

Smart Schools Investment Plan - Cairo-Durham SSBA Spending Plan

SSIP Overview

Page Last Modified: 12/14/2016

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

Anthony Taibi

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

5186228534

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

ataibi@cairodurham.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.

(No Response)

- 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.

(No Response)

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

1,402

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:

\$1,293,077

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	(No Response)
Connectivity Projects for Communities	0
Classroom Technology	0
Pre-Kindergarten Classrooms	0
Replace Transportable Classrooms	0
High-Tech Security Features	0
Totals:	0

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School Connectivity

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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.

The district currently has a 200Mbps connection to the Internet via NERIC. This bandwidth was achieved in August, 2016. This exceeds the 100Mbps per 1,000 students requirement, given current and anticipated future enrollment.

- 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	1,256	125,600	125.6	200	200	9/1/2016

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

Funds will be used to upgrade existing network infrastructure, including the both wired and wireless systems. This will improve the bandwidth of wireless connections, moving the district from IEEE-802.11n to IEEE-802.11ac. It will also improve effective throughput by introducing Multiple-Input/Multiple-Output (MIMO) protocols, allowing devices with with MIMO to clear the airspace faster and allow overall performance gains across all devices. As the district has required IEEE-802.11ac on all new devices since roughly Fall 2014, there are hundreds of devices with MIMO already used by students. Additionally, the number of wifi access points (APs) will be significantly increased in instructional spaces, allowing for an increase in the number of devices concurrently used in a given area. This will allow for more students to use devices at the same time with no decrease of performance and possibly a small increase.

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- 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?")

By providing an increase in the number of wireless devices which can connect concurrently, we will create the foundation for a one-to-one device deployment to students. This rollout will enable greater adoption of online resources as routine classroom tools. A few examples include Google Classroom for distributing materials in class and collecting assignments, online video for instructional differentiation, and checking for missing assignments in SchoolTool.

- 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.

We have worked with a well established networking vendor to evaluate our current wireless network. While it currently covers all of our schools, we wish to increase the performance and "device density" in order to build a foundation for a one-to-one device deployment. We have relied on their experience to select specific hardware and designs to meet our goals, but have also vetted those designs with the district's Network Administrator. Lastly, design was specifically shaped to include an access point (AP) in each classroom as a means of preventing more than 30 devices from connecting to any given AP.

- 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?

(No Response)

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

Name	License Number
Mosaic Associates	25849

- 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	307,772
Outside Plant Costs	(No Response)
School Internal Connections and Components	(No Response)
Professional Services	(No Response)
Testing	(No Response)
Other Upfront Costs	(No Response)
Other Costs	(No Response)
Totals:	307,772

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

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School Connectivity

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Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
Network/Access Costs	Catalyst 4500-X 24 Port 10G Ent Services, Frt-to-Bk, No P/S	2	12,240	24,480
Network/Access Costs	Catalyst 4500X 8 Port 10G Network Module	2	0	0
Network/Access Costs	Catalyst 4500X 750W AC front to back cooling 2nd PWR supply	2	1,020	2,040
Network/Access Costs	Catalyst 4500X 750W AC front to back cooling power supply	2	1,020	2,040
Network/Access Costs	NEMA 5-15 to IEC-C15 8ft US	4	0	0
Network/Access Costs	CAT4500-X Universal Crypto Image	2	0	0
Network/Access Costs	IP Base to Ent. Services license for 16 Port Catalyst 4500-X	2	0	0
Network/Access Costs	10GBASE-LRM SFP Module	4	507	2,029
Network/Access Costs	10GBASE-CU SFP+ Cable 3 Meter	4	51	204
Network/Access Costs	10GBASE-CU SFP+ Cable 5 Meter	2	132	265
Network/Access Costs	1000BASE-T SFP	14	201	2,830
Network/Access Costs	10GBASE-SR SFP Module	2	507	1,014
Network/Access Costs	10GBASE-LR SFP Module	1	2,037	2,037
Network/Access Costs	SNTC-24X7X4OS Catalyst 4500-X 24 Port 10G Ent. Service	2	15,960	31,920
Network/Access Costs	Catalyst 2960-X 48 GigE PoE 740W, 2 x 10G SFP+, LAN Base	1	4,077	4,077
Network/Access Costs	AC Power cord, 16AWG	1	0	0
Network/Access Costs	Catalyst 2960-X 48 GigE PoE 740W, 2 x 10G SFP+, LAN Base	1	4,077	4,077
Network/Access Costs	AC Power cord, 16AWG	1	0	0
Network/Access Costs	Catalyst 2960-X 48 GigE PoE 740W, 2 x 10G SFP+, LAN Base	1	4,077	4,077
Network/Access Costs	AC Power cord, 16AWG	1	0	0
Network/Access Costs	10GBASE-LRM SFP Module	1	507	507
Network/Access Costs	Catalyst 2960-X 48 GigE PoE 740W, 2 x 10G SFP+, LAN Base	1	4,077	4,077
Network/Access Costs	10GBASE-LRM SFP Module	1	507	507
Network/Access Costs	AC Power cord, 16AWG	1	0	0
Network/Access Costs	Catalyst 2960-X 48 GigE PoE 740W, 2	1	4,077	4,077

