

Smart Schools Investment Plan - Alexander SSIP

SSIP Overview

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Group 1

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

Matthew Perry

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

585-820-7290

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

mperry@alexandercsd.org

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.

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- 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.

Alexander Smart Schools Investment Plan.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.alexandercsd.org/files/_cTLIv_/da1a8b941de889c33745a49013852ec4/Alexander_Smart_Schools_Investment_Plan.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.

1,016

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:

\$961,925

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	261,073
Connectivity Projects for Communities	0
Classroom Technology	0
Pre-Kindergarten Classrooms	0
Replace Transportable Classrooms	0
High-Tech Security Features	0
Totals:	261,073

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School Connectivity

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Group 1

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 Alexander Central School district will meet the Federal Communication's 100 Mbps per 1,000 students standard by continuing our use of BOCES broadband access (which is currently 200 Mbps for the 835 students and 119 staff members we currently have in the district for the 2016-2017 school year.) Our SSIP will further boost our actual download/upload speeds by upgrading our district-wide infrastructure with new Cisco switches that will replace older 1Gbps switches with 10/100Mbps ports with 10Gbps switches which will have 1Gbps ports. By using Cisco the district will keep to its single vendor infrastructure design with its switches. The SSIP also will include the upgrade of our three 1Gbps fiber optic lines between the High/Middle school and Elementary to a 10Gbps pre-existing fiber optic line that will be newly terminated and connected to the new switches, leaving three 1Gbps fiber line as redundant lines. Finally the Alexander SSIP calls for the purchase of state-of-the-art 802.11ac compatibility wave 2 access points for our wireless network that can reach speeds of 1.9Gbps each. To make sure the wireless access can utilize as much bandwidth as possible, our SSIP calls for the installation of Cat 6a wiring to all the classrooms and offices that currently have Cat 5e wiring. The district will improve security and our broadband speed by throttling the guest wireless network's broadband from data intensive applications like video streaming. The guest wireless network can be throttled even more during online testing and other high broadband demands of the main student and staff network.

- 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	835	83,500	83.5	200	(No Response)	(No Response)

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

The Alexander SSIP will allow the district to boost its broadband speed through new Cat 6a wiring and new replacement switches in all of our switch closets. With these improvements and the new termination of existing fiber lines between the Middle/High School and the Elementary school, the district can improve its infrastructure to realize better up/down speeds on the network. Along with replacing older and slower switches, the new switches will provide the district with power over ethernet through the Cat 6a wiring so that we can add wireless access points to the district in all classrooms and key high traffic areas. The Funds from the Smart Schools Bond Act will allow us to provide complete wireless coverage in our district with state-of-the-art 802.11ac compatibility wireless access points. As of the beginning of the 2016-2017 school year the district only has about 10% coverage with its wireless network. This is not an adequate density of coverage for newer mobile technology. The funds will allow us to provide access of its bandwidth to more students and staff than we've ever been able to provide. The Wave 2 Access points that are capable of 1.9Gbps broadband speeds will allow the district to acquire more mobile equipment like Chromebooks and iPads. This will allow us to expand the amount of devices we have available for students far beyond the current stationary Windows desktops that can only be placed where there are Cat 5e wired outlets and provide the foundation for the district to provide a 1:1 ratio of student to technology device. The new wireless network will also allow us to provide a secure guest network for community access and for student BYOD (Bring your own device) access. This can be throttled to prevent loss of broadband speeds for student and staff use. The project laid out in the SSIP will allow better broadband communication between our switch closets and switches in the district by utilizing more of the existing fiber lines and upgrading old switches. The wiring of cat 6a will allow the realized broadband communication to be spread to the new wireless high speed access points that will provide coverage of the entire district. This reliable, well rounded approach will future proof the district for years to come, provide connections to technology that our teachers can rely on, and allow for more teachers to integrate technology into their classrooms.

