Page Last Modified: 09/20/2018

Institution ID

800000055435

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

William Schrom

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

518 756 4590

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

bschrom@rcscsd.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.

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

Page Last Modified: 09/20/2018

5. Certify that the following required steps have taken place by checking the boxes below: Each box must be checked prior to submitting your Smart Schools Investment Plan.

- ☑ The district developed and the school board approved a preliminary Smart Schools Investment Plan.
- ☑ The preliminary plan was posted on the district website for at least 30 days. The district included an address to which any written comments on the plan should be sent.
- ☑ The school board conducted a hearing that enabled stakeholders to respond to the preliminary plan. This hearing may have occured as part of a normal Board meeting, but adequate notice of the event must have been provided through local media and the district website for at least two weeks prior to the meeting.
- ☑ The district prepared a final plan for school board approval and such plan has been approved by the school board.
- ☑ The final proposed plan that has been submitted has been posted on the district's website.

5a. Please upload the proposed Smart Schools Investment Plan (SSIP) that was posted on the district's website, along with any supporting materials. Note that this should be different than your recently submitted Educational Technology Survey. The Final SSIP, as approved by the School Board, should also be posted on the website and remain there during the course of the projects contained therein.

Ravena SmartSchoolsPresentation.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.

https://www.rcscsd.org/wp-content/uploads/2017/06/SSBA-Presentation2017.pdf

6. Please enter an estimate of the total number of students and staff that will benefit from this Smart Schools Investment Plan based on the cumulative projects submitted to date.

2,100

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:

$1,491,838

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	471,092
Connectivity Projects for Communities	

Page Last Modified: 09/20/2018

	Sub-Allocations
	0
Classroom Technology	0
Pre-Kindergarten Classrooms	0
Replace Transportable Classrooms	0
High-Tech Security Features	129,347
Totals:	**600,439**

Page Last Modified: 09/20/2018

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 Ravena-Coeymans-Selkirk CSD is planning a comprehensive program to upgrade their entire technology network infrastructure.
The first phase was to upgrade the broadband circuit providing internet access to the district. Ravena-Coeymans-Selkirk CSD upgraded their internet broad band connection to 200 mbs before the opening of school in September, 2017. This increase has supported the true goal of the Technology Plan allowing the establishment of a one-to-one program to support student learning in the district. RCS subscribes to internet services through the Northeast Regional Information Center.
Finally, the district applied for and received a commitment of Erate Category 2 funds to use with their Smart Schools funds to expand and upgrade the wireless network for the district. All of the spaces will receive appropriate access points and all of the access points will be replaced.

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	1,895	189,500	189.5	200	200	Currently Met

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 Smart School component of the district plan is a complete upgrade of the switching and wireless infrastructure as identified in this proposal. All of the edge switches and two of the three building core switches will be upgraded.. (The core at P. Coeymans Elementary has already been upgraded.) In addition to Power of Ethernet capacity, these switches will provide a minimum of 1 gig to all of the devices in use in the district. All of the connections between the core and the edge switches will also be a minimum of 1 gig. The cables to each of the wireless access points will be upgraded to Category 6a cables to provide the highest available capacity for each of these units.
The district also plans to use Erate Category 2 and Smart Schools funds to totally replace and expand the wireless network in all three buildings in the district. All classrooms and large group spaces will have new wireless access points installed with capacity to support a one-to-one program.

Page Last Modified: 09/20/2018

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 primary goal of the district technology plan is to provide unlimited, borderless access to information and educational resources through the establishment of a one-to-one environment Students will be able to access information, collaborate with teachers and peers, and reduce the impact of the 45 minute schedule. Students will no longer be passive recipients of information. The goal of the Ravena-Coeymans-Selkirk CSD is for the students to become active learners, problem solvers, and develop skills that can be applied in future endeavors.

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.

During the 2016-2017 school year RCS Central Schools consulted with the network engineers from Annese and Associates, and RCS School administration. During the year they have reviewed all of the instructional and public spaces and the usages for those areas. They have developed a wireless and switch upgrade plan that will provide robust wireless to all areas of the district for all students and staff working in those areas. This plan reflects those reviews.

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
01-04-02-06-7-999-BA1

7. Certain high-tech security and connectivity infrastructure projects may be eligible for an expedited review process as determined by the Office of Facilities Planning.