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	x 10G SFP+, LAN Base			
Network/Access Costs	10GBASE-LRM SFP Module	1	507	507
Network/Access Costs	AC Power cord, 16AWG	1	0	0
Network/Access Costs	Catalyst 2960-X 48 GigE PoE 740W, 2 x 10G SFP+, LAN Base	1	4,077	4,077
Network/Access Costs	10GBASE-LRM SFP Module	1	507	507
Network/Access Costs	AC Power cord, 16AWG	1	0	0
Network/Access Costs	Catalyst 4500-X 24 Port 10G IP Base, Front-to-Back, No P/S	1	10,200	10,200
Network/Access Costs	Catalyst 4500X 8 Port 10G Network Module	1	0	0
Network/Access Costs	Catalyst 4500X 750W AC front to back cooling power supply	1	1,020	1,020
Network/Access Costs	Catalyst 4500X 750W AC front to back cooling 2nd PWR supply	1	1,020	1,020
Network/Access Costs	NEMA 5-15 to IEC-C15 8 ft US	2	0	0
Network/Access Costs	CAT4500-X Universal Crypto Image	1	0	0
Network/Access Costs	10GBASE-LR SFP Module	1	2,037	2,037
Network/Access Costs	10GBASE-LRM SFP Module	2	507	1,014
Network/Access Costs	10GBASE-CU SFP+ Cable 5 Meter	1	76	76
Network/Access Costs	1000BASE-SX SFP transceiver module, MMF, 850nm, DOM	10	255	2,550
Network/Access Costs	1000BASE-T SFP	9	201	1,813
Network/Access Costs	IP Base license for Catalyst 4500-X	1	0	0
Network/Access Costs	Catalyst 2960-X 48 GigE PoE 740W, 2 x 10G SFP+, LAN Base	1	4,077	4,077
Network/Access Costs	AC Power cord, 16AWG	1	0	0
Network/Access Costs	1000BASE-T SFP	4	201	805
Network/Access Costs	ONSITE 24X7X4 Cat 4500-X 24 Prt 10G IP Base, Front to	1	1,848	1,848
Network/Access Costs	Catalyst 2960-X 48 GigE PoE 740W, 2 x 10G SFP+, LAN Base	1	4,077	4,077
Network/Access Costs	10GBASE-LRM SFP Module	1	507	507
Network/Access Costs	AC Power cord, 16AWG	1	0	0
Network/Access Costs	Catalyst 2960-X 48 GigE PoE 740W, 2 x 10G SFP+, LAN Base	1	4,077	4,077
Network/Access Costs	10GBASE-LRM SFP Module	1	507	507
Network/Access Costs	AC Power cord, 16AWG	1	0	0
Network/Access Costs	Catalyst 2960-X 48 GigE PoE 740W, 2	1	4,077	4,077

