

## Smart Schools Investment Plan - GASD SMART 1

## SSIP Overview

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## Group 1

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

Michele Downing

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

518.843.3180

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

mdowning@gasd.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.

SSIP BOE February.pptx  
 SSIP BOE March Public Hearing.pptx

- 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.

www.gasd.org

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.

4,200

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

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

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

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

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

(No Response)

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

\$3,170,930

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	436,648
Connectivity Projects for Communities	0
Classroom Technology	2,475,585
Pre-Kindergarten Classrooms	0
Replace Transportable Classrooms	0
High-Tech Security Features	0
<b>Totals:</b>	<b>2,912,233</b>

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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 district already meets this demand as we have a 1Gb internet connection serving a student body of 3800.

- 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	3,800	380,000	380	1000	1000	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.**

SSBA funds will be used to purchase edge switches to upgrade the district's existing switches. These switches, along with the addition of a new firewall and UPS's, will facilitate increased internal bandwidth to support the addition of 1,745 devices being added to the district network. No new wiring is required as this is in place upgrade of existing equipment.

With the district's upcoming (completed this summer) upgrade of its wireless network (funded through E-Rate, not Smart Bond) the district will be able to support individual wireless connection speeds of up to 1.3Gbps. With the SSBA we will be adding an additional 1,745 devices to the district wireless network. Currently our core is connected to all buildings at 10Gb. But internal connections to edge switches are only 1Gb. Which creates a bottleneck. Utilizing Smart Bonds we plan on purchasing edge switches which support 10Gb connections between stacks. And will facilitate greater Layer 7 visibility to enhance continuity and quality of service to all of our end users. With an AP per classroom and each AP being able to support up to 254 simultaneous users. We have ensured there is redundancy in the case of individual AP failure. The upgrade of our firewall to a newer solution will provide support for up a minimum 8000 registered endpoints. The new firewall will ensure room for future growth and will help facilitate the implementation and support a BYOD program for students and staff. The newer firewall will also provide enhanced network security. Ensuring our network fosters a safe and open educational computing environment for our staff and students. No new wiring is required as this is an in place upgrade of existing equipment.

Additionally, the District will be implementing Distance Learning (DL) at the Amsterdam High School. We will be using funding to support 2 distance learning classrooms within the high school. Costs include the equipment needs as prescribed by NERIC. The distance learning program will provide students here and in the region with tremendous opportunities that they may have otherwise not had access to. The DL program will offer options to enroll in cutting-edge courses in technology, foreign language, business and science, all of which support the 21st century skills essential to college- and career-readiness.

**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 foundation of this plan incorporates the International Society for Technology in Education National Educational Technology Standards (ISTE). In line with this we are moving towards broader goals in which technology is seamlessly integrated into curriculum projects that are based on and encourage critical thinking, creativity, collaboration, and information and media fluency. Students need to be immersed in more interactive environments in which material is customized based on students' learning needs and teachers supplement instruction with technology to explain concepts, coordinate student discussion, and stimulate high-level thinking. We need to aim for: one-to-one computer access; technology designed to promote high levels of interactivity and engagement while making data available in multiple forms; curriculum and instruction plans that enable students to use technology to create content as well as learn material; and "blended" learning environments, characterized by significant levels of teacher support and opportunities for interactions among students, as companions to technology use.

Additionally, the District will focus on ensuring that teachers, staff and administrators are proficient in the use and integration of technology through professional development activities. This will be done by: encouraging innovation in professional practices by utilizing NETS for Teachers as a framework for skill development in integrating technology, facilitating and participating in professional learning communities that stimulate, nurture and support administrators, faculty, and staff in the study and use of technology, continue to provide in-service through a train the trainer approach, provide job embedded professional development directly relevant to classroom practice, provided over time, and when it provides opportunity for practice of new strategies, promoting technology integration mentors to provide embedded training, conducting periodic assessments of teachers,

staff and administration to provide feedback for improvement of the professional development program and implementing E-learning and virtual schools

in an effort to expand professional development as well as instructional opportunities.

