Smart Schools Investment Plan - 2016-17 Version (Original) - SSIP #1 FINAL

SSIP Overview

Institution ID
800000037281

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

Michael Informa

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

631-912-2030

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

minforna@commack.k12.ny.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.

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 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.

Preliminary SSIP 2016.pdf

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.commackschools.org/DistrictPolicies.aspx

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.

7,666

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:

$3,504,794

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	398,722
Connectivity Projects for Communities	0
Classroom Technology	1,202,536
Pre-Kindergarten Classrooms	0
Replace Transportable Classrooms	0
High-Tech Security Features	285,000
Totals:	**1,886,258**

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.

The District currently holds 400 mbps in its infrastructure. To meet this FCC requirement, the District has completed adding another 300 mbps to our network capacity. The District will contract with Optimum Lightpath for additional bandwidth.

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	6,666	6,666,000	666.6	700	700	(No Response)

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

This technology will enhance school connectivity with the investment in the purchase and installation of a new core router/switch and firewall at our primary data center. In order to provide a high level of performance to our students and staff we will create a secondary data center at the south end of the school district which will require a new firewall. We will seek to purchase and implement new wireless access points to increase the reach of our existing wireless system in certain schools. The district will also seek to upgrade switches in school buildings and computer labs. The district will also seek to provide connectivity to its Cedar Road school with the addition of a single mode fiber optic cable to our primary data center. This will provide voice, data, security camera and door access for Cedar road school.

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?)

In order to provide students with exemplary learning experiences as outlined in our District instructional technology plan, the District is utilizing Smart Schools funds to improve its infrastructure to support the capacity to engage students with instructional technology to the desired extent. The District is and continues to be moving to a daily use classroom notebook program and the investments in the infrastructure as outlined above are critical to its success.

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 currently have one WiFi access point per classroom at all secondary and intermediate schools. In the primary schools, every other classroom has a WiFi access point. These access points are high-speed 802.11n and upgrade-able to 802.11ac. The aforementioned second firewall with wireless control will help ensure the District meets this demand.

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
58-04-10-03-7-999-001
58-04-10-03-7-999-BA1

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
John Grillo	27360

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	189,066
Outside Plant Costs	55,000
School Internal Connections and Components	154,656
Professional Services	0
Testing	0
Other Upfront Costs	0
Other Costs	0

	Sub-Allocation
Totals:	**398,722**

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
Connections/Components	Firewall Implementation (price per hour for professional implementation services)	16	120	1,920
Connections/Components	Core Switch Implementation (price per hour for professional implementation services)	16	120	1,920
Outside Plant Costs	1) Install +/- 300' of conduit from school to serving pole on the north side of Cedar Rd 2) Place +/- 1200' of 24F ADSS Fiber Optic from building to existing splice point on Cedar Rd, 3 Poles West of Atlas Way, 3) Furnish and install all required inside-plant innerduct or EMT required to extend the POE to the MDF within the school, 4)Terminate 6-strands of Fiber optic cable in Ligthower-supplied fiber distribution panel, 5) Complete end-to-end splicing for 6-strands of fiber from 175 Cedar back to the Administration building	1	55,000	55,000
Network/Access Costs	Fortinet Fortigate 3000D Firewall	2	50,000	100,000
Connections/Components	Cat 6500 Sup 2T with 2x10GbE and 3x 1GbE with MSFC5 PFC4	1	15,540	15,540
Connections/Components	Catalyst 6800 16 Port 10GE with Integrated DFC4	1	14,152	14,152
Connections/Components	10Base-LR SFP Module, Enterprise Class	16	1,110	17,760
Network/Access Costs	Cisco Catalyst 3850 48 Port UPOE LAN Base	5	6,455	32,275
Network/Access Costs	Cisco Catalyst 3850 48 Port DATA LAN Base	1	5,039	5,039
Connections/Components	Cisco Catalyst 3850 2x 10GE Network	6	1,415	8,490

School Connectivity

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
	Module			
Connections/Components	1100W AC Config 1 power supply	6	1,054	6,324
Connections/Components	10GBase Active Optical SFP+cable, 3M	5	70	350
Connections/Components	WS=X4748-UPOE+E=	14	6,300	88,200
Network/Access Costs	Cisco Catalyst 3650-48 POE+	8	5,344	42,752
Network/Access Costs	Fortinet FortiAp 320C Wireless Access Point	15	600	9,000

Community Connectivity (Broadband and Wireless)

1. **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)
Totals:	**0**

7. **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.