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	x 10G SFP+, LAN Base			
Network/Access Costs	AC Power cord, 16AWG	1	0	0
Network/Access Costs	Fiber Optic Cable, LC/SC, OM1, Multi Mode, Duplex - 3 meter (62.5/125 Type) - Orange	20	11	221
Network/Access Costs	1FT 24AWG Cat6 550MHz UTP Ethernet Bare Copper Network Cable - Yellow	480	1	480
Network/Access Costs	0.5FT 24AWG Cat6 550MHz UTP Ethernet Bare Copper Network Cable - Purple	100	1	90
Network/Access Costs	1FT 24AWG Cat6 550MHz UTP Ethernet Bare Copper Network Cable - Purple	260	1	260
Network/Access Costs	3FT 24AWG Cat6 550MHz UTP Ethernet Bare Copper Network Cable - Purple	50	1	75
Network/Access Costs	0.5FT 24AWG Cat6 550MHz UTP Ethernet Bare Copper Network Cable - Green	200	1	180
Network/Access Costs	1FT 24AWG Cat6 550MHz UTP Ethernet Bare Copper Network Cable - Green	100	1	100
Network/Access Costs	3FT 24AWG Cat6 550MHz UTP Ethernet Bare Copper Network Cable - Green	50	1	75
Network/Access Costs	ASA 5525-X with FirePOWER Svcs. Chassis and Subs. Bundle	1	0	0
Network/Access Costs	ASA 5525-X with FirePOWER Services, 8GE, AC, 3DES/AES, SSD	1	4,740	4,740
Network/Access Costs	ASA 9.2.2 Software image for ASA 5500-S Series, 5585-X,ASA-SM	1	0	0
Network/Access Costs	Cisco ASA5525 Control License	1	0	0
Network/Access Costs	Cisco FirePOWER Software v5.4 for ASA 5500-X	1	0	0
Network/Access Costs	AC Power Cord (North America), C13, NEMA 5-15P, 2.1m	1	0	0
Network/Access Costs	^ASA 5525 IPS Part Number with which PCB Serial is associated	1	0	0
Network/Access Costs	ASA 5500 Strong Encryption License (3DES/AES)	1	0	0
Network/Access Costs	ASA 5512-X through 5555-X 120GB MLC SED SSD (Incl.)	1	0	0

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Network/Access Costs	SNTC-24X7X4OS ASA 5525-X with FirePOWER Services, 8GE	1	1,161	1,161
Network/Access Costs	Cisco Ent MGMT: Lic For PI 3.x And APIC EM Solution Apps	1	0	0
Network/Access Costs	Cisco Ent MGMT: PI 3.x Platform Base Lic	1	48	48
Network/Access Costs	Prime Infrastructure 3.0 Software	1	12	12
Network/Access Costs	SWSS UPGRADES Cisco Ent MGMT PI 3.x Platform Base Lic	1	13	13
Network/Access Costs	SWSS UPGRADES Cisco MGMT: Lic For Prime Infra 3.x And	1	0	0
Network/Access Costs	Cisco ONE - Upgrade for Wireless	1	0	0
Network/Access Costs	Cisco ONE Foundation Upg Perpetual - Wireless (AP)	75	127	9,562
Network/Access Costs	Cisco ONE Energy Mgmt Perpetual Lic - 25 DO End Points	75	0	0
Network/Access Costs	Cisco ONE Identity Services Engine 25 EndPoint Base Lic	75	0	0
Network/Access Costs	Cisco ONE CMX Base (Location + Connect) - 1AP license	75	0	0
Network/Access Costs	Cisco ONE PI Device License for LF & AS for WLAN	75	0	0
Network/Access Costs	Cisco ONE WLC Universal Lic (Reference, No License)	75	0	0
Network/Access Costs	Cisco ONE MSE License PAK	1	0	0
Network/Access Costs	SWSS UPGRADES C1 Foundation Perpetual - Wireless	75	37	2,782
Network/Access Costs	SWSS UPGRADES Cisco ONE - Wireless	1	0	0
Network/Access Costs	Cisco ONE Access - Wireless	1	0	0
Network/Access Costs	Cisco ONE Foundation Perpetual - Wireless	50	178	8,925
Network/Access Costs	Cisco ONE CMX Base (Location + Connect) - 1AP license	50	0	0
Network/Access Costs	Cisco ONE Identity Services Engine 25 EndPoint Base Lic	50	0	0
Network/Access Costs	Cisco ONE Energy Mgmt Perpetual Lic - 25 DO End Points	50	0	0
Network/Access Costs	Cisco ONE Wireless LAN Controller AP License (any WLC)	50	0	0
Network/Access Costs	Cisco ONE Wireless LAN Controller AP License PAK (any WLC)	1	0	0

