

Smart Schools Investment Plan - Revised - Alexander Display SSIP

SSIP Overview

Institution ID

800000034031

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.

5858207290

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 an approved Smart Schools Investment Plan.

Supplemental submission

3. All New York State public school districts are required to complete and submit a District Instructional Technology Plan survey to the New York State Education Department in compliance with Section 753 of the Education Law and per Part 100.12 of the Commissioner's Regulations. Districts that include investments in high-speed broadband or wireless connectivity and/or learning technology equipment or facilities as part of their Smart Schools Investment Plan must have a submitted and approved Instructional Technology Plan survey on file with the New York State Education Department.**By checking this box, you certify that the school district has an approved District Instructional Technology Plan survey on file with the New York State Education Department.**☒ District Educational Technology Plan Submitted to SED and Approved**4. Pursuant to the requirements of the Smart Schools Bond Act, the planning process must include consultation with parents, teachers, students, community members, other stakeholders and any nonpublic schools located in the district.****By checking the boxes below, you are certifying that you have engaged with those required stakeholders.**☒ Parents☒ Teachers☒ Students☒ Community members☐ The district was unable to meet with each group of stakeholders due to an emergency need as a result of the COVID-19 crisis.**5. Did your district contain nonpublic schools in 2014-15?**☐ Yes☐ Yes, but they have all since closed, moved out of district or are declining use of SSBA funds☒ No**6. Certify that the following required steps have taken place by checking the boxes below:**☒ 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 school board was unable to conduct a hearing that enabled stakeholders to respond to the preliminary plan due to an emergency need as a result of the COVID-19 crisis.☒ 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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- 6a. 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.

2020 Alexander Central School Smart Schools Investment Plan.pdf

- 6b. 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.

<https://4.files.edl.io/ce93/06/01/20/142430-4d30d931-0869-4045-b123-2d171f447fb0.pdf>

7. 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.

997

8. 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.

9. 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)

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

(No Response)

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

\$961,925

12. Final 2014-15 BEDS Enrollment to calculate Nonpublic Sharing Requirement

	Public Enrollment	Nonpublic Enrollment	Total Enrollment	Nonpublic Percentage
Enrollment	847	0	847.00	0.00

13. This table compares each category budget total, as entered in that category's page, to the total expenditures listed in the category's expenditure table. Any discrepancies between the two must be resolved before submission.

	Sub-Allocations	Expenditure Totals	Difference
School Connectivity	37,650.00	37,650.00	0.00
Connectivity Projects for Communities	0.00	0.00	0.00
Classroom Technology	462,272.92	462,272.92	-0.00
Pre-Kindergarten Classrooms	0.00	0.00	0.00
Replace Transportable Classrooms	0.00	0.00	0.00
High-Tech Security Features	0.00	0.00	0.00
Nonpublic Loan	0.00	0.00	0.00
Totals:			

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	Sub-Allocations	Expenditure Totals	Difference
	499,923	499,923	-0

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School Connectivity

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 districts Internet bandwidth has far exceeded the minimum speed standard of 100 Mbps per 1,000 students and staff. Our local BOCES RIC provides us with the Internet bandwidth in the district. Our contract with our Wayne Finger Lakes BOCES RIC provides us with 600 MB of bandwidth speed standard.

- 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).** If the district currently meets the required speed, enter "Currently Met" in the last box: Expected Date When Required Speed Will be Met.

	Number of Students	Required Speed in Mbps	Current Speed in Mbps	Expected Speed to be Attained Within 12 Months	Expected Date When Required Speed Will be Met
Calculated Speed	847	84.70	600	600	currently met

