We currently have Alcatel wireless access points and controllers that support the use of over 5,000 iPads with WiFi access. We have quantified the wireless demand based on class size and assuming maximum access of one device per student. Every secondary school classroom is wired for wireless and has its own Alcatel wireless access point which provides a density of coverage in all of our secondary schools that meets all of the current wireless needs of our district's secondary 1:1 initiative. At the elementary school level, one out of every two classrooms are similarly outfitted, so two classrooms are sharing the wireless bandwidth available from a single wireless access point. This is currently sufficient to meet our needs because elementary classrooms have much smaller class sizes than secondary classrooms. Money requested in our Smart Schools Bond Act Investment Plan will allow us to wire the remaining elementary classrooms sharing wireless bandwidth with a neighboring classroom, and then outfit those rooms with their own wireless access point as well. The wireless access points needed for these elementary classrooms will be redistributed from our secondary classrooms, where they will be freed up when we purchase newer and faster wireless access points for our secondary classrooms, which is also being requested in our Smart Schools Bond Act Investment Plan. Once this is done, all secondary classrooms will have received a wireless network upgrade and all elementary classrooms in the district will have a dedicated wireless access point.

4. **All New York State public school districts are required to complete and submit an 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 educational technology purchases 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 are certifying that the school district has an approved Instructional Technology Plan survey on file with the New York State Education Department.

5. **Describe the devices you intend to purchase and their compatibility with existing or planned platforms or systems. Specifically address the adequacy of each facility's electrical, HVAC and other infrastructure necessary to install and support the operation of the planned technology.**

Since we have already funded a secondary 1:1 iPad initiative within our budget, and have committed to an ongoing upgrade cycle using an overlapping lease model, we have decided to fund the replacement of older projectors and interactive whiteboards in classrooms with new interactive flat panel displays through our Smart Schools Bond Act Investment Plan. These classroom devices have a much longer replacement cycle and, in our view, lend themselves more to being funded through a one-shot funding mechanism such as this one. Since newer interactive flat panel displays represent the replacement of an older technology with a newer one, the existing infrastructure, equipment, software, systems, and most of the professional development, are already in place. Every classroom already has a computer connected to a projector and an existing interactive whiteboard. The computer has interactive whiteboard software installed on it which allows the older board or the newer flat panel to work in the same manner with similar functionality. Our staff has received professional development training on the existing equipment and software which applies to a large extent to the new equipment. Additional training will be made available through our building-based technology staff developers to showcase the enhancements and new features associated with interactive flat panel displays. These include a much brighter image, improved clarity, greater color accuracy, more robust interactive features including multi-touch capability and simultaneous writing, erasing, and object manipulation, greater technological longevity, and reduced ongoing maintenance and cost without the need to purchase and install replacement bulbs.

**Smart Schools Investment Plan**

## Classroom Learning Technology

Page Last Modified: 06/14/2016

6. Describe how the proposed technology purchases will:
- > enhance differentiated instruction;
  - > expand student learning inside and outside the classroom;
  - > benefit students with disabilities and English language learners; and
  - > contribute to the reduction of other learning gaps that have been identified within the district.

The expectation is that districts will place a priority on addressing the needs of students who struggle to succeed in a rigorous curriculum. Responses in this section should specifically address this concern and align with the district's Instructional Technology Plan (in particular Question 2 of E. Curriculum and Instruction: "Does the district's instructional technology plan address the needs of students with disabilities to ensure equitable access to instruction, materials and assessments?" and Question 3 of the same section: "Does the district's instructional technology plan address the provision of assistive technology specifically for students with disabilities to ensure access to and participation in the general curriculum?"