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Network/Access Costs	Cisco ONE PI Device License for LF & AS for WLAN	50	0	0
Network/Access Costs	Cisco ONE MSE License PAK	1	0	0
Network/Access Costs	SWSS UPGRADES C1 Foundation Perpetual - Wireless	50	37	1,855
Network/Access Costs	SWSS UPGRADES Cisco ONE - Wireless	1	0	0
Network/Access Costs	Cisco 5508 Series Wireless Controller for High Availability	1	10,200	10,200
Network/Access Costs	Cisco 5500 Series Wireless Controller Redundant Power Supply	1	762	762
Network/Access Costs	AIR Line Cord North America	2	0	0
Network/Access Costs	Cisco Unified Wireless Controller SW Release 8.0	1	0	0
Network/Access Costs	Base Software License	1	0	0
Network/Access Costs	1000BASE-T SFP	20	201	4,029
Network/Access Costs	SNTC-8X5XNBDOS Cisco 5508 Series Wi	1	2,274	2,274
Network/Access Costs	802.11ac W2 AP w/CA; 4x4:3; Int Ant; 2xGbE B	62	660	40,947
Network/Access Costs	802.11n AP Low Profile Mounting Bracket (Default)	62	0	0
Network/Access Costs	Ceiling Grid Clip for Aironet APs - Recessed Mount (Default)	62	0	0
Network/Access Costs	Cisco Aironet 2800 Series CAPWAP Software Image	62	0	0
Network/Access Costs	802.11ac W2 AP w/CA; 4x4:3; Ext Ant 2xGbE, B Domain	4	711	2,845
Network/Access Costs	2.4GHz 3dBi/5 GHz 5dBi Low Profile Antenna, White, RP-TNC	16	30	481
Network/Access Costs	802.11n AP Low Profile Mounting Bracket (Default)	4	0	0
Network/Access Costs	Ceiling Grid Clip for Aironet APs - Recessed Mount (Default)	4	0	0
Network/Access Costs	Cisco Aironet 2800 Series CAPWAP Software Image	4	0	0
Network/Access Costs	14	2	0	0
Network/Access Costs	2.4 GHz 6 dBi/5 GHz 6 dBi Directional Ant., 4-port, RP-TNC	1	356	356
Network/Access Costs	2.4 and 5 GHz Lightning Arrestor, N Connector	4	106	426