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)

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.
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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.

The District currently holds 400 mbps in its infrastructure. To meet this FCC requirement, the District has completed adding another 300 mbps to our network capacity. The District will contract with Optimum Lightpath for additional bandwidth.

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.

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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	6,666	6,666,000	666.6	700	700	(No Response)

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 currently have one WiFi access point per classroom at all secondary and intermediate schools. In the primary schools, every other classroom has a WiFi access point. These access points are high-speed 802.11n and upgradeable to 802.11ac. The aforementioned redundant firewall with wireless control will help ensure the District meets this demand.

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.

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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.

First, the District will replace 130 mnemonics boards with interactive whiteboards. This equipment is severely out-of-date. Next, the District will purchase 1,533 mobile computers to support its district-wide implementation of Microsoft Office 365 for Education to enhance teaching and learning. It is our intention to place a classroom set of these devices in 50 classrooms at our High School with this initial Smart Schools Investment Plan. Further, 100 mobile device mounting systems will be purchased (2 per classroom) to provide for secure storage, easy access, and charging. Lastly, the District will be investing in AV equipment to bring its TV Production courses up-to-date with industry and college-level learning standards. Please note that non-public schools have been included and invited to be part of this process but have not responded, therefore, classroom technology for loan to non-public schools is to be determined.
Our process included the review of the Districts ability to provide adequate electrical supply to support an increase in devices with the Director of Facilities. It has been determined that the District can meet this demand.

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?"

Differentiated instruction includes using available tools, resources, and strategies to reach every student in the classroom. To this end, an investment in 130 interactive whiteboards will provide students with access to technology that can reach students where they are and, when used in meaningful ways, can engage students and make learning relevant to them. With interactive whiteboards, teachers can differentiate learning to reach different types of learners; audio, visual, kinesthetic, etc. Further, an investment in interactive whiteboards provides educators with a tool that promotes project-based learning. When students are engaged in authentic, problem-based learning activities, coupled with technology like interactive whiteboards, students are able to choose how they will demonstrate learning. For example, students can choose to engage in a public speaking presentation accompanied by an interactive slideshow or may create videos to demonstrate their understanding of a topic. Interactive whiteboards also provide teachers with a tool to provide students with engaging lessons.

The upgrading of the audio/visual equipment is essential to the District A/V program. The District prides itself on its ability to provide all students with varying levels of "access and opportunity" and cares to prepare students for what they want to do when they leave our schools. In Commack typically our students go to college. To this end, we have provided our students with TV journalism coursework and, over the past two years, have offered 1) College TV Studio Production and 2) Advanced College Studio Production recognizing that students may chose to pursue this path of coursework in college. Utilizing SMART Schools funds to upgrade this instructional technology allows the District to provide students with learning activities that familiarize them with equipment and tools they will use at the "next level" of learning. An example of this equipment is the LiveStream HD510 which will provide an enhanced opportunity for students to extend their learning of video production during school events. This live stream device will allow students to apply and demonstrate their AV learning at school athletic events and other extracurricular events as they will embrace the role of operater and producer for the entire community to benefit from. In addition, although only some students would utilize this equipment as part of the coursework, all students benefit from the products of the course.