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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.

With the district's upcoming (completed this summer) upgrade of its wireless network (funded through E-Rate, not Smart Bond) the district will be able to support individual wireless connection speeds of up to 1.3Gbps. With the SSBA we will be adding an additional 1,745 devices to the district wireless network. Currently our core is connected to all buildings at 10Gb. But internal connections to edge switches are only 1Gb. Which creates a bottleneck. Utilizing Smart Bonds we plan on purchasing edge switches which support 10Gb connections between stacks. And will facilitate greater Layer 7 visibility to enhance continuity and quality of service to all of our end users. With an AP per classroom and each AP being able to support up to 254 simultaneous users. We have ensured there is redundancy in the case of individual AP failure. The upgrade of our firewall to a newer solution will provide support for up a minimum 8000 registered endpoints. The new firewall will ensure room for future growth and will help facilitate the implementation and support a BYOD program for students and staff. Ensuring our network fosters a safe and open educational computing environment for our staff and students. No new wiring is required as this is an in place upgrade of existing equipment.

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
27010017999BA1

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
Michael J. Harris	221911

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	422,108
Outside Plant Costs	0
School Internal Connections and Components	11,040
Professional Services	0
Testing	3,500
Other Upfront Costs	0
Other Costs	0
<b>Totals:</b>	<b>436,648</b>

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](mailto: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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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	Eaton UPS with extended runtime battery & mounting hardware	15	5,084	76,266
Network/Access Costs	FortiNet FG-300 D firewall	1	79,200	79,200
Network/Access Costs	FortiNet FAZ-300D	1	16,000	16,000
Network/Access Costs	FortiNet FMD-200D	1	8,000	8,000
Network/Access Costs	Extreme Networks 48 Port POE 10 GB Switches	18	5,712	102,809
Network/Access Costs	Dell Power Edge R370	5	27,008	135,043
Connections/Components	Installation distance learning equipment	2	5,250	10,500
Testing	Testing of distance learning equipment	2	1,750	3,500
Network/Access Costs	Cisco Catalyst 3650 Port data 4x1G uplink IP service	1	3,900	3,900
Network/Access Costs	Cisco Catalyst 3560 C Switch 8 GE 2x Dual uplink IP base	1	850	850
Network/Access Costs	Cisco 19 in Rack Mount for catalysts switches	1	40	40
Connections/Components	Cisco 1000 Base-SX SFP transceiver module, MMF, 850 nm DOM	2	250	500
Connections/Components	Cisco 4M Fiber Patchcord LC to SC 2m	2	20	40

## Smart Schools Investment Plan - GASD SMART 1

## Community Connectivity (Broadband and Wireless)

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## 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)
<b>Totals:</b>	<b>0</b>

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](mailto:smartschools@nysed.gov).

Add rows under each sub-category for additional items, as needed.



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

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## Classroom Learning Technology

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## 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.

The FCC requirement is  $3800/1000 \times 100 = 380$  Mbps. We currently have 1Gb of bandwidth for 3800 students.

- 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	3,800	380,000	380	1000	-	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.

With the district's upcoming (completed this summer) upgrade of its wireless network (funded through E-Rate, not Smart Bond) the district will be able to support individual wireless connection speeds of up to 1.3Gbps. With the SSBA we will be adding an additional 1,745 devices to the district wireless network. Currently our core is connected to all buildings at 10Gb. But internal connections to edge switches are only 1Gb. Which creates a bottleneck. Utilizing Smart Bonds we plan on purchasing edge switches which support 10Gb connections between stacks. And will facilitate greater Layer 7 visibility to enhance continuity and quality of service to all of our end users. With an AP per classroom and each AP being able to support up to 254 simultaneous users. We have ensured there is redundancy in the case of individual AP failure. The upgrade of our firewall to a newer solution will provide support for up a minimum 8000 registered endpoints. The new firewall will ensure room for future growth and will help facilitate the implementation and support a BYOD program for students and staff. The newer firewall will also provide enhanced network security. Ensuring our network fosters a safe and open educational computing environment for our staff and students. No new wiring is required as this is an in place upgrade of existing equipment.

