



BOARDS OF COOPERATIVE EDUCATION SERVICES Regional Technology Plan

5-YEAR 793 PLAN FOR TECHNOLOGY SERVICES



Western New York Regional Information Center Revised: November 2023









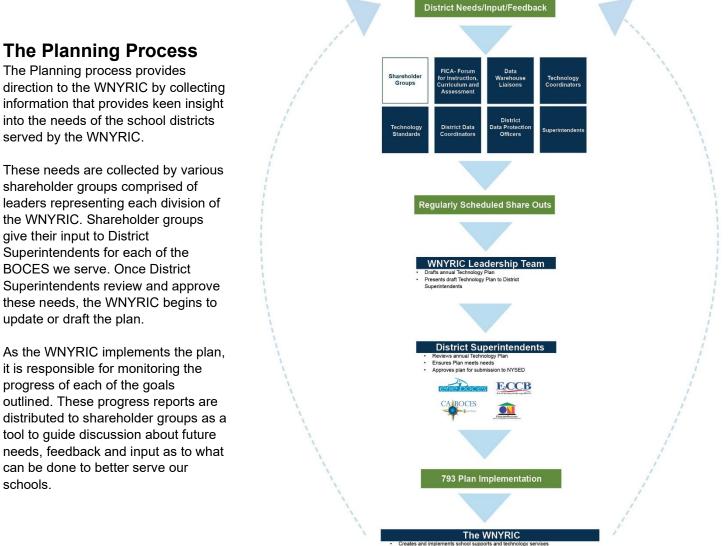


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Section One: Regional Technology Planning Process



Identifying and **Prioritizing Regional** Needs

schools.

A range of broad-based shareholder groups and other broad-based fact-finding methods are used to gather information for the purpose of framing the challenges facing school districts in the region. Care is taken to ensure no constituent shareholders are excluded. This results in the development of a plan that contains meaningful contributions from representatives of all school districts in the region, reflecting not only their needs, but also WNYRIC's objectives to address those needs.



Section Two: Current Context

Plan Scope and Regional Priorities

Plan Scope & Bogiopal	Technology Leadership	Instructional Leadership	Data Leadership	Data Privacy and Security
Regional Priorities	Maintain and evolve technology environments to support instructional and administrative needs.	Provide and reinforce best practices to support instruction to enhance all students' learning.	Lead, guide and support regional instructional and administrative data requirements and district needs.	Provide and maintain a robust security environment to support the protection and reliability of data.



Section Three: Five Year Technology Plan

Scope	Goal	Objectives	NYSED Aligned Priorities
		Provide devices and access to support online learning	1/3
	Maintain and evolve technology environments to support instructional and	Provide and support secure and cost- effective cloud offerings	3/6
Technology	administrative needs.	Provide and support a secure and robust network environment	6
Leadership		Plan for disaster recovery and redundancy	6
		Support districts in understanding and implementing computer science and digital fluency standards	3
	Provide and reinforce best practices to support	Availability of programs to support online learning	2/3
Instructional Leadership	technology integration for instruction to enhance all	Prepare students for college and/or careers	2/3
Leadership	students' learning.	Access and engagement for all students	2
		Implement tech integration strategies that align with NYS learning standards	2/3/4
		Provide data views and reports for use in a multiple measure data approach to assess, analyze and prescribe learning plans for all students	5
	Lead, guide and support regional instructional and administrative data initiatives.	Provide guidance and support for NYSED data collection, requirements and reporting process	5
Data Leadership		Implement and support new and existing data management systems that enhance regional services	5
\bigcirc	Provide and maintain a	Provide guidance regarding Ed Law 2D compliance	6
Data Privacy and Security	robust security environment to support the protection and reliability of data.	Provide cybersecurity guidance and support	6



Section 4: Plan Benefits

It is imperative for the school districts in the WNYRIC region to remain on the cutting edge as new technology and applications develop at a rapid pace. The role of the WNYRIC is to provide high quality professional development, innovative technology supports, access to on-demand customer service, and provide secure access to district data needs. The WNYRIC continues to enhance existing services with updated functionality, as well as offer new products to provide for the effective management of student information and meet the needs of school districts. As a result, WNYRIC staff will continue to investigate emerging technologies including their administrative and instructional uses and implications.