The Smart Schools Bond Act Investment Plan funding request for new interactive flat panel displays that will be replacing our existing projectors and interactive whiteboards in classrooms, will provide an improved ability to enhance differentiated instruction which will benefit teachers and students in those classrooms, especially those with disabilities or limited English language proficiency. The improved technology of the new equipment provides a clearer, brighter, and more colorful image which will enhance multimedia presentations, interactive demonstrations, and Web-based resources. The improved functionality of the new equipment allows for multi-touch capability and simultaneous functional operation of the equipment, whereas the current technology does not. Multiple students will be able to interact with the new equipment at the same time during lessons and activities, benefitting more students with kinesthetic and visual learning styles. Teachers will be able to more seamlessly provide instruction by having simultaneous access to display operation without having to put down the electronic pen in order to engage these functions as they do now. Existing computer and software programs will continue to operate with the new displays, leveraging our investments in hardware, software, and professional development. This is especially true of a companion program that allows up to four students in a 1:1 environment to display their work from their devices. This software allows students to share their knowledge and collaborate with their classmates and their teachers to learn from each other in a more modern, personal learning community environment.

7. Where appropriate, briefly describe how the proposed technology purchases will enhance ongoing communication with parents and other stakeholders and help the district facilitate technology-based regional partnerships, including distance learning and other efforts.

The focus of this particular technology is primarily targeted at classroom instruction and learning and does not, on its own, enhance parental communication. However, built-in functionality of the software used with interactive whiteboards and flat panels allows teachers to share presentations with students and parents at home, and we will continue to take advantage of this functionality. The district has already invested in distance learning equipment, software, and professional development, including videoconferencing equipment and Facetime/Skype software. These tools will integrate with the new flat panel displays allowing us to enhance and increase distance learning opportunities, whether they be for a student who is homebound or for students in class to collaborate with peers and experts beyond the school or take virtual field trips to museums and other agencies offering remote access experiences.

**Smart Schools Investment Plan**

## Classroom Learning Technology

Page Last Modified: 06/14/2016

8. **Describe the district's plan to provide professional development to ensure that administrators, teachers and staff can employ the technology purchased to enhance instruction successfully.**

**Note: This response should be aligned and expanded upon in accordance with your district's response to Question 1 of F. Professional Development of your Instructional Technology Plan: "Please provide a summary of professional development offered to teachers and staff, for the time period covered by this plan, to support technology to enhance teaching and learning. Please include topics, audience and method of delivery within your summary."**

Both formal and informal professional development are integral components of our technology plan and are part and parcel of our Smart Schools Bond Act Investment Plan. Our district has added staffing that is dedicated to professional development in each school. These technology staff developers are assigned to each school, work closely with all staff, and will provide training to teachers to support all technology purchased to enhance and support instruction. Teachers make appointments during preparation periods, lunch periods, or before or after school and receive individual training from these technology resource staff members. Teachers also receive training in the form of workshops offered through grade level, department, team and faculty meetings. Technology staff developers also push into classrooms and co-teach lessons with classroom teachers to model best practices. In addition, a robust after-school Technology Academy Staff Development Program offers inservice credit to teachers who take professional development courses that focus on technology integration strategies. These courses are taught by colleagues who are paid a fee to share their knowledge with their colleagues and are available for ongoing support. All of these training strategies will be employed to help teachers gain comfort with new technology, understand the new functionality, and apply it to classroom instruction in order to enhance and support teaching and learning in classrooms.

9. **Districts must contact the SUNY/CUNY teacher preparation program that supplies the largest number of the district's new teachers to request advice on innovative uses and best practices at the intersection of pedagogy and educational technology.**

☒ By checking this box, you certify that you have contacted the SUNY/CUNY teacher preparation program that supplies the largest number of your new teachers to request advice on these issues.

10. **A district whose Smart Schools Investment Plan proposes the purchase of technology devices and other hardware must account for nonpublic schools in the district.**

**Are there nonpublic schools within your school district?**

☒ Yes  
☐ No

- 10a. **Describe your plan to loan purchased hardware to nonpublic schools within your district. The plan should use your district's nonpublic per-student loan amount calculated below, within the framework of the guidance. Please enter the date by which nonpublic schools must request classroom technology items. Also, specify in your response the devices that the nonpublic schools have requested, as well as in the in the Budget and the Expenditure Table at the end of the page.**

