

MONROE RIC

Chapter 793 Plan

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Monroe One BOCES and Monroe 2-Orleans BOCES
Regional Plan for Technology Services



monroe ric
TECHNOLOGY SERVICES

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INTRODUCTION

PURPOSE OF THIS PLAN

Boards of Cooperative Educational Services (BOCES) are required by law and regulations to prepare a regional plan for providing technology services in the supervisory district. Plans must address the requirements outlined in Education Law 1950(4)(c) and the related Part 115.1 of the Commissioner's Regulations. The Monroe Regional Information Center (RIC), under the direction of the District Superintendents, is responsible for facilitating the process and plan development for the 2 BOCES within our service region.

MONROE RIC REGION




Monroe One BOCES
Brighton
East Irondequoit
East Rochester
Fairport
Honeoye Falls -Lima
Penfield
Pittsford
Rush- Henrietta
Webster
West Irondequoit

Monroe 2-Orleans BOCES
Brockport
Churchville -Chili
Gates Chili
Greece
Hilton
Holley
Kendall
Spencerport
Wheatland- Chili

FOCUS OF THE PLAN

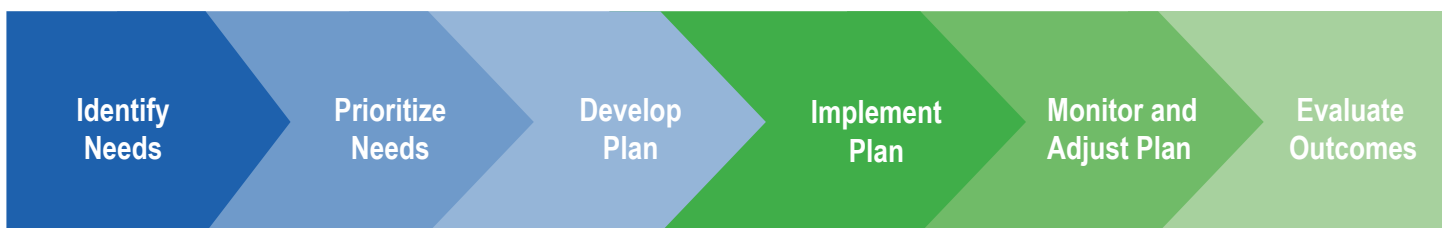
This plan addresses the scope of work in the following areas:

Technology Leadership	Instructional Leadership	Data Leadership	Data Privacy and Security Leadership
			

SECTION 1: REGIONAL TECHNOLOGY PLANNING PROCESS

The plan is collaboratively developed with input from various stakeholders within our component districts and BOCES. This is accomplished through surveys, focus groups, district and BOCES meetings, and the review of component district technology plans to evaluate common needs and goals. Members of RIC leadership have regularly scheduled meetings with District Superintendents, Assistant Superintendents for Instruction, School Business Officials, Directors of Technology, Data Privacy Officers, and the Regional Information Center Regional Advisory Committee (RICRAC).

Participation in statewide groups and committees provides additional information that is also a factor in the planning process. These groups include: SED, CBT work group, DATAG, RIC Directors group meetings, RIC committees, NYSCATE, and SLISA.



TWO PRIMARY COMMITTEES

RIC Strategic Planning Team - A multi-disciplinary technical team that meets monthly. The strategic team is focused on state and regional priorities to achieve organizational goals. The members represent the following services: Data Reporting, Data Integration and Analytics, eCommunications, Finance and HR systems, Infrastructure and Facilities, Project Management and Purchasing, and Instructional Technology.

RIC Regional Advisory Committee (RICRAC) - An advisory team made up of leaders from districts and BOCES that meets quarterly. The team advises the RIC on day-to-day and long-term operations and service offerings. Membership is represented as follows:

- District Superintendent, Monroe One BOCES
- District Superintendent, Monroe 2-Orleans BOCES
- Assistant Superintendent/Director of Monroe RIC, Monroe One BOCES and Monroe 2-Orleans BOCES
- Assistant Superintendent for Finance & Operations, Monroe One BOCES
- School District Superintendents (2)
- School District Assistant Superintendents for Instruction (2)
- School District Technology Directors (2)
- School District Business Officials (2)
- Assistant Directors of Monroe RIC (2)
- Supervising Manager of Communication & Technology Services (CaTS), Monroe 2-Orleans BOCES
- Infrastructure Manager of Monroe RIC