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

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

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

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

Since all equipment that is being purchased is being purchased as an upgrade we will not be running any new wiring or power. As we will be placing all items purchased in place of existing units. All new Smartboards/Touch Panels are going in place of existing broken or aged out boards. As such each unit already has appropriate power waiting for it. All Chromebooks being purchased are going to be housed in mobile carts. Those carts will be plugged into existing surge protected computer outlets for power when not in use. All iPads will be purchased with protective cases. All school buildings currently have adequate HVAC to keep equipment within operating norms. hence, no physical building alterations will be needed to support the rollout of new classroom equipment.

Additionally, the District will be implementing Distance Learning (DL) at the Amsterdam High School. We will be using funding to support 2 distance learning classrooms within the high school. Costs include the equipment needs as prescribed by NERIC. The distance learning program will provide students here and in the region with tremendous opportunities that they may have otherwise not had access to. The DL program will offer options to enroll in cutting-edge courses in technology, foreign language, business and science, all of which support the 21st century skills essential to college- and career-readiness.

Finally, based on the needs survey to staff and community, additional funding will be used for purchasing peripherals such as web cameras, document cameras and a laser engraver to promote the STEM initiative at the middle and high schools.

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## Classroom Learning Technology

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

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

The 2004 Individuals with Disabilities Education Act (IDEA) requires that districts provide assistive technology to all students with disabilities if it is needed for them to receive a free appropriate public education (FAPE). The Individualized Education Program (IEP) Team is charged with the responsibility for determining a student's individual need for assistive technology in order to benefit from his or her special education and to have access to the general curriculum. If it is determined that assistive technology devices and/or services are necessary, the IEP must specify the devices and services. The range of recommendations can be very broad and can include both low-tech solutions and the use of more complex forms of technology. For example, a student with a fine motor difficulty may need a larger than standard pencil or may need to use a special keyboard, whereas a student who is unable to speak may need an augmentative communication device. The plan incorporates a variety of assistive technologies for students with disabilities. Assistive technology ranges from low- to high-tech and is used to support learning and to bypass challenging tasks (such as handwriting). In order to be effective, assistive technology needs to be embedded within quality instruction. These include but are not limited to: laptops, tablets, software supports, computer assisted instruction, digital books, text to speech, speech to text and graphic organizers. It is understood that the technology considerations are a universal design for learning ( for all students including those with disabilities).

The GASD is responsible for the assistive technology needs of the students with disabilities served in both general and special education classrooms. It is important to keep in mind that providing assistive technology is not simply a matter of purchasing devices. There are many factors that need to be examined when assistive technology devices and services are being considered for a student—including educational goals, personal preferences, social needs, environmental realities, and practical concerns.

Also critical are the various services that will support the student's use of assistive technology. These services can include customizing a device, maintaining or repairing the device, and providing training and technical support. In addition, training may be needed not only for the student but for any family members and teachers who may assist the student. It is important that these services be considered, planned, and documented at the time of the evaluation. Finally, evaluation should be an ongoing process. Assistive technology devices and strategies should be constantly reviewed to ensure that they are meeting the changing needs of the student.

In Amsterdam we understand that technology can be used to close learning gaps for our ELLS, SWDS and at risk students as well as enhance differentiated instruction. Technology provides interactive learning and the ability to explore and create rather than to "drill and kill". Professional development is needed to support our teachers in utilizing the technology to engage their students. With the help of the Smart Bond monies we hope to support all of our students (including students identified as at risk, ELLs and SWDs) with the following pieces:

- Technology access aiming for a 2-to-one computer access: introduction of a BYOD initiative in year 2 of implementation
- Technology access ensuring that speedy internet connections are available
- Technology usage designed to promote high levels of interactivity and engagement and make data available in multiple forms
- Curriculum and instruction plans enabling students to use technology to create content as well as learn material
- Building "blended" learning environments, characterized by significant levels of teacher support and opportunities for interactions among students
- Providing Distance Learning opportunities to our students to have access to programs they would not have otherwise
- Providing professional learning opportunities for teachers on how to use the technology and pedagogies that are recommended, including technical assistance to help educators manage the hardware, software and connections to the Internet.