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Network/Access Costs	802.11ac W2 AP w/CA; 4x4:3; Mod; Pro Ext Ant; mGig B Domain	1	892	892
Network/Access Costs	Cisco Aironet 3800 Series CAPWAP Software Image	1	0	0
Network/Access Costs	802.11n AP Low Profile Mounting Bracket (Default)	1	0	0
Network/Access Costs	Ceiling Grid Clip for Aironet APs - Recessed Mount (Default)	1	0	0
Network/Access Costs	20 ft LOW LOSS CABLE ASSEMBLY W/RP-TNC CONNECTORS	4	65	263
Network/Access Costs	Power Injector (802.3at) for Aironet Access Points	1	70	70
Network/Access Costs	AIR Line Cord North America	1	0	0
Network/Access Costs	SNTC-8X5XNBDOS 802.11ac W2 AP w/CA; 4x4:3; Mod; Pro Ext	1	61	61
Network/Access Costs	802.11ac W2 AP w/CA; 4x4:3; Int Ant; 2xGbE B	25	660	16,511
Network/Access Costs	Cisco Aironet 2800 Series CAPWAP Software Image	25	0	0
Network/Access Costs	802.11n AP Low Profile Mounting Bracket (Default)	25	0	0
Network/Access Costs	Ceiling Grid Clip for Aironet APs - Recessed Mount (Default)	25	0	0
Network/Access Costs	802.11ac W2 AP w/CA; 4x4:3; Ext Ant; 2xGbE, B Domain	2	711	1,422
Network/Access Costs	2.4 GHz 3dBi/5 GHz 5 dBi Low Profile Antenna, White, RP-TNC	8	30	240
Network/Access Costs	802.11n AP Low Profile Mounting Bracket (Default)	2	0	0
Network/Access Costs	Ceiling Grid Clip for Aironet APs - Recessed Mount (Default)	2	0	0
Network/Access Costs	Cisco Aironet 2800 Series CAPWAP Software Image	2	0	0
Network/Access Costs	14	2	0	0
Network/Access Costs	802.11ac W2 AP w/CA; 4x4:3; Int Ant; 2xGbE B	22	660	14,529
Network/Access Costs	802.11n AP Low Profile Mounting Bracket (Default)	22	0	0
Network/Access Costs	Ceiling Grid Clip for Aironet APs - Recessed Mount (Default)	22	0	0
Network/Access Costs	Cisco Aironet 2800 Series CAPWAP Software Image	22	0	0

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Network/Access Costs	802.11ac W2 AP w/CA; 4x4:3; Int Ant; 2xGbE B	6	660	3,962
Network/Access Costs	802.11n AP Low Profile Mounting Bracket (Default)	6	0	0
Network/Access Costs	Ceiling Grid Clip for Aironet APs - Recessed Mount (Default)	6	0	0
Network/Access Costs	Cisco Aironet 2800 Series CAPWAP Software Image	6	0	0
Network/Access Costs	802.11ac W2 AP w/CA; 4x4:3; Int Ant; 2xGbE B	1	660	660
Network/Access Costs	802.11n AP Low Profile Mounting Bracket (Default)	1	0	0
Network/Access Costs	Ceiling Grid Clip for Aironet APs - Recessed Mount (Default)	1	0	0
Network/Access Costs	Cisco Aironet 2800 Series CAPWAP Software Image	1	0	0
Network/Access Costs	802.11ac W2 AP w/CA; 4x4:3; Ext Ant; 2xGbE, B Domain	1	711	711
Network/Access Costs	2.4 GHz 3dBi/5 GHz 5dBi Low Profile Antenna, White, RP-TNC	4	30	120
Network/Access Costs	802.11n AP Low Profile Mounting Bracket (Default)	1	0	0
Network/Access Costs	Ceiling Grid Clip for Aironet APs - Recessed Mount (Default)	1	0	0
Network/Access Costs	Cisco Aironet 2800 Series CAPWAP Software Image	1	0	0
Network/Access Costs	Phase 1 - Routing & Switching	1	6,340	6,340
Network/Access Costs	Phase 1 - Wireless	1	18,103	18,103
Network/Access Costs	Phase 1 - Security	1	2,697	2,697
Network/Access Costs	Phase 1 - Authentication / Network Management	1	1,696	1,696
Network/Access Costs	Phase 1 - Annese Remote Support, 1 Hours	1	0	0
Network/Access Costs	Project Completion	1	11,072	11,072

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Community Connectivity (Broadband and Wireless)

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

There is currently no plan for using Smart Schools Bond Act funds for high-speed broadband or wireless connectivity within the community.

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.

Not applicable.

3. Community connectivity projects must comply with all the necessary local building codes and regulations (building and related permits are not required prior to plan submission).

I certify that we will comply with all the necessary local building codes and regulations.

4. Please describe the physical location of the proposed investment.

(No Response)

5. Please provide the initial list of partners participating in the Community Connectivity Broadband Project, along with their Federal Tax Identification (Employer Identification) number.