SECTION 2: CURRENT CONTEXT

PLAN SCOPE

Technology Leadership	Instructional Leadership	Data Leadership	Data Privacy and Security Leadership
Cloud	Professional Learning	Information Systems	Assessing Risk
NOC/WAN	Student Learning	Data Management	Access Control
LANS	NYS Computer Science and Digital Fluency Standards	Data Analysis	Data Security
Communication/ Collaboration	Technology Resources	Accountability	Vendor Management

REGIONAL PRIORITIES AND NEEDS

Technology Leadership	Instructional Leadership	Data Leadership	Data Privacy and Security Leadership
Cloud Efficiencies and Security	Virtual and Remote Learning	Data Informed Educators and Staff	Protected Technology
Develop Standardization Procedures and Practices	Enhanced Teaching and Learning	Enhanced Data Quality	Cyber Program
Business Continuity Planning	Implementation of NYS Computer Science and Digital Fluency Standards	Presentation of Actionable Data	Protected Data
Standardize Systems and Responsibilities	Vet and Curate Education Law 2-D Compliant Resources	ESSA Reset	Vendor Assessment

SECTION 3: 5-YEAR REGIONAL TECHNOLOGY PLAN

TECHNOLOGY LEADERSHIP

Regional Priorities

- Cloud, LAN/WAN, NOC/Data Center, Communication and Collaboration

Goal	Objectives	Metric/Measure
Modernize technology ecosystem to support instructional and administrative needs	<ul style="list-style-type: none"> • Continue to advance district adoption of private and public cloud applications for instructional and administrative needs 	<ul style="list-style-type: none"> • % Conversion to cloud classrooms • Teams meeting utilization rate • % Teams and Classroom integration with SIS systems • Integrated cloud SIEM/SOAR adoption rate • Cloud applications uptake (Workflow, etc.)
	<ul style="list-style-type: none"> • Implement standard base templates, access levels and monitoring for all network switch configurations for districts 	<ul style="list-style-type: none"> • Number of districts that have adopted the standard base template • Audit access levels to ensure compliance
	<ul style="list-style-type: none"> • Develop district run books to help with business continuity (I.e. Maintenance, Generators, UPS, NOC equipment) • Implement enhancements to the NOC/Data Center to meet district needs 	<ul style="list-style-type: none"> • Number of districts that defined policy and tested runbooks • Track implementation of NOC enhancements
	<ul style="list-style-type: none"> • Assist districts in the selection and integration of compliant platforms for parent, student, and internal communications 	<ul style="list-style-type: none"> • Number of integrations and implementations. • Monitoring RIC involvement in the selection process

NYSED Aligned Priority:

- Improving digital equity, including increasing student and teacher access to devices and broadband internet both in school buildings and in place(s) of residence

SECTION 3: 5-YEAR REGIONAL TECHNOLOGY PLAN

INSTRUCTIONAL LEADERSHIP

Regional Priorities

- Professional Learning, Student Learning, Technology Resources, NYSED CSDF Standards

Goal	Objectives	Metric/Measure
Engage students in the effective use of technology to obtain college and career readiness skills, knowledge and dispositions	<ul style="list-style-type: none"> • Design and deliver high quality professional learning experiences for PreK-12 teachers, instructional leaders/administrators and support staff. Research-based best practices will be utilized including specific technology embedded strategies for supporting SWD and ELL/MLLs 	<ul style="list-style-type: none"> • Attendance data for PD and regional meetings; district feedback
	<ul style="list-style-type: none"> • Assist districts in the evaluation of technology integration to determine the degree to which instructional practices enhance classroom learning as evidenced by student proficiency 	<ul style="list-style-type: none"> • District survey
	<ul style="list-style-type: none"> • Provide synchronous and asynchronous professional development aligned to NYSCSDF Standards Roadmap to increase awareness and build capacity toward full implementation 	<ul style="list-style-type: none"> • Attendance data for PD and regional meetings; Documentation of articulated curriculum guidance materials
	<ul style="list-style-type: none"> • Explore, curate and communicate with districts the high quality technology tools and resources that support 21st century skill development 	<ul style="list-style-type: none"> • Attendance at PD and regional meetings; RIC-wide database of technology teaching tools