Digital Learning and Fluency Standards will provide the foundation for online offerings that support remote synchronous/asynchronous learning on the part of teachers, students, and school communities. The WNYRIC continues to examine new technologies to provide cost effective access from any device for administrators, teachers, and learners. We ensure that legal and district policies are in place to safely and securely navigate within these environments as compliant with Ed Law 2d and Part 121 Regulations. We continue to provide new instructional technology offerings through the statewide RFP process that is conducted by the WNYRIC.

Technology contributes significantly to how data is used for instructional planning and student achievement. We provide school administrators and teachers with critical information to target resources and forge instructional strategies to assist in the educational success of all students. The WNYRIC continues to be a leader in the collection and reporting of data that supports the tremendous impact of technology on instruction and student learning. WNYRIC staff investigates/researches/assists school districts with formative, summative, and innovative online and authentic assessment use that aligns with Computer Based Testing needs and the expectations of the NYS Blue Ribbon Commission. This is accomplished through effective technology planning as well as providing the essential professional development needed for successful implementation. WNYRIC staff continues to operate at a high level when it comes to all data privacy and security. We research and communicate potential threats and risks to ensure the protection of student information.

Using the input of the region and recommendations from the WNYRIC Standards committee, we establish a single set of service delivery standards that encompass hardware and telecommunications protocols. This allows us to provide consistent infrastructure services to all districts. The WNYRIC continues to design and implement the most cost effective, secure and robust bandwidth (network connectivity), including the utilization of priority layered design. Through our partnerships with multiple vendors and facilitating competitive bidding practices, we obtain a strong price advantage.

Optimization of the WNYRIC Service Desk is achieved using trend analysis to optimize services offered. We use video and centralized service tools to facilitate anytime self-service. Staff utilize the inclusive Active Directory to aid in efficient sharing of resources. For network infrastructure security enhancements, the WNYRIC staff implements cost optimization methods for wide area and local area network security. We remain focused on the continual enhancement of our Disaster Recovery (DR) and Business Continuity (BC) Plans and Procedures. The WNYRIC continues to update the Disaster Recovery Initiatives for our Tier 1 applications, as appropriate, and Tier 2 applications will be implemented based on time of recovery needs.



Section Five: Results from Previous Plan

Previous Plan Goals:

- Provide a secure, robust, cost-effective infrastructure at WNYRIC, in the cloud, as well as in the district as appropriate.
- Continue to enhance instructional offerings under CSLO
- Develop and provide data systems, processes and services in support of accountability and or instructional improvement
- Support the initiative for Computer Based Testing (CBT)
- Continue to enhance existing services with updated functionality and new product offerings

Results: 793 Plan for 2015 - 2023

Goal #1: Provide a secure, robust, cost-effective infrastructure at WNYRIC, in the cloud, as well as in the district as appropriate

Objective	Results
Implement Change Management to effectively communicate with end users and staff regarding process or technical changes to avoid downtime or outages. • Configuration Management • Release Management	Change Management is in place and ITIL (Information Technology Infrastructure Library) best practices are in place and communicated to the field.
Provide enhanced services in response to emerging customer needs	Services to respond to emerging districts needs are provided. 3/23/23 - Piloting an E-Fax Service: FERPA/PPRA Compliant. DID (Direct Inward Dial) fax numbers can replace copper lines and aggregated page counts can be cost effective.
Extended Classroom, Mobile Learning and Connected Transportation	Provide safe, secure and cost-effective ways to expand broadband beyond the school campus utilizing wireless broadband and cellular LTE technology.



