

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

Bonnie Mangicaro

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

315-622-7120

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

bmangicaro@liverpool.k12.ny.us

2. **Please indicate below whether this is the first submission, a new 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 (Checked)

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 (Checked)

Teachers (Checked)

Students (Checked)

Community members (Checked)

- 4a. **If your district contains non-public schools, have you provided a timely opportunity for consultation with these stakeholders?**

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. (Checked)

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. (Checked)

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. (Checked)

The district prepared a final plan for school board approval and such plan has been approved by the school board. (Checked)

The final proposed plan that has been submitted has been posted on the district's website. (Checked)

- 5a. **Please upload the proposed Smart Schools Investment Plan (SSIP) that was posted on the district's website. Note that this should be different than your recently submitted Educational Technology Survey.**

LIVERPOOL CSD

Smart Schools Investment Plan -

SSIP Overview

Status Date: 12/09/2015 10:32 AM

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.

8,800

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.

(No Response)

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:

\$5,345,676

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	900,000
Connectivity Projects for Communities	0
Classroom Technology	1,520,470
Pre-Kindergarten Classrooms	0
Replace Transportable Classrooms	0
High-Tech Security Features	0
Totals:	2,420,470.00

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

We already provide wireless access to all school buildings.
The District is Upgrading Network Backbone from 1Gb to 10Gb
High School & Liverpool Middle School Core Switch replacement (2)
44 Site Switches

- 2. Briefly 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 success of the Liverpool Central School District Technology Plan requires adequate educational and technical staffing, as well as a structured approach for providing assistance to staff when needed. The teaching assistants with technology specialization (TATS) and the Turnkey Trainers must continue to address the ongoing issues related to the support of technology integration. This support function includes modeling the use of technology tools and curriculum specific software in classrooms with individual teachers and small groups, as well as searching out specialized software and web resources for teachers to use in support of their lessons. The support function also includes helping teachers explore the best ways to use technology with students.

The School Library Media Specialist meet monthly to discuss curriculum and how library technologies can assist teachers in delivery curriculum. BOCES Support- The Model Schools Coordinator from the OCM BOCES Regional Information Center is in the District one day per week throughout the year. The role of this person is to support classroom instruction and provide professional development in both workshop and classroom settings. Additionally, a CoSer for Distance Learning Services provides two on-site days for instructional implementation of video conferencing and distance learning collaborations in classrooms.

Online Tutorial, Resources, and Collaboration tools - The newly designed District website and our First Class email system have online tutorials created to support specific curricular areas and/or specific software.

10Gb interconnection throughout the District will increase access point connectivity bandwidth which is currently limited due to network infrastructure. The goal of providing consistent bandwidth to all devices will be met with this upgrade.

- 3. To ensure that districts maximize the return on their investment in education technology and devices, Smart Schools Bond Act funds used for technology infrastructure investments must increase the number of school buildings that meet or exceed the Federal Communications Commission minimum speed standard of 100 Mbps per 1,000 students.

Please describe how you will use SSBA funds to meet this standard.

The district will be purchasing additional Internet bandwidth through our local budget to meet the minimum speed standard. No SSBA funds will be used for meeting this standard.

- 3a. 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.

(No Response)

- 4. If the district wishes to have students and staff access the Internet from wireless devices within the school building, or in close proximity to it, it must first ensure that it has a robust Wi-Fi network in place that has sufficient bandwidth to meet user demand.

Please describe how you have quantified this demand and how you plan to meet this demand.

The district will purchase the additional bandwidth through local funds.

- 5. 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.

