LHRIC

2025-2030

LOWER HUDSON REGIONAL INFORMATION CENTER
REGIONAL TECHNOLOGY PLAN

793 Plan

SOUTHERN WESTCHESTER BOCES

PUTNAM/NORTHERN WESTCHESTER BOCES

ROCKLAND BOCES

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SECTION ONE | REGIONAL TECHNOLOGY PLANNING PROCESSES

The Lower Hudson Regional Information Center (LHRIC) is committed to seeking input from constituents to guide the development of the regional plan and services. To improve services and deepen school consortium partnerships, the LHRIC organized an Advisory Committee. The LHRIC Advisory Committee represents diverse roles and responsibilities, comprising approximately 30 volunteers across each BOCES region with roles including BOCES superintendents, school district superintendents, assistant superintendents for business, assistant superintendents for instruction, directors of technology and the three BOCES curriculum managers/directors. The LHRIC Advisory Committee meets four times per year to assist with future planning. The committee charters representatives to act on behalf of their region's districts and BOCES and provide input on the direction of the LHRIC and the many critical consortium issues that arise. Representatives from the Yonkers Schools as well as our non-component school district, Mamaroneck Schools, are invited when we develop the 793 plan.

This year, the Advisory Committee met two additional times to work on the 793 Plan. State priorities, regional challenges and priorities, and local district instructional technology plan goals were the foundation for the goals of this Regional Technology Plan.

As an advisory, we first identified the needs and challenges of our region with a review of the district instructional technology plans. We prioritized those needs on a regional level to establish direction for the regional plan. We then developed goals and objectives that align with the state priorities and regional priorities. These goals and objectives will continue to be the focus of the 2025–2030 plan.

Incorporating the feedback from additional groups is also an important part of the planning process. The LHRIC participates in a variety of statewide planning groups such as: Data Warehouse group, Finance Manager group, Test Scoring group, the RIC Directors Technical Committee, Statewide RIC Data Structure/Report Committee, Model Schools, RIC One Data Privacy and Security Team meetings, and the Cyber Intelligence Task Force, etc. Our partnership with Rockland, Putnam | Northern Westchester and Southern Westchester BOCES offers continued opportunities for collaboration and feedback. Participation in these groups allows us to have a broader view of the innovations and directions that others are pursuing around the state.

We also elicit feedback through periodic service surveys, district conversations with Account Managers, and feedback from the Technology Leadership Institute and other regional K-12 technology conferences.

CONTEXT

SECTION TWO | CURRENT CONTEXT

Mission Statement:

Lower Hudson Regional Information Center
The mission of the LHRIC is to provide K-12 Leadership with our partner districts to achieve their educational technology goals.

Scope	Current Environment – opportunities and challenges	Regional Priorities and Needs
Technology Leadership	• Expanding information technology ecosystem • Maintaining 1-to-1 environments • Inflation, supply chain, and other influencers • Increasing equitable access as recommended by the NYSED's Blue Ribbon Commission • Physical Security Systems and Infrastructure • Unified Communications • Challenges with financially maintaining a one-to-one environment • Increased use and support of online learning and video conferencing • Increased reliance on technology for CBT and other online assessments • Increased reliance on technology for non-instructional purposes (i.e. voting, streaming games, extra-curricular activities)	Enabling and Maintaining Reliable Technology
Instructional Leadership	• Increased use of online learning • Increased use of instructional technology • Impact of use of personal devices and social media on students' mental health • Full implementation of the Computer Science and Digital Fluency standards K-12 • New NYSED learning standards • Enhancing professional development for educators as recommended by the NYSED's Blue Ribbon Commission • Impact of Artificial Intelligence	Enhanced Teaching and Learning, Support of district and BOCES work in addressing Computer Science & Digital Fluency Standards Support

Scope	Current Environment – opportunities and challenges	Regional Priorities and Needs
Data Leadership	• Evolving data and expanding reporting requirements • ESSA (pandemic impact) • Increased use of and interest in dashboards • New applications and enhancement to existing solutions • Support districts and BOCES in providing data for the NYS Regionalization project • Increased focus on data analytics and data driven decision making	Data-Informed Educators and Staff, Enhanced Data Analytics
Data Privacy and Security	• Cybersecurity threats • Education Law 2-d compliance • NIST CSF compliance • Insurance providers' requirements • Vendor partner management • District/Comptroller's audits • NYSED Cybersecurity reviews	Protected Technology, Protected Data