The acquisition of the large number of mobile computers and classroom mounting systems supports the District's Microsoft Office 365 for Education initiative. We recognize that we need to prepare students with essential knowledge and skills for 21st century learning. These skills include 1) creativity and innovation, 2) communication and collaboration, 3) research and information fluency, 4) critical thinking, problem solving, and decision making, 5) digital citizenship, and 6) technology operations and concepts (ISTE Standards for Students). In order to reach all students, including special education and English Language Learners, and to provide opportunities for learning to continue outside the classroom walls as we design instruction to teach these skills, we are providing the Microsoft Office 365 for Education online suite to students and staff. Microsoft Office 365 for Education will provide for 1) anywhere, anytime access to the Microsoft tools, 2) the availability for students to download Office 365 applications for up to five (5) devices plus 1 TB of free, outsourced storage, 3) students can access and share schoolwork from anywhere with mobile apps that seamlessly sync to your devices at home and school, 4) teacher-designed authentic learning activities where students will acquire skills necessary for secondary and post-secondary education (college), and 5) teachers will be able to guide students through a lesson, see their progress, and keep them on track, all remotely.

The classroom technology purchased with Smart Schools funds will support students with disabilities and English Language Learners. For example, for both classifications of students, the interactive whiteboards provide visual, audio, and kinesthetic modalities for learning. Students with disabilities can benefit from instruction that adds additional visual and tactile input and interaction within lessons. Within whole group lessons teachers can create interactive lessons and games that allow for movement and the use multiple modalities of material to help students retain information. Additionally, smartboard software provides many different engaging games and review methods for teachers to pre-teach and re-teach material to students in smaller settings such as resource room and support labs. The interactive smartboards also allow for students to see modeling of many tools they are required to use (e.g., outlines, graphic organizers, graphs, charts, etc.) while ELLs can engage in vocabulary acquisition with visual and audio support using the whiteboard.

Our AV program is open to all students. The enhancements to our AV program support the AV program curriculum to which both students with disabilities and ELLs have access to. As an example, the use of the camcorder would allow any students to express their learning in any content area in a manner beyond a paper and pencil test. In this regard, students with disabilities and ELLs can demonstrate their learning through AV productions. The ability to have access to tools such as these provides students that cannot demonstrate their knowledge and understanding in traditional ways an

outlet and avenue to feel successful. Additionally this provides the parents, teachers and administration a better understanding of the students understanding of curriculum.
Lastly, the District's Office 365 initiative provides an abundance of benefits to students with disabilities and ELLs. For example, Office 365 includes Microsoft OneNote and within OneNote are learning tools specifically designed for instructional use with students with disabilities and ELLs. These learning tools that can enhance learning for students with disabilities includes Enhanced Dictation, a "focus mode" that helps students with ADD/ADHD to sustain their attention, immersive reading tools to improve comprehension, font spacing and short lines to improve reading speed by addressing "visual crowding," provides assistance with parts of speech to support writing goals, syllabification to improve word recognition, and includes a comprehension mode that is used to improve reading comprehension. Additionally, Office 365 allows students to manage all of their assignments in one virtual location. This is an important component for many students with special needs that struggle with executive functioning. They can log onto any computer and access their files without having to transport an external device where this material would traditionally been saved. Furthermore, these tools assist teachers in planning instruction to meet IEP goals or for providing second language acquisition skills for ELLs. In addition, Office 365 includes other tools, such as presentation, audio, visual/media, and other tools that support teachers in planning instruction to meet IEP goals or to provide second language acquisition skills for ELLs.

7. Where appropriate, 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 proposed technology purchases of the mobile computers and classroom mounting systems will support the District's Microsoft Office 365 for Education initiative and enhance communications with parents and other stakeholders. For example, the district will have the ability through the Microsoft Office 365 for Education application suite to develop "teacher websites" and to share important classroom documents with students and parents. The ability to do so provides students and parents with the opportunity to have anywhere, anytime access to their classroom materials and instructional documents. With the same technology, students can participate in distance-learning activities designed by the teacher. For example, having anywhere, anytime access allows teachers to design activities that allow student ot have flexibility and multiple modalities for completion. Students may elect to visit a museum, take pictures, upload the pictures to the Microsoft Office 365 for Education suite, and create interactive products that allow students to demonstrate learning. The suite can also act as videoconferencing equipment which can allow the classroom to connect with virtually anywhere in the world. Currently, the District has a single videoconferencing location in each building but the funding of this instructional technology through Smart Schools wil allow each classroom to have this ability.

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."