Was your project deemed eligible for streamlined review?

Yes

7a. Districts that choose the Streamlined Review Process will be required to certify that they have reviewed all installations with their licensed architect or engineer of record and provide that person's name and license number. The licensed professional must review the products and proposed method of installation prior to implementation and review the work during and after completion in order to affirm that the work was code-compliant, if requested.

☑ I certify that I have reviewed all installations with a licensed architect or engineer of record.

8. Include the name and license number of the architect or engineer of record.

Name	License Number
Edwin C. Anker	31647

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.

Page Last Modified: 09/20/2018

	Sub-Allocation
Network/Access Costs	166,785
Outside Plant Costs	0
School Internal Connections and Components	247,196
Professional Services	17,189
Testing	0
Other Upfront Costs	4,922
Other Costs	35,000
Totals:	**471,092**

10. Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category. This is especially important for any expenditures listed under the "Other" category. All expenditures must be eligible for tax-exempt financing to be reimbursed through the SSBA. Sufficient detail must be provided so that we can verify this is the case. If you have any questions, please contact us directly through smartschools@nysed.gov.
NOTE: Wireless Access Points should be included in this category, not under Classroom Educational Technology, except those that will be loaned/purchased for nonpublic schools.
Add rows under each sub-category for additional items, as needed.

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
Network/Access Costs	AIR-AP2802E-B-K9 Erate 70% discount	156	194	30,264
Network/Access Costs	Air-ANT2524DW-R Erate 70% discount	569	6	3,404
Network/Access Costs	Air-CT5520-K9 Erate 70% discount	1	2,784	2,784
Network/Access Costs	WS-C2960X-48FPD-L Erate 70% discount	37	1,113	41,181
Network/Access Costs	WS-C2960X-24PD-L Erate 70% discount	1	640	640
Connections/Components	Installation Routing & Switching	1	66,057	66,057
Network/Access Costs	Installation Wireless Access Points	1	34,515	34,515
Professional Services	Project Mgmt	1	17,189	17,189
Connections/Components	15216-LC-SC-5= 3M Fiber Patchcord	48	20	960
Connections/Components	C1FPAIRK9	46	179	8,234
Network/Access Costs	WS-C4500X-16SFP+	1	8,160	8,160
Network/Access Costs	WS-C4500X-32SFP+	1	14,280	14,280
Network/Access Costs	C4KX-PWR-750AC-R	2	1,020	2,040
Network/Access Costs	C4KX-PWR-750AC-R/2	2	1,020	2,040

School Connectivity

Page Last Modified: 09/20/2018

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
Other Upfront Costs	C4500X-IP-ES IP Base to Ent Services Licenses	1	4,080	4,080
Connections/Components	C2960X-stack	19	609	11,571
Connections/Components	F0-50MTRJDLLC-003 3 meter patchcord	8	25	200
Connections/Components	GLC-T 1000 Base-T SFP	2	202	404
Connections/Components	GLC-TE+ 1000 Base-T Transceiver module	1	202	202
Other Upfront Costs	ISE-PLS-3YR-100 Cisco ISE 3 Year 100 Endpoint License	1	842	842
Network/Access Costs	L-MSE-7.0-K9 MSE Virtual Appliance (Please select L-MSE-PAK for MSE Lic)	1	2,547	2,547
Network/Access Costs	R-ISE-VM-K9 Cisco Identity Services Engine VM (eDelivery)	2	3,055	6,110
Connections/Components	SFP-10G-LRM	51	508	25,908
Connections/Components	SFP-H10GB-CU1M	4	51	204
Connections/Components	SFP-H10GB-CU3M	6	51	306
Network/Access Costs	UCS-HD12TB10K12G 1.2 Tb HDD	8	745	5,960
Network/Access Costs	VMW-VSP-STD-1A= VMware vSphere 6 Standard	4	846	3,384
Connections/Components	1 ft Blue Cat 6 Ethernet	1,000	2	2,000
Connections/Components	2 ft Blue Cat 6 Ethernet	800	2	1,600
Connections/Components	3 ft Blue Cat 6 Ethernet	800	2	1,600
Connections/Components	5 ft Blue Cat 6 Ethernet	200	3	600
Connections/Components	1 Ft Green Cat 6 Ethernet	100	2	200
Connections/Components	2 Ft Green Cat 6 Ethernet	100	2	200
Connections/Components	3 Ft Green Cat 6 Ethernet	100	2	200
Connections/Components	5 Ft Green Cat 6 Ethernet	50	3	150
Connections/Components	7 Ft. Green Cat 6 Ethernet	200	3	600
Connections/Components	Cat 6 cables to Wireless Access Points	252	500	126,000
Other Costs	Construction and Design Contingencies	1	35,000	35,000
Network/Access Costs	Air-ANT2524DW-R No Erate	55	18	990
Network/Access Costs	WS-C2960X-48FPD-L No Erate	2	3,710	7,420