Project Number
42-15-01-06-7-999-SB1

6. **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

- 6a. **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. (Checked)

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

Name	License Number
Nicholas Signorelli	024017

8. **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	0
School Internal Connections and Components	900,000
Professional Services	0
Testing	0
Other Upfront Costs	0
Other Costs	0
Totals:	900,000.00

9. **Please specify what is included under Other Costs above.**

(No Response)

LIVERPOOL CSD

Smart Schools Investment Plan -

Community Connectivity (Broadband and Wireless)

Status Date: 12/09/2015 10:32 AM

1. Briefly 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).

(No Response)

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:	

7. Please specify what is included under Other Costs above.

(No Response)

- 1. As a precondition to any purchase of devices using a Smart Schools allocation, a district must increase the number of school buildings that meet or exceed the Federal Communications Commission minimum speed standard of 100 Mbps per 1,000 students.**

Please describe how your district already meets or is planning to meet this standard within 12 months of plan submission.

The District will purchase additional bandwidth through local budget.

- 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.**

(No Response)

- 2. If the district wishes to have students and staff access the Internet from wireless devices within the school building, or in close proximity to it, it must first ensure that it has a robust Wi-Fi network in place that has sufficient bandwidth to meet user demand.**

Please describe how you have quantified this demand and how you plan to meet this demand.

The district wireless network has been upgraded to the latest (802.11ac) standard of 1 Gbps wireless. Density of access points has been increased by 115%.

- 3. 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. (Checked)

- 4. Describe the devices you intend to purchase and their compatibility with existing or planned platforms or systems.**

We will augment and upgrade our existing inventory of interactive whiteboards. We will replace teacher instructional laptops and repurpose the turned in laptops for student use. These items will seamlessly integrate with our existing infrastructure. We will also upgrade the in-district data infrastructure from 1 Gbps to 10 Gbps. Core Switches and site switches will be replaced to accommodate the increase bandwidth to end devices.

5. 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?")

Technology Plan did not address both students with disabilities and assistive technology. The planned purchases will rectify this omission. The laptop computers have dictation and other assistive technologies built in to the OS. The interactive projectors will enable students diagnosed with disabilities such as autism, ADHD, and expressive/respective language disorder respond to visuals and the interactivity these projectors provide in the classroom.

6. Where appropriate, briefly 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)

7. 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 Technology Advisory Team consists of the following subcommittees: Planning and Policy, Research and Design, Technology Standards, and Professional Development, as well as a Technology Plan subcommittee which is responsible for this document. The committee consisted of Curriculum Directors, Asst. Supt. for Support Services and Curriculum, Instruction and Assessment, Teachers, Non-Instructional Staff, Technology Staff, Library Media Specialists, Community and Parent members. As a subcommittee of the District Technology Advisory Team, members attended meetings, webinars and work sessions between January 15, 2015 and February 12, 2015 to review and discuss the various components of the plan. During these meetings, rich discussions took place regarding the definition of instructional technology in our schools, engaging staff and students with technology, developing graduates who are college and career ready for varied post-high school and work settings and occupations, as well as topics including Bring Your Own Device (BYOD), flipped classrooms, blended classrooms and instruction, and how best to utilize existing and new technology resources in the next four years. The District established an implementation plan for the next phases of technology training and acquisition that includes objectives for each area keeping student success at the center of the plan. This technology strategic plan is intended to integrate with Liverpool's educational initiatives, as well as to support our District's vision, mission and beliefs. The plan was developed from the strong stance, supported by research, that technology can significantly enhance the teaching and learning environment. Furthermore, technology is seen as a critical component of our efforts to adequately prepare our students. This technology plan defines the vision and objectives for continuing to move our students and Liverpool's learning community forward in the 21st century. The committee members recognized the following points for moving forward to support the vision, mission and goals: Expanding the technology tools available in the district working towards a hybrid 1 to 1 infrastructure Exploring project/problem-based learning Matching computer resources to instruction, curriculum, and assessment requirements Providing professional development in various formats and timeframes for instructional and non-instructional staff Providing both the tools and leadership to move toward a paperless learning and office environment Expanding Google Apps for Education use in the district. K-12 Workshops on Superintendent's Conference Days K-12 Workshops on District Professional Development Days Building Level Workshops to support Building Goals established by the School Excellence Teams (SET) K-12 Mentor-Mentee Program K-12 New Teacher Induction Program Grade Level/ Departmental Workshops Summer Technology Workshops to support curriculum, instruction, and assessment.