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

The district has already use our Smart Schools Bond Act funds for high-speed broadband and wireless connectivity in our first Smart Schools Bond plan. This gave the district new switches to both increase our bandwidth and to provide Power Over Ethernet connections. That previous projects saw the installation of Category 6a cabling to each classroom and the installation of Meraki Wireless access points to provide full district WiFi access. This current project will require the services of Wayne Finger Lakes BOCES to help the district wall mount it's 81 Interactive displays it is looking to purchase for the Smart School plan. This Smart Bond Project requires that we replace the older SMART Boards in the classrooms and in their place hang and mount the new Promethean ActivPanel Titanium 75" 4K TFT LCD Interactive Displays. A project like this would utilize too much time for our Alexander Maintenance and IT department to do in house. The BOCES Facility Services department of Wayne - Finger Lakes Board of Cooperative Educational Services worked with the Alexander Central School District on its first Smart Bond Project in the 2018 School Year. They installed / terminated the Cat 6a Wired connections and installed the Wireless Access Points in each room throughout the district. They did this work on the first SMART Bond project after hours so as to not interfere with the normal instruction day. The work was done quickly and professionally. All the work they did on our first Smart Bond project has held up and worked properly. Being a part of BOCES, this department has a lot of experience working in our district and our neighbouring districts. The Alexander Technology Committee knew from the beginning planning stages of this project that we would need a team to install these Interactive displays. We did speak to our various vendors about 3rd party teams who could come into our district and looked over their proposals. With our previous experience with the work that BOCES Facility Services has done in our district we were excited to hear that this was a project they could also do for our Smart Bond Project. The BOCES Facility Services team came to the district and did a room by room walk through to gauge the scope of the project and most importantly evaluate the surfaces these Interactive Displays would mount to. Safety of the Students and faculty is the district's number one concern in any project. With the help for the BOCES Facility Services team we identified 2 mounting locations that will need an additional floor mounted bracket for the locations that are not structurally strong enough for the weight of the Interactive Display that will be installed in that location. They will both provide and install these additional wall mounts as part of their quote to the district. The BOCES Facility services team provided the Alexander School District with a plan and quote that best fits our needs for this Smart Bond project. The plan will safely mount these Interactive Displays which each weigh 132lbs with the proper mounting and bracing in each location to assure the safety of our students and faculty. They will also work after hours so as to not disturb our normal day of instruction. Through discussion with the BOCES team we decided that the district will mount the 4 Interactive Displays that will go on the Promethean APTMS-3 - stands. The district will also wall mount 2 Interactive displays to locations that will not need extra bracing, but will replace an existing older Interactive Display. Below is the proposal for this Smart Bond Project given to us by the BOCES Facility Services team.

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4. **Describe the linkage between the district's District Instructional Technology Plan and how the proposed projects will improve teaching and learning. (There should be a link between your response to this question and your responses to Question 1 in Section IV - NYSED Initiatives Alignment: "Explain how the district use of instructional technology will serve as a part of a comprehensive and sustained effort to support rigorous academic standards attainment and performance improvement for students.")**

Your answer should also align with your answers to the questions in Section II - Strategic Technology Planning and the associated Action Steps in Section III - Action Plan.)

Our second goal listed in the district's 3 year technology plan lays out our plans to go 1:1 with Chromebook devices and students. The goal states that a Chromebook for each student would open more possibilities for our teachers and students. After the installation of full district WiFi in the 2017-2018 Smart Bond plan, these mobile devices can be used anywhere in the district. With digital textbooks, web resources, and other digital curricula available to our learners and teachers, the Chromebook is both a great 21st-century resource and can save on costs in other areas. Mobile devices like Chromebooks eliminate the need for the districts stationary Windows labs which require furniture, a classroom space, and non-mobile Windows workstations that cost nearly 3 times as much as a Chromebook. Alexander uses G-Suite accounts for all staff and all students from the 2nd grade to 12th which the Chromebook takes advantage of giving each user cloud storage and a set of applications they can access in or out of district. The work of our first Smart Schools Project was to build a strong network foundation that would provide WiFi access in every classroom and learning space in the district, as well as the bandwidth to allow all students to utilize this resource no matter where they are located in the district or whether the classroom is at full capacity or not. The work of our previous 3 year technology plan and the Smart schools project has paved the way for the work we will be doing in this Smart Schools plan. It's because the district's technology committee has identified Chromebooks and reaching a 1:1 ratio with students to devices as a goal for this 3-year technology plan that we have done the preparation work to make this a reality. The additional factor of school closures due to the pandemic in 2020 has made the need for being 1:1 all the more important. The district was not 1:1 before or during the 2020 school closure, but the work done by the technology committee and the IT department in preparation for this Smart Schools plan allowed us to have multiple technology distributions to families to make sure that each household had a device if it was needed. These devices we sent home already had the internet filtering software and remote management that the district knew it would need to send home 1:1 devices. Our previous 1:1 take home pilot gave us the experience we needed to anticipate the issues that could come up with having school managed equipment used outside the district. In March of 2020 when the school closures first happened the district also purchased the Verizon Jetpacks needed to provide our families with the Internet they needed if cost or location prevented them from having a strong internet connection needed to do schoolwork from a district provided device at home. The district's technology committee and it's IT department has done the required work to make sure that we are ready in the district for 1:1 devices and that we are ready to offer the appropriate support for the same devices in the home environment.