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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.

Plans include: Working with the local library, Centro Civico and the City of Amsterdam to provide wireless access in public buildings during non-school hours; implement and support a BYOD initiative district-wide; promoting the use of digital resources in a variety of ways to support teaching and learning; electronic grade books, digital portfolios, learning games, and real-time feedback on teacher and student performance; blended and/or online learning opportunities incorporate both face-to-face and online learning opportunities. This includes researching various distance learning opportunities available. The strategy of blending online learning with school-based instruction can accommodate students' diverse learning styles and increase opportunities in ways that may not be possible with full-time conventional classroom instruction.

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

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

The District will focus on ensuring that teachers, staff and administrators are proficient in the use and integration of technology through professional development activities. This will be done by: encouraging innovation in professional practices by utilizing NETS for Teachers as a framework for skill development in integrating technology, facilitating and participating in professional learning communities that stimulate, nurture and support administrators, faculty, and staff in the study and use of technology, continue to provide in-service through a train the trainer approach, provide job embedded professional development directly relevant to classroom practice, provided over time, and when it provides opportunity for practice of new strategies, promoting technology integration mentors to provide embedded training, conducting periodic assessments of teachers, staff and administration to provide feedback for improvement of the professional development program and implementing E-learning and virtual schools in an effort to expand professional development as well as instructional opportunities.

Examples of professional development will include but not be limited to: embedded classroom support by building level technology leaders (stipended teacher leader positions). This professional development includes coaching or mentoring teachers to implement new instructional methods. Teachers will have continuous access to resources that will support their teaching activities and professional formation, including: online courses, online tutorials, personal learning networks, relevant content and data, educational technology experts; and technical assistance providers.

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

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

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

SUNY Albany

- 9b. Enter the primary Institution phone number.

518-442-4007

- 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. Jianwei Zhang

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

Are there nonpublic schools within your school district?

- ☒ Yes  
☐ No

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

The District plans to loan Chromebooks to Saint Mary's Institute. A meeting was held with GASD Director of Data/Personnel, Michele Downing and SMI Principal, Ms. Maureen Dario, to review the technology needs of the K-8 parochial school. Ms. Daurio requested chromebooks for their student population. This request came about after a needs assessment of the staff and parents was conducted. Saint Marys has 176 students in its K-8 school. Therefore  $188 \times 250 = \$47,000$ . This amount will be used to purchase approximately 4 chromebook carts. Each cart will hold 36 chromebooks. The non public school in the GASD will be asked to request their devices on an annual basis and to submit their requests no later than August 1 of each year.

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

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

11. Nonpublic Classroom Technology Loan Calculator

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

See:

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

	1. Classroom Technology Sub-allocation	2. Public Enrollment (2014-15)	3. Nonpublic Enrollment (2014-15)	4. Sum of Public and Nonpublic Enrollment	5. Total Per Pupil Sub-allocation	6. Total Nonpublic Loan Amount
Calculated Nonpublic Loan Amount	2,475,585	3,800	188	3,988	621	47,000

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.

## Smart Schools Investment Plan - GASD SMART 1

## Classroom Learning Technology

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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	1,738,000
Computer Servers	0
Desktop Computers	0
Laptop Computers	304,045
Tablet Computers	162,692
Other Costs	270,848
<b>Totals:</b>	<b>2,475,585</b>

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](mailto: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.