Professional development approaches include the following:

Buildings create technology professional development plans to be implemented during the half day training sessions, as well as during after school sessions, and planning period sessions. The topics include website development, use of hardware, software, and apps, as well as integration of technology with assessment and instruction.

Liverpool staff, including teachers, librarians, TATS and technology personnel, participate as Turnkey Trainers for District technology initiatives, effectively and creatively using Chromebooks, iPads, and apps in the dissemination of information and instruction, use of projector and cell phones, These Turnkey Trainers provide in-district professional development trainings for K-12 teachers and administrators in structured formats that include faculty meeting presentations, conference day training sessions, peer coaching during scheduled and requested sessions, mentor program training, and summer sessions, as well as after school help desk and/or training sessions.

The Turnkey Trainers hold monthly meetings to learn and review new technologies relating to instructional software and hardware. The Trainers are expected to return to their buildings to share learnings and skills, to train and provide the staff with informed and innovative technology practices that should model research-based strategies, and to assist with troubleshooting these practices. Scheduled training sessions are coordinated at each school with the building principal.

In addition, professional development activities are provided by the District and by the individual schools as part of professional development sessions to support the District Goals for achievement and technology experiences:

- K-12 Workshops on Superintendent's Conference Days
- K-12 Workshops on District Professional Development Days
- Building Level Workshops to support Building Goals established by the School Excellence Teams (SET)
- K-12 Mentor-Mentee Program
- K-12 New Teacher Induction Program
- Grade Level/ Departmental Workshops
- Summer Technology Workshops to support curriculum, instruction, and assessment

Needs assessments have been used to gather information and perceptions from the Liverpool staff to ascertain their levels of technology expertise, their instructional needs for technology training, and their awareness of the skills students will need to perform as 21st century learners and thinkers.

The 21st century skills as outlined in Appendix A are the centerpiece of the Partnership for 21st Century Skills (www.p21.org) and have been used in developing the technology plan as one step in the preparation of college and career ready students.

In 2014, a research and design team comprised of Liverpool educators involved in the Central New York Leadership Development Program

conducted an issue analysis on the topic of instructional technology.

- 8. 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. (Checked)

- 9. The Smart Schools Bond Act provides that any district hardware 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. Accordingly, a district Smart Schools Investment Plan that 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?

No

- 9a. All students attending nonpublic schools in your District are eligible to receive loans of classroom technology equal on a per pupil basis to the per pupil amounts spent on classroom technology for public school students (up to \$250/pupil.)
See:
http://www.p12.nysed.gov/mgtserv/smart_schools/docs/Smart_Schools_Bond_Act_Guidance_04.27.15_Final.pdf.

Describe your plan to loan purchased hardware to nonpublic schools within your district. The plan should use your district's budget for classroom devices to calculate the nonpublic student loan amount, within the framework of the guidance.

(No Response)

- 9b. 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.

(No Response)

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

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

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

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

- 12. 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	819,470
Computer Servers	(No Response)
Desktop Computers	(No Response)
Laptop Computers	701,000
Tablet Computers	(No Response)
Other Costs	(No Response)
Totals:	1,520,470.00

13. **Please specify what is included under Other Costs above.**

(No Response)

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.

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:	

6. Please specify what is included under Other Costs above.

(No Response)

LIVERPOOL CSD

Smart Schools Investment Plan -

Replace Transportable Classrooms

Status Date: 12/09/2015 10:32 AM

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.

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:	

5. Please specify what is included under Other Costs above.

(No Response)

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.

Project Number
(No Response)

3. Was your project deemed eligible for streamlined Review?

- 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.

(No Response)

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)
Main Entrance Electronic Security System (Streamlined Review)	(No Response)
Main Entrance Entry Control System (Streamlined Review)	(No Response)
Approved Door Hardening Project (Streamlined Review)	(No Response)
Other Costs	(No Response)
Totals:	

6. Please specify what is included under Other Costs above.

(No Response)