Smart Schools Investment Plan - Revised - Alexander Display SSIP**School Connectivity**

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 Alexander Central School District currently has the robust Wi-Fi network in place with the sufficient bandwidth to support the devices we already own in the district and the 334 Chromebooks we are requesting to purchase in this Smart Schools plan. The first Smart Schools project that was approved and finished from 2017-2018 was the preliminary work needed to make sure that our district was ready to have a 1:1 environment for all students and devices in every grade level as well as staff and administrative devices.

Our infrastructure upgrade included Power over Ethernet switches that provide 1 gigabit connections via Category 6a wiring to each Access Point in the district. Our first Smart Schools project saw the installation of seven brand new Cisco power over Ethernet switches as well as 4 new Cisco Ethernet switches in our main server closet and all the edge closets in the district. This provided both the bandwidth and power requirements needed by the access points installed throughout the district.

The first Smart Schools project also saw the purchase of 101 Meraki MR52 Cloud Managed Access Points to join the 12 MR42 and MR34 Meraki Access Points purchased with district funds. The district currently has 113 Access Points which provide full district coverage to every classroom, library, auditorium, gymnasium, and other learning spaces in the district. Each one of these Access points can accommodate 60 connections with smart connection sharing to unload device connections to another underused access point in range. The 802.11ac Wave 2 access points provide up to 2.5 Gbps of bandwidth speed. Along with the 600 Mbps of high-speed broadband coming in to the district we have more than enough bandwidth to handle the devices we own, the devices we are requesting in this Smart Schools project, and for future growth.

In preparation for this Smart Schools project and going 1:1 with devices the district also made sure that its edge closets fiber connections were cleaned and paired with 10 gigabit connections to the new switches we had purchased in our previous Smart Schools project. Also, to make sure we had a strong connection to each access point in the district we had Category 6a wiring installed between each switch and access point to make sure there would be no bandwidth speed bottlenecks in all our connections. This Category 6a wiring installation and Fiber optic connection cleaning and termination was done by the Facility Services department of Wayne - Finger Lakes Board of Cooperative Educational Services (WFL BOCES) which is the same team we are utilizing in this Smart Schools project to wall mount and install the 81 75" Display Units we are installing in all the district classrooms.

6. **Smart Schools plans with any expenditures in the School Connectivity category require a project number from the Office of Facilities Planning. Districts must submit an SSBA LOI and receive project numbers prior to submitting the SSIP. As indicated on the LOI, some projects may be eligible for a streamlined review and will not require a building permit.**

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-BA2

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.**

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School Connectivity

Name	License Number
Gian-Paul Plane	25315

9. Public Expenditures – Loanable (Counts toward the nonpublic loan calculation)

Select the allowable expenditure type. Repeat to add another item under each type.	PUBLIC Items to be Purchased	Quantity	Cost Per Item	Total Cost
(No Response)	(No Response)	(No Response)	(No Response)	0.00
		0	0.00	0

10. Public Expenditures – Non-Loanable (Does not count toward nonpublic loan calculation)

Select the allowable expenditure type. Repeat to add another item under each type.	PUBLIC Items to be purchased	Quantity	Cost per Item	Total Cost
Connections/Components	BOCES Facility Services - Installation of Promethean ActivPanel Displays in Classrooms.	1	37,650.00	37,650.00
		1	37,650.00	37,650