Project Partners	Federal ID #
(No Response)	(No Response)

6. If you are submitting an allocation for Community Connectivity, complete this table.

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

	Sub-Allocation
Network/Access Costs	(No Response)
Outside Plant Costs	(No Response)
Tower Costs	(No Response)
Customer Premises Equipment	(No Response)
Professional Services	(No Response)
Testing	(No Response)
Other Upfront Costs	(No Response)
Other Costs	(No Response)
Totals:	0

7. Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category. This is especially important for any expenditures listed under the "Other" category. All expenditures must be capital-bond eligible to be reimbursed through the SSBA. If you have any questions, please contact us directly through smartschools@nysed.gov.

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

Smart Schools Investment Plan - Cairo-Durham SSBA Spending Plan

Community Connectivity (Broadband and Wireless)

Page Last Modified: 10/12/2016

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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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 currently has a 200Mbps connection to the Internet via NERIC. This bandwidth was achieved in August, 2016. This exceeds the 100Mbps per 1,000 students requirement, given current and anticipated future enrollment.

- 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	1,256	125,600	125.6	200	200	9/1/2016

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.

We have worked with a well established networking vendor to evaluate our current wireless network. While it currently covers all of our schools, we wish to increase the performance and "device density" in order to build a foundation for a one-to-one device deployment. We have relied on their experience to select specific hardware and designs to meet our goals, but have also vetted those designs with the district's Network Administrator. Lastly, design was specifically shaped to include an access point (AP) in each classroom as a means of preventing more than 30 devices from connecting to any given AP.

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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.

(No Response)

- 6. Describe how the proposed technology purchases will:

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

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

(No Response)

- 7. Where appropriate, describe how the proposed technology purchases will enhance ongoing communication with parents and other stakeholders and help the district facilitate technology-based regional partnerships, including distance learning and other efforts.

(No Response)

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

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

(No Response)

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

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

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

(No Response)

9b. Enter the primary Institution phone number.

(No Response)

9c. Enter the name of the contact person with whom you consulted and/or will be collaborating with on innovative uses of technology and best practices.

(No Response)

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

Are there nonpublic schools within your school district?

- Yes
- No

11. Nonpublic Classroom Technology Loan Calculator

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

See:

http://www.p12.nysed.gov/mgtserv/smart_schools/docs/Smart_Schools_Bond_Act_Guidance_04.27.15_Final.pdf.

	1. Classroom Technology Sub-allocation	2. Public Enrollment (2014-15)	3. Nonpublic Enrollment (2014-15)	4. Sum of Public and Nonpublic Enrollment	5. Total Per Pupil Sub-allocation	6. Total Nonpublic Loan Amount
Calculated Nonpublic Loan Amount	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

12. To ensure the sustainability of technology purchases made with Smart Schools funds, districts must demonstrate a long-term plan to maintain and replace technology purchases supported by Smart Schools Bond Act funds. This sustainability plan shall demonstrate a district's capacity to support recurring costs of use that are ineligible for Smart Schools Bond Act funding such as device maintenance, technical support, Internet and wireless fees, maintenance of hotspots, staff professional development, building maintenance and the replacement of incidental items. Further, such a sustainability plan shall include a long-term plan for the replacement of purchased devices and equipment at the end of their useful life with other funding sources.

By checking this box, you certify that the district has a sustainability plan as described above.

13. Districts must ensure that devices purchased with Smart Schools Bond funds will be distributed, prepared for use, maintained and supported appropriately. Districts must maintain detailed device inventories in accordance with generally accepted accounting principles.

By checking this box, you certify that the district has a distribution and inventory management plan and system in place.

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

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

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Classroom Learning Technology

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	Sub-Allocation
Interactive Whiteboards	(No Response)
Computer Servers	(No Response)
Desktop Computers	(No Response)
Laptop Computers	(No Response)
Tablet Computers	(No Response)
Other Costs	(No Response)
Totals:	0

15. **Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category. This is especially important for any expenditures listed under the "Other" category. All expenditures must be capital-bond eligible to be reimbursed through the SSBA. If you have any questions, please contact us directly through smartschools@nysed.gov.**

Please specify in the "Item to be Purchased" field which specific expenditures and items are planned to meet the district's nonpublic loan requirement, if applicable.

NOTE: Wireless Access Points that will be loaned/purchased for nonpublic schools should ONLY be included in this category, not under School Connectivity, where public school districts would list them.