## Smart Schools Investment Plan - GASD SMART 1

## Classroom Learning Technology

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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
Interactive Whiteboards	Clear Touch Panel	315	5,500	1,732,500
Laptop Computers	Chromebooks	1097	245	268,765
Other Costs	Chromebook Carts	29	1,500	43,500
Tablet Computers	Ipads	356	457	162,692
Other Costs	iPevo Doc Cameras	315	100	31,500
Other Costs	Web cameras	315	50	15,750
Other Costs	Laser Engraver	2	28,000	56,000
Other Costs	Ipad cases	356	58	20,648
Other Costs	chromebook carts NON-PUBLIC	4	1,500	6,000
Laptop Computers	chromebooks NON-PUBLIC	144	245	35,280
Interactive Whiteboards	Clear Touch Panel NON-PUBLIC	1	5,500	5,500
Other Costs	Undetermined non-public allocation	1	220	220
Other Costs	MX800 Dual Display 70	1	30,000	30,000
Other Costs	Integrated Package SX80 with Precision 60 camera, speaker tracker, touch 10	1	13,500	13,500
Other Costs	Ceiling mounted Audioscience microphone	4	750	3,000
Other Costs	Assistive listening transmitter	2	525	1,050
Other Costs	Assistive listening receiver	2	75	150
Other Costs	Assistive listening receiver earphone	2	10	20
Other Costs	Assistive listening system mount	2	50	100
Other Costs	XPA 1002 Audio Amplifier	1	475	475
Other Costs	SI 26 Surface Mount Speakers (pair, black)	1	275	275
Other Costs	HD Document camera	2	2,500	5,000
Other Costs	DTP T UWP 232 D Two input DTP Transmitter for HDMI & VGA with audio embedding - decora wallplate	2	700	1,400
Other Costs	DTP HDMI 4k 230 Rx DTP Receiver for HDMI	2	375	750
Other Costs	Ultra flexible HDMI Cable HDMI Ultra/15	4	60	240
Other Costs	Microdigital Ultra flexible HDMI cable (HDMI Micro/3)	2	30	60



## Smart Schools Investment Plan - GASD SMART 1

## Classroom Learning Technology

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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
Other Costs	Male to male 15 pin HD Micro HR with audio cables (MVGA-A M-M/12)	2	40	80
Other Costs	ProSeries HDMI cable (HDMI Pro/50)	2	225	450
Other Costs	Male to male VGA & audio cables molded connector (VGA-A-M-M MD/50)	2	100	200
Other Costs	Lightning to HDMI digital AV adapter MD826AM/A	2	50	100
Other Costs	iPad 30-pin digital AV adapter	2	40	80
Other Costs	Interactive whiteboard eBeam Edge+with LCD display bracket	2	750	1,500
Other Costs	Uninterruptible power supply 700VA	2	750	1,500
Other Costs	Deluxe mobile rack (Storm STL-Finish) with RU utility shelf and 6	2	800	1,600
Other Costs	Eighty inch LED display	2	4,250	8,500
Other Costs	Display wall mounts	2	250	500
Other Costs	X20 training table24x60x29; laminate top & modesty panel; 3mm edge; casters	22	750	16,500
Other Costs	Student Desks - 60	2	900	1,800
Other Costs	Flexible seating; swivel/seat height mechanism; 5 leg composite base w/ dual wheel; hooded carpet casters	48	175	8,400

## Smart Schools Investment Plan - GASD SMART 1

## Pre-Kindergarten Classrooms

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## 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)
<b>Totals:</b>	<b>0</b>

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](mailto:smartschools@nysed.gov).  
Add rows under each sub-category for additional items, as needed.

**Smart Schools Investment Plan - GASD SMART 1**Pre-Kindergarten Classrooms

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

## Smart Schools Investment Plan - GASD SMART 1

## Replace Transportable Classrooms

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## 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)
<b>Totals:</b>	<b>0</b>

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](mailto: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 - GASD SMART 1

## High-Tech Security Features

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## 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)
<b>Totals:</b>	<b>0</b>

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](mailto: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 - GASD SMART 1**

High-Tech Security Features

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PPU Report

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