11. Final 2014-15 BEDS Enrollment to calculate Nonpublic Sharing Requirement (no changes allowed.)

	Public Enrollment	Nonpublic Enrollment	Total Enrollment	Nonpublic Percentage
Enrollment	847	0	847.00	0.00

12. Total Public Budget - Loanable (Counts toward the nonpublic loan calculation)

	Public Allocations	Estimated Nonpublic Loan Amount	Estimated Total Sub-Allocations
Network/Access Costs	(No Response)	0.00	0.00
School Internal Connections and Components	(No Response)	0.00	0.00
Other	(No Response)	0.00	0.00
Totals:	0.00	0	0

13. Total Public Budget – Non-Loanable (Does not count toward the nonpublic loan calculation)

	Sub-Allocation
Network/Access Costs	(No Response)
Outside Plant Costs	(No Response)
School Internal Connections and Components	37,650.00
Professional Services	(No Response)
Testing	(No Response)
Other Upfront Costs	(No Response)

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School Connectivity

	Sub- Allocation
Other Costs	(No Response)
Totals:	37,650.00

14. School Connectivity Totals

	Total Sub-Allocations
Total Loanable Items	0.00
Total Non-loanable Items	37,650.00
Totals:	37,650

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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. Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category.

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
(No Response)	(No Response)	(No Response)	(No Response)	0.00
		0	0.00	0

7. 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:	0.00

Smart Schools Investment Plan - Revised - Alexander Display SSIP

Classroom Learning Technology

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 districts Internet bandwidth has far exceeded the minimum speed standard of 100 Mbps per 1,000 students and staff. Our local BOCES RIC provides us with the Internet bandwidth in the district. Our contract with our Wayne Finger Lakes BOCES RIC provides us with 600 MB of bandwidth speed standard.

- 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).** If the district currently meets the required speed, enter "Currently Met" in the last box: Expected Date When Required Speed Will be Met.

	Number of Students	Required Speed in Mbps	Current Speed in Mbps	Expected Speed to be Attained Within 12 Months	Expected Date When Required Speed Will be Met
Calculated Speed	847	84.70	600	600	currently met

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.

The Alexander School District addressed this concern with it's first Smart Bond plan two years ago. Our first Smart Bond project saw an infrastructure upgrade to the district that included:

- 113 Meraki 4-stream 802.11ac Access Points with up to 2.5 Gbps for complete district coverage
- New Power Over Ethernet switches in all the switch and edge closets with 10 Gbs connections to provide bandwidth and power to Access Points
- Cat 6a wiring to each Access Point to support data rates of 10G

Planning for the Chromebooks we would be purchasing with this current Smart Bond proposal and other equipment purchased with our regular budget we assured that our first Smart Bond project would install the infrastructure needed to make sure we could easily accommodate 1:1 devices for all out students and the other devices used by staff. The Meraki MR52 Access points currently installed in the district provide full district coverage of 802.11ac WiFi access. Each MR52 Access Point can accept up to 60 connections with smart balance loading controls to hand off connections to other Access Points. With room to room coverage of the district these access points have more capacity then even having 1:1 devices in the district will demand.

Smart Schools Investment Plan - Revised - Alexander Display SSIPClassroom Learning Technology

4. **All New York State public school districts are required to complete and submit an Instructional Technology Plan survey to the New York State Education Department in compliance with Section 753 of the Education Law and per Part 100.12 of the Commissioner's Regulations.**

Districts that include educational technology purchases as part of their Smart Schools Investment Plan must have a submitted and approved Instructional Technology Plan survey on file with the New York State Education Department.

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

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

The district plans on replacing it's old SMART Boards with Promethean ActivPanel 75" displays. These displays will need the same power outlet access as the current SMART boards as the SMART boards have an Epson projector to shine the display on to the board. The Promethean will need one power outlet connection like the Epson needed one power outlet connection. The Promethean Interactive Display will require a video connection and a USB connection to interact with the board. These are the same connections that the current SMART Board in each classroom require. The district plans to install the Promethean Interactive displays in the same location as the current SMART board in each of the classrooms. We are purchasing 4 Promethean stands in this SMART Bond project as well because we have 4 district rooms where wall mounting the Promethean display would not be ideal. This is the same situation as the SMART Boards in the building currently and the 4 stands will replace 4 SMART boards on stands that are currently in the district.