There are five non-public schools with BEDS enrollment data listed within our district boundaries. Their total enrollment is 1,167 students. Our GNPS enrollment from 2014-15 BEDS data is 6,432. The combined public and non-public enrollment within our geographic boundary is 7,599. We plan to spend \$294,420 on classroom technology, our portion of which we will use to purchase new interactive flat panel displays. Dividing this number by the total enrollment yields a per student allocation of \$39. Multiplying this per student allocation by 1,167 non-public students yields \$45,513. Adding this amount to the \$248,907 we plan to spend on the interactive flat panel displays for our district equals the \$294,420 classroom technology allocation requested in this Smart Schools Bond Act Investment Plan. The non-public schools will be able to select the classroom technology that best meets their needs up to their per pupil allocation basis. As of this date, our non-publics have not decided on the classroom technology they wish to select. The non-public schools have been given a date of November 1 by which they must request the devices annually. We will purchase this technology for them after that date once those items receive NYSED approval, and loan them to their schools up to the \$45,513 total non-public allocation.

## Smart Schools Investment Plan

## Classroom Learning Technology

Page Last Modified: 06/14/2016

- 10b. A final Smart Schools Investment Plan cannot be approved until school authorities have adopted regulations specifying the date by which requests from nonpublic schools for the purchase and loan of Smart Schools Bond Act classroom technology must be received by the district.

☒ By checking this box, you certify that you have such a plan and associated regulations in place that have been made public.

11.

**Nonpublic Classroom Technology Loan Calculator**

The Smart Schools Bond Act provides that any Classroom Learning Technology purchases made using Smart Schools funds shall be lent, upon request, to nonpublic schools in the district. However, no school district shall be required to loan technology in amounts greater than the total obtained and spent on technology pursuant to the Smart Schools Bond Act and the value of such loan may not exceed the total of \$250 multiplied by the nonpublic school enrollment in the base year at the time of enactment.

See:

[http://www.p12.nysed.gov/mgtserv/smart\\_schools/docs/Smart\\_Schools\\_Bond\\_Act\\_Guidance\\_04.27.15\\_Final.pdf](http://www.p12.nysed.gov/mgtserv/smart_schools/docs/Smart_Schools_Bond_Act_Guidance_04.27.15_Final.pdf).

	1. Classroom Technology Sub-allocation	2. Public Enrollment (2014-15)	3. Nonpublic Enrollment (2014-15)	4. Sum of Public and Nonpublic Enrollment	5. Total Per Pupil Sub-allocation	6. Total Nonpublic Loan Amount
Calculated Nonpublic Loan Amount	294,420	6,432	1,167	7,599	39	45,513

12. To ensure the sustainability of technology purchases made with Smart Schools funds, districts must demonstrate a long-term plan to maintain and replace technology purchases supported by Smart Schools Bond Act funds. This sustainability plan shall demonstrate a district's capacity to support recurring costs of use that are ineligible for Smart Schools Bond Act funding such as device maintenance, technical support, Internet and wireless fees, maintenance of hotspots, staff professional development, building maintenance and the replacement of incidental items. Further, such a sustainability plan shall include a long-term plan for the replacement of purchased devices and equipment at the end of their useful life with other funding sources.

☒ By checking this box, you certify that the district has a sustainability plan as described above.

13. Districts must ensure that devices purchased with Smart Schools Bond funds will be distributed, prepared for use, maintained and supported appropriately. Districts must maintain detailed device inventories in accordance with generally accepted accounting principles.

☒ By checking this box, you certify that the district has a distribution and inventory management plan and system in place.

14.

If you are submitting an allocation for Classroom Learning Technology 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
Interactive Whiteboards	248,907
Computer Servers	(No Response)
Desktop Computers	(No Response)
Laptop Computers	(No Response)
Tablet Computers	(No Response)
Other Costs	45,513
<b>Totals:</b>	294,420.00

## Smart Schools Investment Plan

Classroom Learning Technology

Page Last Modified: 06/14/2016

15. To the extent possible, please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category.

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be Purchased	Quantity	Cost per Item	Total Cost
Interactive Whiteboards	Interactive Flat Panel Display	57	3,899	222,243
Interactive Whiteboards	Rail System and Wall Mount for Interactive Flat Panel	60	415	24,900
Interactive Whiteboards	HDMI Cable	63	28	1,764
Other Costs	Non-Public School Allocation To Be Determined	1	45,513	45,513

## Smart Schools Investment Plan

## Pre-Kindergarten Classrooms

Page Last Modified: 12/18/2015

1. Provide information regarding how and where the district is currently serving pre-kindergarten students and justify the need for additional space with enrollment projections over 3 years.