The Commack Public Schools has had a long-standing commitment to professional development for our staff. This commitment includes training our teachers on how to integrate technology into everyday lessons. Our Professional Development Plan includes goals for technology. Our Professional Council, Commack Teacher Center and Curriculum Council, Summer Learning Institutes, and District-sponsored events focus on technology needs of our teachers. The District has used the ISTE NETS Standards for Teachers when creating and preparing our in-service courses and professional development opportunities.

In order to continue to use technology to promote higher order thinking, the District has an active District Technology Committee, as well as sub-committees, that meet regularly to discuss all aspects of our technology and computer education program; including staff development. The committee includes administrators and teachers. Building-level Technology Committees meet monthly in the High School and Middle School. An Elementary Software Committee meets annually. Our professional-development program for technology is coordinated with our Professional Development Plan, our Professional Development Committee and our Commack Teacher Center Policy Board.

We offer a variety of learning opportunities for our staff to learn current and emerging technologies through a variety of activities that may include attendance at workshops, seminars, collegial circles, faculty meetings, professional periods, and participation in District-sponsored online staff development. Teachers are encouraged to participate in workshops, conferences, and seminars that address curriculum technology skills, assistive technology hardware and software, and the implementation of technology across the curriculum for the purposes of meeting the New York State Learning Standards. Courses are advertised via email and the Commack Teacher Center. The District is a member of the Western Suffolk BOCES Model Schools consortium. Model Schools' workshops as well as those by other organizations are disseminated. The Commack Teacher Center sponsors technology courses, workshops, and tutorials after school and on Saturdays throughout the school year.

Our elementary teachers have a professional period each morning that is used for professional development purposes related to the technology purchased using Smart Schools funds. This time will continue be set aside for demonstrations of technology use for different grade levels as applicable. Teacher leaders with a passion for technology often demonstrate best practices in technology in education for their colleagues. Elementary computer teaching assistants are also available to provide assistance with the technology purchased using Smart Schools funds. Teachers meet regularly to learn how to best use the interactive whiteboards, SMART Board technology, and to share best practices in their use.

At the secondary level teachers have a daily professional period during the school day. This time can be used for demonstrations, training, and assisting colleagues in using the technology purchased using Smart Schools funds. Each secondary building has a Lead Computer Teacher supports the teachers as they continue to use technology to enhance instruction. The High School has a computer TA and a computer aide to support the Lead Teacher. The Middle School has three computer TA's and a computer maintenance aide for this task as well. A third computer aide rotates between the two buildings.

Superintendent's Conference Days, faculty meetings, and department and grade-level meetings are frequently used for technology staff development throughout the school year. This setting is a common forum for sharing curriculum integration strategies for the technology purchased using Smart Schools funds. Many teachers also take advantage of outside workshops and courses sponsored by Western and Eastern Suffolk BOCES, SCOPE, and local colleges and universities. They also attend local, state, and national technology conferences and register for distance learning staff development opportunities such as online courses from various professional development organizations.

In alignment to our NYSED approved 2016 instructionally technology plan the District will offer professional development to support the Smart School initiative. For example, the mobile computers and the mounting systems will provide students with anywhere, anytime access to Office 365 tools. Teachers use these tools to teach 21st skills such as creativity, problem-solving, and collaboration. In our ITP, the District include "Microsoft Office 365 for Education" workshops, however, this is a broad term. These workshops are frequent and vary in scope. For example, the District has and will continue to offer PD such as "Intro to Office 365" where teachers learn the basic functions of the system in order to begin to plan instructional activities, "Integrating Office Mix into the Classroom" where students can produce videos to demonstrate their learning and teachers can create videos similar to the Khan Academy for the purpose of engaging in the 'flipped' model of learning, and with "Integrating OneNote into the Classroom" where teacher can learn how to create and structure an online notebook for students and to provide to students video and audio embedded into the notebook. Further, with OneNote and this PD, teachers can learn create assignments for students in OneNote, "collect" the assignments, and provide feedback digitally. As a last example, through the PD workshop the District offers title "Integrating Sway into the Classroom" teacher can learn how to create presentation using Microsoft Sway for students and parents to view on any mobile device. Instructionally, through Sway, students are provided with anywhere, anytime access to teacher made resources using Sway. Further, through this PD teachers learn how Sway can be used as a tool to communicate with parents.