NYSED Aligned Priority:

- 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)
- 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
- Providing access to relevant and rigorous professional development to ensure educators and leaders are proficient in technology for both instructional and administrative purposes

SECTION 3: 5-YEAR REGIONAL TECHNOLOGY PLAN

DATA LEADERSHIP

Regional Priorities

- Information Systems, Data Management, Data Analysis, Accountability

Goal	Objectives	Metric/Measure
Increase the sophisticated use of data to improve fiscal efficiency, instructional effectiveness and student learning	<ul style="list-style-type: none"> • Support districts in the investigation of emerging technology and implementation of information systems 	<ul style="list-style-type: none"> • Analysis of districts implementing and utilizing new primary and ancillary systems
	<ul style="list-style-type: none"> • Foster an organized system to effectively manage and ensure clean, consistent, and accurate data 	<ul style="list-style-type: none"> • Review of support call volumes • Participation of districts in professional development
	<ul style="list-style-type: none"> • Provide means to manage, view and analyze data sources to produce actionable information for data decision making 	<ul style="list-style-type: none"> • Review of participating districts in online dashboards
	<ul style="list-style-type: none"> • Provide ESSA and State reporting guidance and resources to ensure data quality 	<ul style="list-style-type: none"> • Decrease of inaccurate data and corrections to reported data

NYSED Aligned Priority:

- Providing access to relevant and rigorous professional development to ensure educators and leaders are proficient in technology for both instructional and administrative purposes
- 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

SECTION 3: 5-YEAR REGIONAL TECHNOLOGY PLAN

DATA PRIVACY AND SECURITY LEADERSHIP

Regional Priorities

- Assessing Risk, Access Control, Data Security, Vendor Management

Goal	Objectives	Metric/Measure
Improve operational best practices for protected data access and usage	<ul style="list-style-type: none"> • Utilize Target Profile trends to identify risk and multi-year roadmap for RIC and regional cyber priorities 	<ul style="list-style-type: none"> • Improved target profile • Identification of annual common priorities
	<ul style="list-style-type: none"> • Create policy, develop process, and publish procedures on secure account life cycle management 	<ul style="list-style-type: none"> • Adoption rate • Account security checks • Account attack versus potential compromise reports • Utilization of least privilege
	<ul style="list-style-type: none"> • Provide training to support operational best practices for data protection • Define and implement policy for data encryption of data at rest and in transit and ensure recoverability of data 	<ul style="list-style-type: none"> • Review reliability of backups results • Yearly penetration testing results • Attendance of training • Number of offerings
	<ul style="list-style-type: none"> • Effectively manage vendor relationships in order to mitigate risks and support compliance with data protection laws 	<ul style="list-style-type: none"> • Vendor Assessments on file; Periodic vendor assessment review as defined by policy

NYSED Aligned Priority:

- Implementing and maintaining data privacy and security controls ensuring compliance with all applicable privacy laws and regulations including, but not limited to, New York Education Law 2d

SECTION 4: PLAN VALUE

Shared services provided by Monroe One BOCES and Monroe 2–Orleans BOCES increase opportunities to enhance operational efficiencies and cost effectiveness for our districts through the use of standards and collaborative planning. Service pricing is reviewed annually with a maximum 2% increase, with the exception of any services that are going through a cost increase due to changes in the industry standard. These rates are shared with our districts prior to approval. Individual district meetings occur to understand how existing services are being utilized and can be modernized, as well as to discuss opportunities for new service development.

The nature of the public education sector often limits the ability for schools to find and access technology-based resources. The Monroe One Regional Technology Plan supports essential prioritization of work and responsive allocation of resources. The plan will increase school district access to technology and assist school districts in developing and maintaining robust information privacy, information security, and cyber security controls. Page 5 depicts our current needs and priorities and pages 6-9 outlines the Monroe One regional 5-year plan.