School Connectivity

Page Last Modified: 09/20/2018

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	WS-C2960X-24PD-L No Erate	1	1,066	1,066

Page Last Modified: 09/13/2018

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.

The Ravena Coeymans Selkirk CSD has long made building security a priority. The district has a significant video security system as well as door security,
This Smart Schools Investment Plan provides funds to upgrade to the video security system. This project includes expanded video storage capacity with new video storage servers. These units will have the capacity to store all recording for a minimum of 30 days plus additional storage to archive specific events for future reference. The video project also includes some additional high resolution cameras at strategic locations in the district.

2. All plans and specifications for the erection, repair, enlargement or remodeling of school buildings in any public school district in the State must be reviewed and approved by the Commissioner. Districts that plan capital projects using their Smart Schools Bond Act funds will undergo a Preliminary Review Process by the Office of Facilities Planning.
Please indicate on a separate row each project number given to you by the Office of Facilities Planning.

Project Number
01-04-02-06-7-999-BA1

3. Was your project deemed eligible for streamlined Review?

☑ Yes
☐ No

3a. Districts with streamlined projects must certify that they have reviewed all installations with their licensed architect or engineer of record, and provide that person's name and license number. The licensed professional must review the products and proposed method of installation prior to implementation and review the work during and after completion in order to affirm that the work was code-compliant, if requested.

☑ By checking this box, you certify that the district has reviewed all installations with a licensed architect or engineer of record.

4. Include the name and license number of the architect or engineer of record.

Name	License Number
Edwin C. Anker	31647

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)	0
Electronic Security System	95,570
Entry Control System	0
Approved Door Hardening Project	0
Other Costs	33,777
Totals:	**129,347**

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

Page Last Modified: 09/13/2018

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
Electronic Security System	S2-NETVR500-32 S2 Video Mgmt System	4.00	9,585	38,340
Electronic Security System	S2-NETVR-4TB-HDD 4TB Hardrive Upgrades	20.00	593	11,860
Electronic Security System	S2-VR-1C Single IP Camera License	22.00	180	3,960
Electronic Security System	z4-08D04001 Axis Communications Fixed Dome Camera	2.00	253	506
Electronic Security System	WG-50885506 .24/4 C5E 5C Blue Box 500 Feet	1.00	144	144
Electronic Security System	Z4-0625001 Axis P1427-LE	5.00	751	3,755
Electronic Security System	Z4-0804001 M3045 Fixed Dome IP Camera	2.00	393	786
Electronic Security System	S2-NetVR425 IP Video Server	2.00	10,170	20,340
Electronic Security System	Z4-0815001 Axis P3707-PE Fixed Dome IP Camera	6.00	1,127	6,762
Electronic Security System	Z4-5507511 Axis T94M020D Network Camera	6.00	93	558
Electronic Security System	Z4-5017641 Axis T91A64 Bracket Corner	6.00	74	444
Electronic Security System	Z04-5504821 Axis T91D61 Wall Mount	6.00	79	474
Electronic Security System	Z4-0777001 Axis P1435-LE	2.00	751	1,502
Electronic Security System	WG-550881106 24/4PR CAT5E 1000Ft Box Blue	8.00	298	2,384
Electronic Security System	Z4-0625001 Axis 1427-LE	5.00	751	3,755
Other Costs	Installation Labor	1.00	27,064	27,064
Other Costs	Programming Labor	1.00	6,713	6,713
(No Response)	(No Response)	(No Response)	(No Response)	(No Response)