(No Response)

2. Describe the district's plan to construct, enhance or modernize education facilities to accommodate pre-kindergarten programs. Such plans must include:

- Specific descriptions of what the district intends to do to each space;
- An affirmation that pre-kindergarten classrooms will contain a minimum of 900 square feet per classroom;
- The number of classrooms involved;
- The approximate construction costs per classroom; and
- Confirmation that the space is district-owned or has a long-term lease that exceeds the probable useful life of the improvements.

(No Response)

3. Smart Schools Bond Act funds may only be used for capital construction costs. Describe the type and amount of additional funds that will be required to support ineligible ongoing costs (e.g. instruction, supplies) associated with any additional pre-kindergarten classrooms that the district plans to add.

(No Response)

4. 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.

Project Number

(No Response)

5. If you have made an allocation for Pre-Kindergarten Classrooms, 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
Construct Pre-K Classrooms	(No Response)
Enhance/Modernize Educational Facilities	(No Response)
Other Costs	(No Response)
<b>Totals:</b>	

6. To the extent possible, please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category.

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

## Smart Schools Investment Plan

## Replace Transportable Classrooms

Page Last Modified: 12/18/2015

1. Describe the district's plan to construct, enhance or modernize education facilities to provide high-quality instructional space by replacing transportable classrooms.

(No Response)

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.

Project Number

(No Response)

3. For large projects that seek to blend Smart Schools Bond Act dollars with other funds, please note that Smart Schools Bond Act funds can be allocated on a pro rata basis depending on the number of new classrooms built that directly replace transportable classroom units.

If a district seeks to blend Smart Schools Bond Act dollars with other funds describe below what other funds are being used and what portion of the money will be Smart Schools Bond Act funds.

(No Response)

4. If you have made an allocation for Replace Transportable Classrooms, 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
Construct New Instructional Space	(No Response)
Enhance/Modernize Existing Instructional Space	(No Response)
Other Costs	(No Response)
<b>Totals:</b>	

5. To the extent possible, please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category.

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
(No Response)	(No Response)	(No Response)	(No Response)	(No Response)



## Smart Schools Investment Plan

## High-Tech Security Features

Page Last Modified: 06/14/2016

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.

Our district already has a fully functional and fully implemented external video surveillance system covering all entrances, exits, playgrounds, and parking lots at all our school buildings. We have started to install internal video security cameras in public areas inside of our schools and have been able to fund such systems in our two middle schools and our PreK/Kindergarten Center. Smart Schools Bond Act funds will enable us to purchase and install the cabling and video cameras needed for internal video security in four additional schools in our district, our four elementary schools without such a system already in place. This will enable us to monitor hallways and stairwells inside of these schools live and go back in time to hold transgressors accountable for their behavior.

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.

Project Number
28-04-07-03-7-999-006

3. Was your project deemed eligible for streamlined Review?

☐ Yes  
☒ No

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

Name	License Number
Roger A. Smith, A.I.A. of Burton, Behrendt and Smith (BBS)	16514

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	173,354
Entry Control System	(No Response)
Approved Door Hardening Project	(No Response)
Other Costs	(No Response)
<b>Totals:</b>	173,354.00

6. To the extent possible, please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category.

**Smart Schools Investment Plan**

## High-Tech Security Features

Page Last Modified: 06/14/2016

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	AXIS-0761-001 AXIS P3225 Day/Night Fixed Dome Video Cameras	118	649	76,582
Electronic Security System	IPV-VS-VMS-SW-1 VMS Single Camera License	118	129	15,222
Electronic Security System	ATS-CMP4/5E-Gray Cat. 5e UTP 4-Pari Solid CMP Gray 1000 Foot Cable	25	220	5,500
Electronic Security System	Installation, Configuration and Integration	507	150	76,050

**Smart Schools Investment Plan**

Report

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