Goal	Action(s)	Measurement
Explore opportunities to enhance operational efficiencies and cost effectiveness using standards and shared service models	<ul style="list-style-type: none"> Identify potential cost savings for each district based on feedback and modify services as needed 	<ul style="list-style-type: none"> Data shared annually at district level meetings Identified service models shared with RICRAC, Directors of Technology, and School Business Officials
	<ul style="list-style-type: none"> Identify tools and resources for establishing and monitoring business intelligence and IT metrics 	<ul style="list-style-type: none"> A list of tools and resources providing business intelligence and IT metrics shared with Directors of Technology

SECTION 5: RESULTS FROM PREVIOUS PLAN

A. Data

- Conducted an overview of ESSA for all districts and provided district-specific deep dives into ESSA data
- Implemented a District Data Coordinator professional development series throughout the year for new and current DDCs and conducted one-on-one End Of Year Reporting sessions to assist schools with data collection, reporting and verification
- Provided professional development in the use of formative assessments and Level 1 Instructional Reports to inform instruction and learning to administrators and teachers
- Developed and distributed a set of regional reports with aggregate state testing data broken down by subgroups for component district ASIs
- Provided assistance to District Business Departments with review and restructuring of financial data and accounts for ESSA and GASB 84 reporting
- Provided increased professional development and workflow review and assistance to District Business Departments due to high staff turnover and vacancies
- Implementation of timekeeping modules to increase efficiencies within District Payroll offices
- Implementation of CO-OP bidding module streamlining the data collection and reporting process
- Increased direct support and training to participating districts for management of employee benefits in an online enrollment system including implementation of Employee Self Service module which increased HR staff productivity



B. Data Center Infrastructure

- VM infrastructure upgrade
- Storage arrays upgrade
- Internet links (added 10g connection)
- Core switch replacement
- Backup system update

C. Data Privacy and Cybersecurity

- Collaboration and guidance on best practices for securing Financial and HR data access and distribution
- Implemented a cyber security assessment process beginning with vendors that were identified as providing critical systems to districts
- Established Data Governance Team
- Established Change Control Approval Process
- Conducted NIST CSF assessment



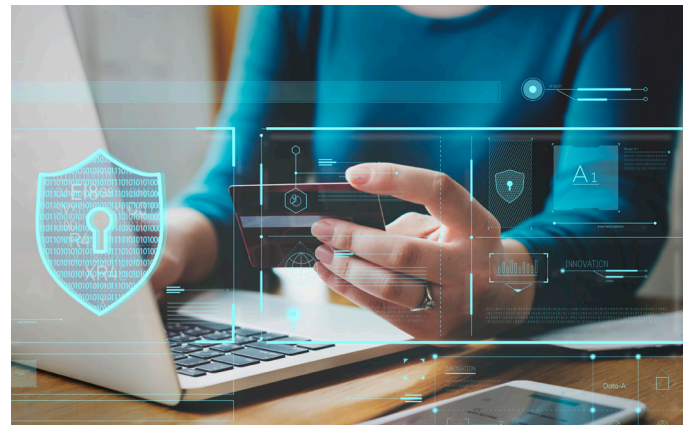
SECTION 5: RESULTS FROM PREVIOUS PLAN

D. Digital Content/Curriculum

- The Media Service continued to expand resources, which included audio books, eBooks, and over 100,000 videos and aligned video clips to integration into instruction
- The media service enhanced student and teacher creation and sharing of video content and curriculum modules through the increased use of Panopto and Ensemble
- Implemented and supported 21st Century Learning with technology such as MakerSpaces, Minecraft EDU, BreakOut EDU, LittleBits, coding robots, etc
- Trained and supported multiple online databases and products that enhance student learning
- Provided asynchronous and live webinar professional development training in hybrid learning environments relevant to Culturally-Responsive Education, Social-Emotional Learning, Family Engagement, Technology Integration, and meeting the needs of Multilanguage Learners/English Language Learners and Students with Disabilities

E. Vendor Risk Management

- Developed and implemented a process for establishing third-party vendor contracts
- Conducted vendor risk assessments for two high priority student and staff systems
- Vendor Inventory established and maintained



F. Integration of Technology into Instruction and Curriculum

- Professional development and 1:1 coaching was provided to integrate technology into instruction
- Trained administrative and teaching staff throughout the county on Office 365, One Note, Classroom One Note and SharePoint for implementation in the classroom
- Trained districts on integrating Google Classroom into classroom instruction
- Trained and supported districts with the use of video conferencing and how to integrate that into effective remote learning
- Digital tools were used to allow teachers to create formative assessments to measure student understanding. This was done through remote and in person training
- Support was provided to offer user groups and create blended learning courses with the use of Schoology, Canvas, SeeSaw, i-Ready, NWEA, Naviance, Microsoft Teams and Google Classroom learning management systems