In addition, our ITP states that "Smart Board" workshops will be provided. These workshops will support the Smart Schools project of implementing a

number of "interactive whiteboards." During these workshops, teachers learn how to use the interactive whiteboard to create instructional activities that engage students in learning. Further, teachers will learn how interactive whiteboards accommodate different styles of learning, use online resources for class instruction, engage students with "click and drag" activities, and use various forms of media. Not only will teachers learn these aspects of this technology, in turn, teachers can teach students to use the technology to demonstrate their learning through presentations and other means.

In addition, our AV teacher is invited by the District to attend various conferences, workshops, and other learning opportunities pertaining to this program. The technology purchased that will be used in this program is unique to the program and the teacher consistently and actively engages in learning to effectively teach with these technologies and to instruct students to learn with these activities. To provide an example, the teacher of this program learns about the use of this technology to enhance teaching and learning by participating in learning with Five Towns College and by learning industry best-practice by engaging in activities with professionals in the industry like REC Productions. In turn, all of the teachers learning is transferred to the students to enhance their teaching and learning.

Although the above explains specific topics for professional development relative to our 2016 approved ITP, the District recently updated this plan. In addition, we are offering professional development in the following areas to support our Smart Schools initiative:

Topic	Audience	Method of Delivery	NYSED PD Standard(s)	ISTE Standard(s)
Microsoft Office 365 for Education	K-12 Teachers	Workshops/Microsoft Teacher Academy/Microsoft Certified Educator	1A, 1C, 1E, 1G, 1H, 2C, 2D, 3A, 3B, 4A, 4B, 4C, 5B, 5C, 6A, 7C, 8A-D, 9A-G	1, 2, 3, 4, 5, 6
Infinite Campus	K-12	Workshops	1A, 1C, 1E, 1F, 1G, 1H, 2C, 2D, 3A, 3B, 4A, 4B, 4C, 5B, 5C, 6A-C, 7A, 7C, 8A-D, 9A-G	2, 3, 6
ManageBac (IB upload program)	9-12	Workshops	1A, 1C, 1E, 1G, 1H, 2C, 2D, 3A, 3B, 4A, 4B, 4C, 5B, 5C, 6A, 7C, 8A-D, 9A-G	2, 3, 6
Castle Learning	K-12	Workshops	1A, 1C, 1E, 1G, 1H, 2C, 2D, 3A, 3B, 4A, 4B, 4C, 5A-C, 6A, 7C, 8A-D, 9A-G	2, 3, 6
Smart Software	K-12	Workshops, Peer Observations	1A, 1C, 1E, 1G, 1H, 2C, 2D, 3A, 3B, 4A, 4B, 4C, 5B, 5C, 6A, 7C, 8A-D, 9A-G	1, 6
Various Web-Based Applications that are in compliance with the Parents Bill of Rights	K-12	Workshops	1A, 1C, 1E, 1F, 1G, 1H, 2C, 2D, 3A, 3B, 4A, 4B, 4C, 5A-C, 6A, 7C, 8A-D, 9A-G	1, 2, 4, 5, 6
Streaming Video (Silverlight, Youtube, etc.)	K-12	Workshops	1A, 1C, 1E, 1G, 1H, 2C, 2D, 3A, 3B, 4A, 4B, 4C, 5B, 5C, 6A, 7C, 8A-D, 9A-G	4 5, 6
APPLE TV / iPads	K-12	Workshops	1A, 1C, 1E, 1G, 1H, 2C, 2D, 3A, 3B, 4A, 4B, 4C, 5B, 5C, 6A, 7C, 8A-D, 9A-G	1, 2, 3, 4, 5, 6
Flipped Classroom	6-12	Workshops/Peer Observations/ PLC	1A, 1C, 1E, 1G, 1H, 2C, 2D, 3A, 3B, 4A, 4B, 4C, 5B, 5C, 6A, 7C, 8A-D, 9A-G	1, 2, 3, 4, 5, 6