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

The mission of the Alexander Instructional Technology Plan states that, "Our focuses are to incorporate technology into the regular curriculum, and provide the professional development that teachers need to use these tools with our students." Using the Smart Schools Act funding, we will keep with this mission statement. We have been providing professional development through pilots and training given to our teachers on Google Apps for Education which will work hand in hand with mobile devices like Google Chromebooks (which we are already utilizing on a small scale with great success.) The district's Technology Committee has monitored these pilots and professional development. Our Technology Plan has taken this into account, and with the help of our Technology Committee we have determined that in order to "incorporate technology into the regular curriculum," we need to expand our infrastructure through stronger broadband connections between our switches, classroom connections and by providing full wireless access to the district. The Technology Plan has set our path to move away from stationary desktop PCs in the classrooms and labs to providing a robust network that can provide wireless access throughout the district's classrooms and high traffic areas. With the guidance of our stakeholder Technology Committee, the district's Technology Plan has identified technologies like mobile devices as a way to get more devices in the hands of our students with the same yearly budget allocated to technology that we have had in the past. The Smart Schools Bond Act funds that we have identified for this investment plan will be used to build a foundation that allows us to tap into the resources we have identified in our district Technology Plan. The district has already expanded its use of online learning platforms. Our district Technology Plan identifies that our students live in a device-rich world where providing a strong infrastructure and wireless access throughout the district is essential to allow us to adopt BYOD (bring your own devices) and district owned mobile devices into daily instruction. The funds allocated in this Smart Schools Investment Plan will allow our teachers to use the flipped classroom model and other technology based teaching strategies that we can't utilize currently. The district Technology Plan also identifies gaps that need to be addressed in order to meet the challenges of moving the district forward in a technology-rich world. Those gaps include an infrastructure upgrade of switches, cabling, and full district wireless network implementation. Our Smart Schools Investment Plan addresses all of those gaps and will bring us into the future, as set forth in our district Technology Plan.

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School Connectivity

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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.

The district has been planning for a Wi-Fi network and its demands for 2 years. We have had multiple 3rd party vendors come to the district and make "heat" maps of how the Wi-Fi will cover our classrooms and high traffic areas like cafeterias, gymnasiums, and our district auditorium. We identified the company Meraki as our best fit for the district as it has tested successfully in our district. It is a Cisco product which fits in our single vendor model with our network switches. In the 2015-2016 school year the district implemented some of these wireless access points as pilots in classrooms. The district itself consists of an older High School building built in 1937, and Elementary building built in the 1960's and a Middle School building built in 2001. We have tested these wireless access points in all three buildings to see how the different wall materials found in each building would affect the Wi-Fi coverage. We utilized Wi-Fi analyzer applications and tested the same mobile equipment we will be using in these classrooms to make sure we planned out a complete map of where Wi-Fi access points will be placed to assure the best Wi-Fi coverage of classrooms and high traffic areas alike. We have worked closely with our Wi-Fi access point vendor to make sure we follow their recommendations for access point implementation. The district has additionally looked at best practices in private industries and surrounding public schools who have already implemented similar Wi-Fi environments. The Wi-Fi's network controller allows us to view traffic analytics, provides encryption on guest BYOD, and allows us to manage bandwidth so that we can ensure that our academic work in the district gets priority. We have worked closely with our local BOCES to make sure our Wi-Fi implementation plan is sound and meets their recommendations for a robust network.

The district's Technology Committee will meet routinely to discuss and monitor the Wi-Fi network traffic in the future and will reach out to our teachers and students for feedback as we have for the initial testing we have done to build this plan.

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
18-02-02-04-7-999-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
Gian-Paul Plane	25315

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.

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School Connectivity

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	Sub- Allocation
Network/Access Costs	139,009
Outside Plant Costs	0
School Internal Connections and Components	62,160
Professional Services	57,024
Testing	2,880
Other Upfront Costs	0
Other Costs	0
Totals:	261,073

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.

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School Connectivity

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Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
Network/Access Costs	Meraki MR42 Cloud Managed AP	88	703	61,864
Network/Access Costs	Meraki MR32 Cloud Managed AP	20	511	10,220
Connections/Components	1ft Cat6a Snagless Unshielded (UTP) Ethernet Network Patch Cable - Gray	107	12	1,284
Connections/Components	2ft Cat6a Snagless Unshielded (UTP) Ethernet Network Patch Cable - Gray	13	12	156
Connections/Components	5ft Cat6a Snagless Unshielded (UTP) Ethernet Network Patch Cable - Gray	85	14	1,190
Connections/Components	10ft Cat6a Snagless Unshielded (UTP) Ethernet Network Patch Cable - Gray	24	18	432
Connections/Components	Oberon 18	4	155	620
Connections/Components	Belden/CDT 23-4 UTP-CMP SOL BC CAT6A small-dia. nonbond. - blue - 10GXS reel	30	675	20,250
Connections/Components	Hubbell 1-port mod. juack 110 8W8P UTP T5689A/B CAT6A Ascent NEXTSPEED - blue 25-pk	10	225	2,250
Connections/Components	Hubbell 1-port surface-mt. box unloaded for UTP jack/AV key conn. - office white	88	2	176
Connections/Components	Hubbell 24-port panel unloaded for Xcelerator jacks/snap fit conn. - black 1U	6	59	354
Connections/Components	Hubbell cbl. assy. mod. 24-4pr stranded CAT6A T568A/B 5ft - blue NEXTSPEED	120	11	1,320
Connections/Components	Velcro tie 3/4 - black - 25yd roll ROHS	1	22	22
Connections/Components	Nelson non-sag caulk adhesive firestop sealant - 10.3 oz. tube	2	18	36
Connections/Components	B-Line 1-5/16	200	3	600
Connections/Components	Hubbell 2-port flush-mt. unloaded snl-gng. IFP series - office white	30	2	60
Connections/Components	Wiremold V700 metallic raceway 10' straight section - ivory	30	10	300
Connections/Components	Wiremold V711 metallic raceway 90-deg. flat elbow - ivory 10pk	3	14	42
Connections/Components	Wiremold V5745 metallic raceway V500/V700 sw./recept. box 1.75	25	6	150

