

Smart Schools Investment Plan - 2016-17 Version (Original) - MDF Switches

SSIP Overview

Page Last Modified: 10/20/2017

Institution ID

800000037601

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

Vincent Raicovi, Ed.D.

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

631-285-8080

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

vraicovi@mccsd.net

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. 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

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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.

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.**

Smart Schools Investment Plan - Update - 20160927 - MDF Switches.pdf
 Smart Schools Investment Plan-BOE Approval-MDF Switches.pdf

5b. **Enter the webpage address where the final Smart Schools Investment Plan is posted. The Plan should remain posted for the life of the included projects.**

<http://www.mccsd.net/ssip>

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.**

11,750

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:**

\$8,318,342

11. **Enter the budget sub-allocations by category that you are submitting for approval at this time. If you are not**

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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	158,218
Connectivity Projects for Communities	0
Classroom Technology	0
Pre-Kindergarten Classrooms	0
Replace Transportable Classrooms	0
High-Tech Security Features	0
Totals:	158,218

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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.

As of September 1, 2017, we have increased our bandwidth from 500 Mbps to 1000 Mbps, satisfying the Smart Schools Bond Act requirement.

- 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	9,986	998,600	998.6	1000	1000	9/1/2017

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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 current fiber optic cable that is installed intra-building between main distribution facilities (MDF) and intermediate distribution facilities (IDF)

was installed approximately 16 years ago. This fiber optic cable has a maximum bandwidth capability of only 1 Gbps. With District support services,

District educational supplemental resources and State testing increasingly moving to being internet-based—as well as systems that were traditionally

on parallel, separate systems (i.e. security and voice) transitioning to sitting on the common data network—the new fiber will we be able to support all

of these services. This system will also support the bandwidth requirements of the Smart Schools Bond, as well as any additional network

requirements deemed necessary by a wireless expansion and 1:1 program. This project was approved as our first submission in August of 2017. We are in the process of bidding this project out.

For this submittal, we are replacing all of our MDF switches in each of our buildings. These will be replacing out of warranty switching hardware, and will allow us to maximize bandwidth utilizing the aforementioned fiber optic cable.

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?")

There is a direct linkage between Middle Country CSD's District Instructional Technology Plan and this proposed project. We have completed our

district-wide wireless access point rollout. In order to support the increased bandwidth needs of the 1:1 program (for which a SSIP will be submitted immediately after this one), bandwidth will need to be increased on intra-building connections between data closets. Once these switches in our MDF closets are connected with the fiber that we install from our first submission, we will be doing just that.

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.

At the conclusion of the 2016-17 school year, the Middle Country Central School District already had full wireless coverage in all 14 instructional

buildings. With the increased connectivity speeds between our buildings and the increased speed to be realized in our

buildings after this project, Middle Country will be in a good position to support student and staff access to to the Internet. As we look into starting a

1:1 program and continue to support increased mobile device usage, the main adjustment that will need to be made we foresee is access point distribution density. This will be part of our next submittal.

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- 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
(No Response)

- 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
Joseph L. Mile	28771

- 9. If you are submitting an allocation for School Connectivity complete this table.

Note that the calculated Total at the bottom of the table must equal the Total allocation for this category that you entered in the SSIP Overview overall budget.

	Sub-Allocation
Network/Access Costs	(No Response)
Outside Plant Costs	(No Response)
School Internal Connections and Components	158,218
Professional Services	(No Response)
Testing	(No Response)
Other Upfront Costs	(No Response)
Other Costs	(No Response)
Totals:	158,218

- 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

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tax-exempt financing to be reimbursed through the SSBA. Sufficient detail must be provided so that we can verify this is the case. If you have any questions, please contact us directly through smartschools@nysed.gov.

NOTE: Wireless Access Points should be included in this category, not under Classroom Educational Technology, except those that will be loaned/purchased for nonpublic schools.

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

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
Connections/Components	Gigabit Ethernet chassis in a 1U form factor with 48 10/100/1000 Base T ports	54	1,450	78,300
Connections/Components	OS6450-SW-PERF: Performance Software License allowing the 2 fixed SFP+ ports to Operate at 10Gig	22	850	18,700
Connections/Components	OS6450-XNI-U2: Optional 10 Gigabit SFP+ module	54	250	13,500
Connections/Components	OS6450 60 Centimeters long SFP+ direct stacking cable	54	75	4,050
Connections/Components	SFP-10G-C1M: 10 Gigabit direct attached copper cable (1m, SFP+)	20	48	960
Connections/Components	1 Year Support Software for OS6450-24/L, OS6450-48/L, OS6450-U24/S, OS6450-P24/L, OS6450-P48/L	2	90	4,860
Connections/Components	OS6450-P48 K12 Education bundle includes one OS6450-P48-US with US power cord, OS6450-XNI-U2 stacking module, OS6450-CBL-60 stacking cable and 1 Year SUPPORT Software	54	2,200	37,400
Connections/Components	SFP-10G-SR:10 GIGABIT OPTICAL TRANSCEIVER (SFP+)	2	224	448