Research-Based Methodologies in Technology Integration	K-12	Workshops/ PLC	1A, 1C, 1E, 1G, 1H, 2C, 2D, 3A, 3B, 4A, 4B, 4C, 5B, 5C, 6A, 7C, 8A-D, 9A-G	3,4,6
Cyber-Security (iSafe)	K-12	Workshops/Faculty/ Department Meetings	1A, 1C, 1E, 1G, 1H, 2C, 2D, 3A, 3B, 4A, 4B, 4C, 5B, 5C, 6A, 7C, 8A-D, 9A-G	5,6
Computer Coding / Computer Science	3-12	Workshops/ PLC	1A, 1C, 1E, 1G, 1H, 2C, 2D, 3A, 3B, 4A, 4B, 4C, 5B, 5C, 6A, 7C, 8A-D, 9A-G	1, 2, 3, 4, 5, 6
How to Use Online Textbooks to Support Instruction	K-12	Workshops/ PLC	1A, 1C, 1E, 1G, 1H, 2C, 2D, 3A, 3B, 4A, 4B, 4C, 5B, 5C, 6A, 7C, 8A-D, 9A-G	1, 2, 3, 4, 5, 6

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.

9a. Please enter the name of the SUNY or CUNY Institution that you contacted.

SUNY Stony Brook

9b. Enter the primary Institution phone number.

631-632-6000

9c. Enter the name of the contact person with whom you consulted and/or will be collaborating with on innovative uses of technology and best practices.

Marvin Glockner / Ken Lindblom

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.

The District has a Board of Education adopted Loan of Instructional Computer Hardware Policy to provide guidance in regard to the management of the loan of hardware equipment to nonpublic schools. The District has established June 1 as the date by which such requests for the loan of instructional computer hardware must be received by the School District.
The nonpublic schools within the District were provided multiple opportunities for input including, but not limited to, committee planning meetings, public hearing, and the ability to provide written comment as the draft was posted on the website. This plan provides for the loan of devices TBD to students in nonpublic schools upon request according to Board policy.

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.

	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	1,202,536	6,781	340	7,121	169	57,460

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	221,000
Computer Servers	(No Response)
Desktop Computers	(No Response)
Laptop Computers	823,221
Tablet Computers	(No Response)
Other Costs	158,315
Totals:	**1,202,536**

15. 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.
Please specify in the "Item to be Purchased" field which specific expenditures and items are planned to meet the district's nonpublic loan requirement, if applicable.
NOTE: Wireless Access Points that will be loaned/purchased for nonpublic schools should ONLY be included in this category, not under School Connectivity, where public school districts would list them.
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
Interactive Whiteboards	Interactive White Boards	130	1,700	221,000
Laptop Computers	HP Probook11 X360	1,533	537	823,221
Other Costs	Classroom Mobile Mounting System	100	750	75,000
Other Costs	LiveStream HD550 All-in-One video switcher	1	7,595	7,595
Other Costs	SONY Camcorder	3	4,000	12,000
Other Costs	Telmax Teleprompter	3	1,200	3,600
Other Costs	Magnus Tripods	3	220	660
Other Costs	Digital Video Mixer	1	2,000	2,000
Other Costs	Undecided nonpublic school allocation	340	169	57,460

Pre-Kindergarten Classrooms

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.**

Please indicate on a separate row each project number given to you 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)
Totals:	**0**

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.

Pre-Kindergarten Classrooms

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)

Replace Transportable Classrooms

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.

Please indicate on a separate row each project number given to you 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)
Totals:	**0**

5. 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.

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)

High-Tech Security Features

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.

Door Hardening Equipment
To be included is the installation of classroom security locks and patented keying systems throughout the District. This security feature provides greater security of classroom doors and other doors throughout the District.
The above will be used as security measures within the District.

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
58-04-10-03-7-999-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
John Grillo	27360

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	(No Response)
Entry Control System	(No Response)
Approved Door Hardening Project	285,000
Other Costs	(No Response)
Totals:	**285,000**

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

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
Approved Door Hardening Project	Classroom Lockdown Hardware (single unit)	750.00	380	285,000