The district will be working with BOCES Facility Services in the installation of Promethean ActivPanel Displays in Classrooms. These are the same BOCES serices who worked with the district in the installation of it's Cat 6a wiring and Access Point installation from our fist Smart Bond project.

They have already done a complete survey of the 81 rooms the Promethean ActivPanel 75" displays will be installed in to make sure that each wall where the display will be mounted too is safe for this type of installation. Their quote includes 2 bracket installs to reinforce the strength of those walls for wall mounting.

With the purchase of these displays we are also purchasing an add-on module called the Promethean ActivConnect OPS-G. These add-on modules insert into the back of the displays and do not require their own power source, are a negligible addition of weight, and will access the district network using WiFi and will not require additional wiring.

The HP EliteDisplay monitors being purchased in this Smart Bond project are a one for one replacement of an older 4:3 format monitor that already seerves as the primary teacher workstation monitor in each classroom. The new displays will use the same power outlet as the monitor they are replacing. Like the monitor they are replacing the new HP monitors will need a video cable, and audio cable. The new monitors will be installed on the teacher's workstation desk like the current monitors.

The final purchases are for Chromebooks to allow the district to go 1:1 with our student body. The Chromebooks that are going home with students will be sent home with a charger and it is expected that Chromebooks will be charged at home for school use the next day. Chromebooks that are to stay in district will be housed and charged in the Chromebook charging carts that the district already owns. The district already has Charging carts that will not be needed when the Chromebooks start to go home with students. These carts will be moved to grade levels that plan to keep their Chromebooks in district providing plenty of Charging and storage capacity. These carts areon wheels and can easily be moved around the schools as needed.

Smart Schools Investment Plan - Revised - Alexander Display SSIP**Classroom Learning Technology**

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?")

In addition, describe how the district ensures equitable access to instruction, materials and assessments and participation in the general curriculum for both SWD and English Language Learners/Multilingual Learners (ELL/MLL) students.

The district's newest Smart Bond proposal focuses heavily on student learning with its Chromebook purchase. The addition of 334 Chromebooks will allow the district to be 1:1 with all students from Kindergarten to 12th grade. The Pre-k will also benefit from additional resources freed up from the 1st grade as those students will become 1:1 with Chromebooks and will not need their iPads after this Smart Bond. Having each student have access to a Chromebook and the Google account access with its collaboration tools will be a big advancement for our teachers. Our teachers have had access to Google accounts since 2011 and have used Chromebooks with students for the last 4 years. Our teachers know how to use these tools with students, but this will be the first time our teachers can rely on having each student have access to a Chromebook for all of their instruction. Being 1:1 in our schools will directly address differentiated instruction for our teachers. Using the collaborative tools in the Google suite of apps alone will allow teachers to implement flexible grouping of students with common needs. Teachers can form small groups with students who are in similar understanding areas of the curriculum, share common interests, or have complementary skills as examples. The technology will help teachers to be flexible with group forming depending on the needs of the students at that time. The classroom Interactive display can also be used by a group while another uses their Chromebooks on another learning opportunity. Differentiated instruction also requires the teacher to identify instructional resources that target the needs of each group or individual student making sure their instruction is effective. Having these devices opens a teacher to more instructional resources than have traditionally been available in the classroom. The technology can also free some of the burden on the teacher and give them more time to identify the individual needs of their students. Giving each student their own access to a Chromebook will also allow the teacher to use computer-based formative assessments to give the teacher more up to date information on their students and allowing them to easily adapt to those student needs.

Being 1:1 will expand our student learning outside of the district as well as within. I already discussed how this benefits differentiated instruction within the district, and the same will hold true outside of the district as this will be the first time we send home any technology with students. Those same groups formed to best help each student in the group can work together outside of the district. Each student will have more access to resources than could have traditionally been sent home in paper form or in a textbook. Importantly each student will have the same level of access by having the same Chromebook as the other students in their class. With the school closure that occurred on March 16th from the COVID19 pandemic we have already been providing families with Verizon Jetpack internet access if they do not have it currently at home. We have also had Chromebook distributions to provide each family with a Chromebook or in the case of 1st and Kindergarten students an iPad. This Smart Bond project will allow us to provide each student with their own device so that each student will have common access.