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Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
Connections/Components	Wiremold 5507B blank faceplate - ivory	40	3	120
Connections/Components	Wiremold 5507FRJ flush dual-RJ non-metallic - ivory	40	3	120
Connections/Components	Wiremold V4050 metallic raceway V4000 plastic dev. mt. plate - ivory	40	10	400
Professional Services	Cabling installation and termination	1	57,024	57,024
Network/Access Costs	Catalyst 3850 48-port full PoE IP Base	2	7,980	15,960
Network/Access Costs	1100WAC Config 1 secondary power supply	2	855	1,710
Network/Access Costs	Catalyst 3850 48-port IP Base	1	6,555	6,555
Connections/Components	Catalyst 3850 4x10GE Network Module	3	2,280	6,840
Connections/Components	1m. Type 1 Stacking Cable	3	114	342
Connections/Components	10GBASE-LRM SFP module	3	567	1,701
Connections/Components	Mode Conditioning patch cable LC	3	285	855
Connections/Components	10GBASE-LR SFP module	1	2,277	2,277
Connections/Components	LC equip to SC MM OM1 62.5/125 mode conditioning patch cable 1m.	3	8	24
Connections/Components	1m. LC-LC 9/125 OS1 duplex SM PVC fiber optic cable - yellow	1	45	45
Connections/Components	1000BASE-SX SFP transceiver module, MMF, 850nm, DOM	2	285	570
Network/Access Costs	Catalyst 3750X/3850 Stack Power Cable 150cm.	3	111	333
Network/Access Costs	Catalyst 2960-X FlexStack Plus Stacking Module	1	681	681
Connections/Components	Cisco FlexStack 1m. stacking cable	1	57	57
Connections/Components	LC equip to SC MM OM1 62.5/125 mode conditioning patch cable 1m.	1	8	8
Network/Access Costs	Catalyst 2960-X 24-port GE PoE 370W 2x10G SFP+ LAN Base	1	2,619	2,619
Network/Access Costs	Redundant Power System 2300 and blower no P/S	1	684	684
Network/Access Costs	Catalyst RPS 2300 750WAC power supply	2	567	1,134
Connections/Components	RPS Cable for Catalyst 2960 PoE	2	86	172

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Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
	switch			
Connections/Components	Accessory Kit for RPS 2300	1	143	143
Connections/Components	10GBASE-LRM SFP module	1	567	567
Connections/Components	Mode Conditioning patch cable LC	1	285	285
Network/Access Costs	Catalyst 2960-X 24-port GE PoE 370W 2x10G SFP+ LAN Base	1	2,619	2,619
Network/Access Costs	Redundant Power System 2300 and blower no P/S	1	684	684
Network/Access Costs	Catalyst RPS 2300 750WAC power supply	2	567	1,134
Connections/Components	RPS Cable for Catalyst 2960 PoE switch	2	86	172
Connections/Components	Accessory Kit for RPS 2300	1	143	143
Connections/Components	10GBASE-LRM SFP module	1	567	567
Connections/Components	Mode Conditioning patch cable LC	1	285	285
Connections/Components	LC equip to SC MM OM1 62.5/125 mode conditioning patch cable 1m.	1	8	8
Network/Access Costs	Catalyst 2960-X FlexStack Plus Stacking Module	1	681	681
Connections/Components	Cisco FlexStack 1m. stacking cable	1	57	57
Network/Access Costs	Catalyst 2960-X FlexStack Plus Stacking Module	1	681	681
Connections/Components	Cisco FlexStack 1m. stacking cable	1	57	57
Connections/Components	LC equip to SC MM OM1 62.5/125 mode conditioning patch cable 1m.	1	8	8
Network/Access Costs	Catalyst 2960-X 24-port GE PoE 370W 2x10G SFP+ LAN Base	1	2,619	2,619
Network/Access Costs	Redundant Power System 2300 and blower no P/S	1	684	684
Network/Access Costs	Catalyst RPS 2300 750WAC power supply	2	567	1,134
Connections/Components	RPS Cable for Catalyst 2960 PoE switch	2	86	172
Connections/Components	Accessory Kit for RPS 2300	1	143	143
Connections/Components	10GBASE-LRM SFP module	1	567	567
Connections/Components	Mode Conditioning patch cable LC	1	285	285