SECTION THREE | 5-YEAR REGIONAL TECHNOLOGY PLAN

Scope	Goals	Two-year Performance Objectives	Metrics
Technology Leadership	• Modernize the technology ecosystem to support instructional and administrative needs • Aligned NYSED priorities: State Priority 1: improving digital equity, including increasing student and teacher access to devices and broadband internet, both in school buildings and in place(s) of residence • Aligned regional priorities: enabling and maintaining reliable technology	• Provide an infrastructure that supports equitable access for all districts • Continue to support district management of 1-to-1, expanded technology • Working towards a more secure environment • Provide guidance on infrastructure for physical security and Unified Communication • Focus on staff and resources to support changes and upgrades • Assist with management and planning for 1-to-1, expanded technology	• Service participation • Bandwidth consumption and availability • Upgrades • Research and development of new technologies to modernize and enhance services • Cost and value analysis • New purchases • Tracking participation in security fundamentals training. • Formalization and enhancing our security postures and procedures

Scope	Goals	Two-year Performance Objectives	Metrics
Instructional Leadership	• Support effective use of learning technology to support instructional needs • Aligned NYSED priorities: State Priority 2: increasing access to technology-enhanced, culturally- and linguistically-responsive, differentiated, and personalized learning environments to support improved teaching and learning for all students, including students with disabilities and English language learners (ELLs) • Aligned NYSED priorities: State Priority 3: increasing equitable access to high-quality instruction, courses, and multi-modal learning experiences through digital technology, including but not limited to advanced courses, for all districts and BOCES, including small, rural, and/or high-needs districts • Aligned NYSED priorities: State Priority 4: providing access to relevant and rigorous professional development to ensure educators and leaders are proficient in technology for both instructional and administrative purposes • Aligned regional priorities: enhanced teaching and learning, computer science & digital fluency standards support	• Assist districts and BOCES in providing flexible learning environments that encourage choice and differentiation for all students • Develop thoughtful approach to help districts and BOCES implement and assess the NYS Computer Science and Digital Fluency Standards • Expand thoughtful learning opportunities in all areas of instructional technology that supports the adult learner • Assist districts and BOCES in increasing equitable access to high-quality digital resources and standards-based, technology-rich learning experiences • Empower districts and BOCES to leverage AI (Artificial Intelligence) to improve educational efficiencies, enrich teacher learning, and optimize the student learning environment • Developing a leadership strand in TLI to prepare district and BOCES leaders to be futureready in a technology rich learning environment.	• Portfolio enhancements and district participation • Course alignment to priorities • Materials produced with an intentional focus on equitable access • District feedback and evaluations

Scope	Goals	Two-year Performance Objectives	Metrics
Data Leadership	• Modernize the data ecosystem to support instructional and administrative needs • Align NYSED priorities: State Priority 5: utilizing, maintaining, and continuing to enhance a robust data environment, including but not limited to the multiple data collection points within the student information repository system (SIRS) and all data applications within the New York State business application portal, to positively impact instruction and decision-making • Align regional priorities: data-informed educators and staff, enhanced data analytics	• Support districts and BOCES in centralizing district, school, classroom and student data so instructional decisions are driven by data • Provide vehicles to analyze data to inform, personalize, and guide instruction (Such as data dashboard products) — ensuring that professional learning leads to impactful practice in the teaching and learning environment • Support districts in analysis of student and teacher/principal evaluation data	• District and BOCES participation in service that supports data analysis • Course offerings and participation • Data integrations

Scope	Goals	Two-year Performance Objectives	Metrics
Data Privacy and Security	• Maintain a robust privacy and security posture to support the protection of data and the reliability of the ecosystem • Align NYSED priorities: State Priority 6: implementing and maintaining data privacy and security controls ensuring compliance with all applicable privacy laws and regulations including, but not limited to, New York State Education Law 2-d and the NIST Cybersecurity Framework (CSF) • Align regional priorities: protected technology, protected data	• Educate the community on appropriate use of technology • Provide infrastructures that complement the NIST CSF and promote a safe learning environment. • Protect and prepare against malicious cybersecurity actions • Help districts and BOCES navigate compliance and implement best practices	• Course offerings and participation • Cybersecurity offerings • DPSS participation • DPSS materials • Participation in Statewide DPO Conference

SECTION FOUR | PLAN VALUE

VALUE OF SHARED SERVICES AND THE RELATED REGIONAL COLLABORATIVE PLAN

Shared services and related regional collaborative planning processes increase the buying power of districts and BOCES and support educational agencies in enhancing local capacity by facilitating access to specialized and trusted technology and data experts. In addition to leveraging economies of scale, new technology services require a formal process to evaluate costs. Cost-effectiveness involves more than determining cost, it also involves assignment of a value to districts.

Cost-effectiveness analysis is used to routinely review the cost and effectiveness of services offered through the LHRIC. The goal of cost-effectiveness analysis is to determine that the services being provided are justified in their costs to districts and BOCES.