The district already invests in resources for our students with special needs, like "Read&Write for Chrome" that allows web resources to be read to the students who have issues with reading the content on their own. We also provide equipment to students whose IEPs require it. Being 1:1 with Chromebooks will allow us to greatly expand on tools and resources like this. Having a common device with all our students will allow the school to provide the same resources to all students while also being able to adapt to specific needs and provide whatever is needed for those students. This will be the first time our students with disabilities will be able to take their device home allowing the tools teachers successfully use in school to follow the student for their work outside of the district. During the school closure of 2020 this has included video meetings and even teletherapy which would be more effective if each student had the same device so one set of instructions work between the teacher and the student instead of different devices that have different onboard hardware. English as a second language students will benefit from the language changing tools that only web based equipment can provide. Resources including our school website, our Google suite of tools, and most of the other online resources we use can easily be translated back and forth to help the students understanding and providing more effective instructions for their different language abilities and needs. The 1:1 Chromebook would also help facilitate communication with our English as a second language instructor and the families of these students.

Giving each student their own access to a Chromebook, or iPad in the case of our Kindergarten students after this Smart Bond is approved will even the playing field of access across all our students. Along with the providing of Verizon internet access to families that need it we make sure that all student regardless of their home environment or financial environment have the same access. During the COVID19 School Closure we have done our

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best to distribute as much technology as families need, but without being 1:1 families with many students at home might need to share devices where students with no siblings at school do not. Being 1:1 will eliminate these types of access gaps in the district.

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.

As the district deals with the COVID19 pandemic school closures as all the other districts in New York have, the need for distance learning has never been so important to the Alexander Central School District. The district has never sent devices home with students other than a pilot we ran on what would be needed to be 1:1 in the district and to send home devices. That pilot was very important to not just 1:1 preparedness for this Smart Bond proposal, but it ended up perfectly setting us up for the school closure that we are currently dealing with. The Alexander school district had already purchased and implemented the monitoring and filter software that is needed for home devices. We had already set up offline file access and self harm alerts. The district has been able to distribute technology with it already being ready for the reality of home use and distance learning.

The only restriction we have keeping us from being 1:1 with all students is this final purchase of the equipment we need to provide each student with a device. In a lot of ways, preparing for this Smart Bond proposal made us ready for the new reality we face in 2020. Already we have video meetings being conducted with parents by our CSE office or from teachers with parents in the community using the devices that we have sent home during this closure. In these times of social distancing we would have to do this all over telephone.

Beyond these abnormal times the technology we are proposing to purchase in this Smart Bond will make a massive impact on how our district can provide distance learning and our communication with parents. Having a device at home will open teachers to the possibility of reverse classroom teaching, Virtual field trips, and guest instruction from educators outside the district. Students can be paired with neighboring district students or students across the country and world for special assignments.

Meetings with parents can also be facilitated through the 1:1 device sent home with the student. If a parent has transportation issues or otherwise can not travel to the district, teachers and other school officials can use video meeting to meet and share documentation.

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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."

This current project will require only a small amount of Professional development. The Professional development itself will revolve around the Use of the Promethean ActivPanel Titanium 75" 4K TFT LCD Interactive Displays and the added functionality of the Promethean ActivConnect OPS-G - digital signage player. When the SMART Boards and the subsequent software upgrades for the SMART Boards were introduced to the district the IT Department would hold training sessions before and after school for a couple of weeks to make sure that all faculty has an opportunity to participate in these training sessions. With the Interactive Displays we plan to do a similar training schedule.

- **Before and After School Training Sessions:** The District IT Department will offer training sessions at 8am and again at 3pm. The Elementary faculty most benefit from the AM training sessions where the Middle and High School faculty will be the focus of the PM trainings
- **Superintendent Conference days:** Rotating Training sessions will be held throughout the conference day to train faculty and introduce more advanced functionality of the new Interactive Displays
- **One of One or Small Group Sessions:** As new staff enter the district training will be offered on a one to one basis by either the Director of Technology or by a turnkey trainer. Small Session trainings can always be requested by faculty where basic or advanced training can be given on the equipment use.
- **Video and White paper documentation:** Help articles, video sessions, and a frequently asked questions site have all been provided by Promethean, and will be shared with faculty for reference.