G. Cost Effectiveness and Operational Efficiencies

- Annually review service pricing and budgets to keep pricing increases to a maximum of 2%
- Audit all purchasing annually to ensure any funds not used are credited back to the districts in a timely manner
- Strategically monitor spending for new services and those with low participation to gauge continued service viability and promote when appropriate



APPENDIX A: REGULATORY REQUIREMENTS SUMMARY

NYSED APPENDIX A

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;	5,10
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 in developing and maintaining robust information privacy, information security, and cybersecurity controls;	6-9
<ul style="list-style-type: none"> 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; 	6
<ul style="list-style-type: none"> 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); 	7
<ul style="list-style-type: none"> 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; 	7
<ul style="list-style-type: none"> 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; 	7,8
<ul style="list-style-type: none"> 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; 	8
<ul style="list-style-type: none"> 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 Education Law 2-d. 	9
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;	6-9
7. Performance objectives for the first two years of the plan;	6-9
8. A description of the procedures which will be put in place to monitor the plan's implementation;	6-9
9. An evaluation of the performance objectives for the previous two years; and	11,12
10. Appendix A	13
11. Appendix B	14
12. Appendix C	separate
13. Appendix D	15

APPENDIX B: COOPERATIVE PLANNING ASSURANCES

APPENDIX B

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

District Superintendent Signatures

I approve the regional collaborative planning process used to develop and maintain our regional technology plan.

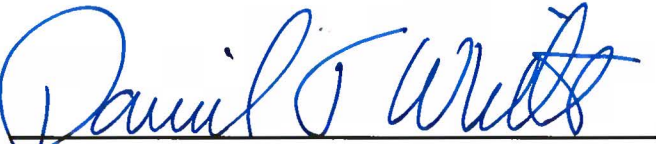
I assure that my BOCES participated fully in the development of this regional plan.

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 Regional Information Center are cost-effective.

Daniel T. White

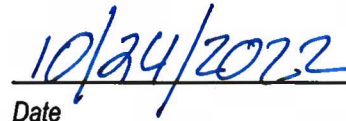
District Superintendent Name



District Superintendent Signature

Monroe One BOCES

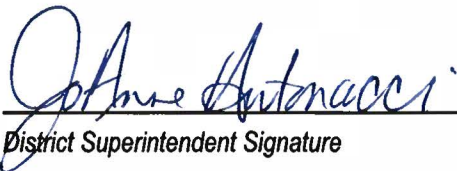
BOCES



Date

Jo Anne Antonacci

District Superintendent Name



District Superintendent Signature

Monroe 2-Orleans BOCES

BOCES



Date

APPENDIX D: NYSED AND 12 RIC PRIORITIES

NYSED PRIORITIES

Below is a list of state priorities that impact the regional technology plan.

DIGITAL EQUITY	Improving digital equity, including increasing student and teacher access to devices and Broadband internet both in school buildings and in place(s) of residence
TECH-ENHANCED ENVIRONMENTS	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)
DIGITAL LEARNING EXPERIENCES	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
TECH PROFICIENT EDUCATORS	Providing access to relevant and rigorous professional development to ensure educators and leaders are proficient in technology for both instructional and administrative purposes
DATA DECISION MAKING	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
DATA PRIVACY AND SECURITY	Implementing and maintaining data privacy and security controls ensuring compliance with all applicable privacy laws and regulations including, but not limited to, new york education law 2-d

12 RIC PRIORITIES

Below is a list of common RIC priorities to support collaborative planning.

DATA LEADERSHIP	Provide leadership, assistance, and resources to enhance districts' data ecosystems in support of local, regional, and state priorities
DATA PRIVACY AND SECURITY	Provide leadership, assistance, and resources to enhance districts' security posture in support of local, regional, and state priorities
TECHNOLOGY LEADERSHIP	Provide leadership, assistance, and resources to enhance districts' technology ecosystems in support of local, regional, and state priorities
ORGANIZATIONAL LEADERSHIP	Provide leadership, assistance, and resources to enhance rics' operations and staff capabilities in support of local, regional, and state priorities



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