The LHRIC's standard method of cost-effectiveness analysis includes the following processes:

- Monthly profit/loss statement review of service expenses and associated revenue to ensure fiscal responsibility of operational activities
- A process through which services that are not financially viable are raised to the attention of leadership for action.
- Routine review of service satisfaction from districts and BOCES
- Input from districts and BOCES on new services to be developed or enhancements to existing services through 793 planning.
  - A budget development process through which district and BOCES input is reflected in the proposed budget
  - Proposed expenses are compared against current and proposed district and BOCES contract revenue to ensure coverage of expenses, utilizing a zero-based budget approach

The proposed budget requires voting by component school district and SBWOCES board adoption. Budgets are proposed to the SWBOCES Board and voted by component districts.

Planning is critical to ensuring regions have access to shared services aligned with current needs. Through collaborative planning processes, existing services are modernized, and new services are developed. As the education sector generally has limited access to resources, planning supports essential prioritization of work and responsive allocation of regional resources. This planning supports continuous service improvement and effective provision of services. On page 5, information is available about current needs and priorities. On pages 7–10, the regional direction is defined in the form of a 5-year plan.

SECTION FIVE | REVIEW OF PREVIOUS PLANS

Scope	Goals	Two-year Performance Objectives	Progress to Date
Technology Leadership	• Modernize the technology ecosystem to support instructional and administrative needs • Aligned NYSED priorities: State Priority 1: improving digital equity, including increasing student and teacher access to devices and broadband internet, both in school buildings and in place(s) of residence • Aligned regional priorities: enabling and maintaining reliable technology	• Provide an infrastructure that supports equitable access for all • Assist with management and planning for 1-to-1, expanded technology	• Increased participation in Network Support Services by adding two new districts • Bandwidth demand continues to grow with 10% district participation growth in the past year. • Completed work on upgrading of the data center infrastructure core. • Deployment of internal firewalls to enhance security of district networks and LHRIC data center

Scope	Goals	Two-year Performance Objectives	Progress to Date
Instructional Leadership	• Support effective use of learning technology to support instructional needs • Aligned NYSED priorities: State Priority 2: increasing access to technology-enhanced, culturally- and linguistically-responsive, differentiated, and personalized learning environments to support improved teaching and learning for all students, including students with disabilities and English language learners (ELLs) • Aligned NYSED priorities: State Priority 3: increasing equitable access to high-quality instruction, courses, and multi-modal learning experiences through digital technology, including but not limited to advanced courses, for all districts, including small, rural, and/or high-needs districts • Aligned NYSED priorities: State Priority 4: providing access to relevant and rigorous professional development to ensure educators and leaders are proficient in technology for both instructional and administrative purposes • Aligned regional priorities: enhanced teaching and learning, computer science & digital fluency standards support	• Assist districts and BOCES in providing flexible learning environments that encourage choice and differentiation for all students • Develop thoughtful learning targets that address NYS Computer Science and Digital Fluency Standards • Expand thoughtful learning opportunities in all areas of instructional technology that supports the adult learner • Assist districts and BOCES in increasing equitable access to high-quality digital resources and standards-based, technology-rich learning experiences	• Enhanced our ability to serve districts and BOCES currently implementing eSports programming and competition. • Online webinars, self-paced courses, face-to-face courses, and customized professional learning cohorts continue to address the K-12 NYS CS/DF standards • Expansion of Learning Pathways opportunities, which embody how adults learn. The pathways allow participants to choose the learning that meets their needs and provides learning opportunities in multiple modalities • Evidence of a high degree of participation in the learning pathways programs • A high degree of participation in learning opportunities for leaders and teachers around setting AI policy and practice in district and BOCES • Continue to enhance our instructional and administrative portfolio of digital solutions in support of learning for all • Expanded the ability for districts to support ELL students and families

Scope	Goals	Two-year Performance Objectives	Progress to Date
Data Leadership	• Modernize the data ecosystem to support instructional and administrative needs • Align NYSED priorities: State Priority 5: utilizing, maintaining, and continuing to enhance a robust data environment, including but not limited to the multiple data collection points within the student information repository system (SIRS) and all data applications within the New York State business application portal, to positively impact instruction and decision-making • Align regional priorities: data-informed educators and staff, enhanced data analytics	• Support districts and BOCES in centralizing district, school, classroom and student data so instructional decisions are driven by data • Provide vehicles to analyze data to inform, personalize, and guide instruction — ensuring the data analysis leads to impactful practices in the teaching and learning environment	• Professional learning opportunities continue with benchmark screeners to assist with MTSS instruction. 51 districts participate in assessment service • Creation of MTSS and Data Dashboard service that assists with bringing many data points to a single platform to help in data analysis of a student, class, or building level (32 districts participate) • Data integrations • Infrastructure for the Data Warehouse was rebuilt which improved performance and enhanced security • District participation in Data Analysis Services increased by 6%