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

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

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Pre-Kindergarten Classrooms

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1. Provide information regarding how and where the district is currently serving pre-kindergarten students and justify the need for additional space with enrollment projections over 3 years.

(No Response)

2. Describe the district’s plan to construct, enhance or modernize education facilities to accommodate pre-kindergarten programs. Such plans must include:

- Specific descriptions of what the district intends to do to each space;
- An affirmation that pre-kindergarten classrooms will contain a minimum of 900 square feet per classroom;
- The number of classrooms involved;
- The approximate construction costs per classroom; and
- Confirmation that the space is district-owned or has a long-term lease that exceeds the probable useful life of the improvements.

(No Response)

3. Smart Schools Bond Act funds may only be used for capital construction costs. Describe the type and amount of additional funds that will be required to support ineligible ongoing costs (e.g. instruction, supplies) associated with any additional pre-kindergarten classrooms that the district plans to add.

(No Response)

4. All plans and specifications for the erection, repair, enlargement or remodeling of school buildings in any public school district in the State must be reviewed and approved by the Commissioner. Districts that plan capital projects using their Smart Schools Bond Act funds will undergo a Preliminary Review Process by the Office of Facilities Planning.

Please indicate on a separate row each project number given to you by the Office of Facilities Planning.

Project Number
(No Response)

5. If you have made an allocation for Pre-Kindergarten Classrooms, complete this table. Note that the calculated Total at the bottom of the table must equal the Total allocation for this category that you entered in the SSIP Overview overall budget.

	Sub-Allocation
Construct Pre-K Classrooms	(No Response)
Enhance/Modernize Educational Facilities	(No Response)
Other Costs	(No Response)
Totals:	0

6. Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category. This is especially important for any expenditures listed under the "Other" category. All expenditures must be capital-bond eligible to be reimbursed through the SSBA. If you have any questions, please contact us directly through smartschools@nysed.gov. Add rows under each sub-category for additional items, as needed.

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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)

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Replace Transportable Classrooms

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- 1. Describe the district’s plan to construct, enhance or modernize education facilities to provide high-quality instructional space by replacing transportable classrooms.

(No Response)

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

Please indicate on a separate row each project number given to you by the Office of Facilities Planning.

Project Number
(No Response)

- 3. For large projects that seek to blend Smart Schools Bond Act dollars with other funds, please note that Smart Schools Bond Act funds can be allocated on a pro rata basis depending on the number of new classrooms built that directly replace transportable classroom units.

If a district seeks to blend Smart Schools Bond Act dollars with other funds describe below what other funds are being used and what portion of the money will be Smart Schools Bond Act funds.

(No Response)

- 4. If you have made an allocation for Replace Transportable Classrooms, complete this table. Note that the calculated Total at the bottom of the table must equal the Total allocation for this category that you entered in the SSIP Overview overall budget.

	Sub-Allocation
Construct New Instructional Space	(No Response)
Enhance/Modernize Existing Instructional Space	(No Response)
Other Costs	(No Response)
Totals:	0

- 5. Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category. This is especially important for any expenditures listed under the "Other" category. All expenditures must be capital-bond eligible to be reimbursed through the SSBA. If you have any questions, please contact us directly through smartschools@nysed.gov.

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

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

Smart Schools Investment Plan - Cairo-Durham SSBA Spending Plan

High-Tech Security Features

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- 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)

- 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)

- Was your project deemed eligible for streamlined Review?

- Yes
- No

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

Name	License Number
(No Response)	(No Response)

- If you have made an allocation for High-Tech Security Features, complete this table.

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

	Sub-Allocation
Capital-Intensive Security Project (Standard Review)	(No Response)
Electronic Security System	(No Response)
Entry Control System	(No Response)
Approved Door Hardening Project	(No Response)
Other Costs	(No Response)
Totals:	0

- Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category. This is especially important for any expenditures listed under the "Other" category. All expenditures must be capital-bond eligible to be reimbursed through the SSBA. If you have any questions, please contact us directly through smartschools@nysed.gov.

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

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

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Report

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PPU Report