Chromebooks being purchased in this Smart Bond Proposal will not need much training. Both Faculty and Staff are very familiar with the use of Chromebooks and the Chrome apps we use in district. Due to the pilot send home program we did in district the IT department already has experience with filtering software like GoGuardian. Students will be given paperwork on a take home agreement and new 1:1 policies.

All professional development with Faculty will be followed by a survey to gauge how useful the information shared was and what clarification would still be needed. If in those surveys we see there is still faculty who do not feel comfortable with certain aspects of the Interactive Displays use, more training Before and After Sessions will be available or Small Group sessions will be planned to make sure all faculty are comfortable with the new equipment use.

9. Districts must contact one of the SUNY/CUNY teacher preparation programs listed on the document on the left side of the page 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.

State University of New York at Geneseo

- 9b. Enter the primary Institution phone number.

(585) 245-5000

- 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.

Dr. Dennis Showers

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10. 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.

11. 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.

12. Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category.

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be Purchased	Quantity	Cost per Item	Total Cost
Interactive Whiteboards	Promethean ActivPanel Titanium 75	81	3,800.00	307,800.00
Interactive Whiteboards	Promethean ActivConnect OPS-G - digital signage player	81	185.34	15,012.54
Desktop Computers	HP EliteDisplay E243m - LED monitor - Full HD (1080p) - 23.8	81	209.84	16,997.04
Other Costs	Adesso SlimTouch 4040 - keyboard - with touchpad	81	26.26	2,127.06
Interactive Whiteboards	Promethean APTMS-3 - stand	4	486.66	1,946.64
Laptop Computers	Chromebooks - ACER C733T N4020 32/4 CHROME with Chrome license	334	320.33	106,990.22
Other Costs	Chromebook Cases - Max Cases MAX Extreme Shell - notebook top and rear cover	334	34.13	11,399.42
		996	5,062.56	462,273

13. Final 2014-15 BEDS Enrollment to calculate Nonpublic Sharing Requirement (no changes allowed.)

	Public Enrollment	Nonpublic Enrollment	Total Enrollment	Nonpublic Percentage
Enrollment	847	0	847.00	0.00

14. If you are submitting an allocation for Classroom Learning Technology complete this table.

	Public School Sub-Allocation	Estimated Nonpublic Loan Amount (Based on Percentage Above)	Estimated Total Public and Nonpublic Sub-Allocation
Interactive Whiteboards	324,759.18	0.00	324,759.18
Computer Servers	0.00	0.00	0.00
Desktop Computers	16,997.04	0.00	16,997.04

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	Public School Sub-Allocation	Estimated Nonpublic Loan Amount (Based on Percentage Above)	Estimated Total Public and Nonpublic Sub-Allocation
Laptop Computers	106,990.22	0.00	106,990.22
Tablet Computers	0.00	0.00	0.00
Other Costs	13,526.48	0.00	13,526.48
Totals:	462,272.92	0	462,273

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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 new 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. Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category.

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
(No Response)	(No Response)	(No Response)	(No Response)	0.00
		0	0.00	0

6. 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:	0.00

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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. Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category.

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
(No Response)	(No Response)	(No Response)	(No Response)	0.00
		0	0.00	0

5. 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:	0.00

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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.

(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. Smart Schools plans with any expenditures in the High-Tech Security category require a project number from the Office of Facilities Planning. Districts must submit an SSBA LOI and receive project numbers prior to submitting the SSIP. As indicated on the LOI, some projects may be eligible for a streamlined review and will not require a building permit. 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. Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category.

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
(No Response)	(No Response)	(No Response)	(No Response)	0.00
		0	0.00	0

6. If you have made an allocation for High-Tech Security Features, complete this table.
Enter each Sub-category Public Allocation based on the the expenditures listed in Table #5.

	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:	0.00