Scope	Goals	Two-year Performance Objectives	Progress to Date
Data Privacy and Security	• Maintain a robust privacy and security posture to support the protection of data and the reliability of the ecosystem • Align NYSED priorities: State Priority 6: implementing and maintaining data privacy and security controls ensuring compliance with all applicable privacy laws and regulations including, but not limited to, New York State Education Law 2-d and the NIST Cybersecurity Framework (CSF) • Align regional priorities: protected technology, protected data	• Educate the community on appropriate use of technology • Provide infrastructures that complement the NIST CSF and promote a safe learning environment. • Protect and prepare against malicious cybersecurity actions • Help districts and BOCES navigate compliance and implement best practices • Align training and Phishing campaigns to the NIST CSF • Introduce districts to the Statewide Student Data Privacy Consortium for Ed Law 2-d	• Increased number of resources to provide increased training and awareness of data privacy and cybersecurity • Participation in the Data Privacy and Security Service increased to 90% • Continued work on the LHRIC, district and BOCES compliance with the NIST Cybersecurity Framework • Investment in deploying firewalls to further protect the LHRIC's private WAN • 24/7 monitoring of the LHRIC's core network in partnership with a SOC (Security Operations Center) provider • Continued work with BOCES on their Incident Response and Disaster Recovery Plans • Provide leadership to districts and BOCES on data privacy and cybersecurity

APPENDIX A

APPENDIX A | REGULATORY REQUIREMENTS SUMMARY

All plans must include Appendix A, which identifies the pages of the plan that addressed the required regulatory elements. Please indicate the page number(s) where the Regional Technology Plan addresses the following required elements:

REQUIRED ELEMENT	PAGE(S)
1. A description of the regional collaborative planning process.	4
2. A description of how the regional technology plan supports efficient and effective provision of technology services, which includes a description of major challenges to be addressed by the plan;	5–6, 11
3. A description of how the regional technology plan addresses the technology and data priorities and needs of the state, and how such plan will increase school district access to technology and assist school districts and BOCES in developing and maintaining robust information privacy, information security, and cybersecurity controls;	7–10
• State Priority 1: Improving digital equity, including increasing student and teacher access to devices and broadband internet both in school buildings and in place(s) of residence;	7
• State Priority 2: Increasing access to technology-enhanced, culturally- and linguistically-responsive, differentiated, and personalized learning environments to support improved teaching and learning for all students, including students with disabilities and English language learners (ELLs);	8
• State Priority 3: Increasing equitable access to high-quality instruction, courses, and multi-modal learning experiences through digital technology, including but not limited to advanced courses, for all districts and BOCES, including small, rural, and/or high-needs districts;	8
• State Priority 4: Providing access to relevant and rigorous professional development to ensure educators and leaders are proficient in technology for both instructional and administrative purposes;	8
• State Priority 5: Utilize, maintain, and continue to enhance a robust data environment, including but not limited to the multiple data collection points within the Student Information Repository System (SIRS) and all data applications within the New York State Business Application Portal, to positively impact instruction and decision-making;	9
• State Priority 6: Implementing and maintaining data privacy and security controls ensuring compliance with all applicable privacy laws and regulations including, but not limited to, New York State Education Law 2-d.	10
4. A list of regional priorities and needs that the regional technology plan will address;	5
5. A description of the methods used to identify and prioritize needs in the region, which shall include engagement with key stakeholder groups;	4
6. A list of quantifiable goals and a description of how the goals will directly address the regional technology needs and improve service delivery over the next five years;	7–10
7. Performance objectives for the first two years of the plan;	7–10
8. A description of the procedures that will be put in place to monitor the plan's implementation;	7–10
9. An evaluation of the performance objectives for the previous two years	12–15
10. Appendix A	16
11. Appendix B	17

APPENDIX B | COOPERATIVE PLANNING ASSURANCES

The BOCES District Superintendents within the service delivery area are responsible for approving the regional planning process and certifying the assurances outlined below.

DISTRICT SUPERINTENDENTS' SIGNATURES

I approve the regional collaborative planning process used to develop and maintain our regional technology plan.
I assure that my BOCES participated fully in the development of this regional plan.
I assure that users, as defined in guidance, were substantively involved in the development of this plan.
I assure that all technology services offered by my BOCES and the Regional Information Center are cost-effective.

_____
District Superintendent Signature

_____
District Superintendent Name
Neil P. Boyle

_____
Date
11/18/24

_____
BOCES
Putnam Northern Westchester

_____
District Superintendent Signature

_____
District Superintendent Name

_____
Date
11/18/24

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BOCES
Rockland BOCES

_____
District Superintendent Signature

_____
District Superintendent Name
Harold A. Coles

_____
Date
11/18/24

_____
BOCES
SW BOCES

APPENDIX C | INSTRUCTIONAL AND ADMINISTRATIVE SOFTWARE AND APPLICATIONS

This information is provided under separate cover using the NYSED provided spreadsheet template.