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School Connectivity

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Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
Network/Access Costs	Catalyst 3750X 48-port full PoE IP Base	1	9,177	9,177
Network/Access Costs	Catalyst 3750X 48-port IP Base	1	7,524	7,524
Network/Access Costs	Catalyst 3K-X 1100WAC secondary power supply	2	855	1,710
Connections/Components	Catalyst 3K-X 10G Network Module	2	1,653	3,306
Connections/Components	10GBASE-LRM SFP module	1	567	567
Connections/Components	Mode Conditioning patch cable LC	1	285	285
Connections/Components	10GBASE-LR SFP module	1	2,277	2,277
Connections/Components	LC equip to SC MM OM1 62.5/125 mode conditioning patch cable 1m.	1	8	8
Connections/Components	1000BASE-SX SFP transceiver module, MMF, 850nm, DOM	2	285	570
Connections/Components	1m. LC-LC 9/125 OS1 duplex SM PVC fiber optic cable - yellow	1	45	45
Network/Access Costs	Catalyst 3750X/3850 Stack Power Cable 150cm.	2	111	222
Connections/Components	LC equip to SC MM OM1 62.5/125 mode conditioning patch cable 1m.	1	8	8
Connections/Components	Cisco Catalyst 3650 stack module kit	2	941	1,882
Connections/Components	1m. Type 2 Stacking Cable	2	114	228
Network/Access Costs	Catalyst 3650 24-port PoE 2x10G LAN Base	1	3,249	3,249
Network/Access Costs	Catalyst 3650 48-port 4x1G LAN Base	1	3,477	3,477
Network/Access Costs	1025W AC Config 2 power supply	2	827	1,654
Connections/Components	10GBASE-LRM SFP module	1	567	567
Connections/Components	Mode Conditioning patch cable LC	1	285	285
Connections/Components	Install Switch Instructional	10	50	500
Connections/Components	Install Access Points Instructional	108	50	5,400
Testing	Cabling Testing	1	2,880	2,880

Smart Schools Investment Plan - Alexander SSIP

Community Connectivity (Broadband and Wireless)

Group 1

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.

Smart Schools Investment Plan - Alexander SSIPCommunity Connectivity (Broadband and Wireless)

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 - Alexander SSIP

Classroom Learning Technology

Questions

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.

(No Response)

- 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	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)	(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.

(No Response)

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.

Smart Schools Investment Plan - Alexander SSIP

Classroom Learning Technology

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.

(No Response)

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?")

(No Response)

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.

(No Response)

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."

(No Response)

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.

(No Response)

- 9b. Enter the primary Institution phone number.

(No Response)

- 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.

(No Response)

Smart Schools Investment Plan - Alexander SSIP

Classroom Learning Technology

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

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	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

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	(No Response)
Computer Servers	(No Response)
Desktop Computers	(No Response)
Laptop Computers	(No Response)
Tablet Computers	(No Response)
Other Costs	(No Response)
Totals:	0

Smart Schools Investment Plan - Alexander SSIP

Classroom Learning Technology

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
(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

Smart Schools Investment Plan - Alexander SSIP

Pre-Kindergarten Classrooms

Group 1

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.

Smart Schools Investment Plan - Alexander SSIPPre-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)

Smart Schools Investment Plan - Alexander SSIP

Replace Transportable Classrooms

Group 1

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)

Smart Schools Investment Plan - Alexander SSIP

High-Tech Security Features

Group 1

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.

(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. 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
(No Response)	(No Response)

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	(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.

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 - Alexander SSIP

Report

Smart Schools Investment Plan - Alexander SSIP

PPU Report