Goal #2: Continue to enhance instructional offerings under CSLO

Objective	Results
Continue to provide new offerings through the statewide RFP process and ensure compliance with Education Law 2d	New RFPs are released and awarded.
Continue to investigate emerging technologies and their instructional uses and implications	Pilot Program implementation dates and follow up for various topics are in place.
Continue to investigate and support Science Technology Engineering, Arts and Mathematics (STEAM) initiatives throughout the region	 New RFPs released and awarded. 9/22/2022 - STEAM RFP & Free Resources RFP - closed 7/20/22 to be awarded in Sept. 3/23/2023 - Sept Award: STEAM - Age of Learning,Inc, BlocksCAD Inc., Coder Kids, Inc. DBA Codelicious, Drone Sports Inc., DroneBlocks LLC, Hello World CS, Kahoot! ASA, moozoom education inc., NS4ed, LLC, Quizziz Inc., Rocket Drones, Inc., Savvas Learning Company LLC, World Book, Inc. Free Resources – Scrible, Canva Feb Award: STEAM - eDynamic Learning, Electronic Gaming Federation, EliteGamingLive, Hive Class Inc., Learnics, REX Academy, UpSavvy, VIVI, Wakelet, 7 Mindsets



Goal #3: Develop and provide data systems, processes and services in support of accountability and or instructional improvement

Provide services to support paper- based NYS and district created assessments 5/18/20 • • • • • • • • • • • • • • • • • • •	August Regents assessments –answer sheets printed, scanned as received and verified. Printing Score reports for 2021-22 3-8 ELA, Math printed and shipped. Others printed as additional requests come in. 23 – Updated and opened online order software to allow districts to order Jan. Regents answer sheets 3-8 ELA & Math, Science 8. January Regents answer sheets printed, scanned and verified. Scores are present in WNYRIC DW Reports and L2RPT. Printed 3-8 ELA and Math answer sheets. Shipping complete. 23 - ELA/Math 3-8 answer sheet processing began May 2; will end May 30. June Regents printed and shipped. Science 8 answer sheets printed and shipped Data support provided for ELA/Math 3-8 CBT administration e.g. student moves, import, data questions.
Provide services to support paper- based NYS and district created assessments 5/18/20 • • • • • • • • • • • • • • • • • • •	 22 – August Regents assessments –answer sheets printed, scanned as received and verified. Printing Score reports for 2021-22 3-8 ELA, Math printed and shipped. Others printed as additional requests come in. 23 – Updated and opened online order software to allow districts to order Jan. Regents answer sheets 3-8 ELA & Math, Science 8. January Regents answer sheets printed, scanned and verified. Scores are present in WNYRIC DW Reports and L2RPT. Printed 3-8 ELA and Math answer sheets. Shipping complete. 23 - ELA/Math 3-8 answer sheet processing began May 2; will end May 30. June Regents printed and shipped. Science 8 answer sheets printed and shipped Data support provided for ELA/Math 3-8 CBT administration e.g. student moves, import, data questions.
provide 9/22/20 particip collecti 3/23/20	Webinar offered on March 30 to districts, BOCES, charters and non- public schools to provide details about assessment processing.
Research and support data collection requirements 5/18/20	Response was very positive. 98 participants. tion, training and support for new data collection requirements are d. 22 - New this year is a data collection for student data for students ating in P-Tech programs. Starts in January; new template for ng the data. 23 - December DDC meetings were held. One at E1B; 3 webinars. 148 participants. NYSED implemented new enrollment code (8300) and grade (UNK) to track compulsory age students no longer attending school and no documentation. Data Collection and Verification: Continue to offer Level 0, NYSSIS, L2RPT/Lvl 1 Verification (BEDS reports, UIAS, DQRC): Total: 101 participants.
Expand 9/22/20	offered. # of participants: Total participants: 148 New Tested/Not Tested Report Training: 30 Participants Continued to produce monthly DW newsletter—most recent was April.



Objective	Results
Research, develop and maintain reporting solutions for the effective use of data, including emerging district	 Assessment data from 3-8, NYSESLAT, NYSAA and Regents used to refresh reports and visualizations. Continue to respond to requests for modifications.
needs	 12/8/2022 – Continue to introduce and maintain visualizations: Added an Enrollment visualization and Graduation visualization. Downloaded released assessments data from NYSED public site to update our NYS District Comparison Visualization.
	 3/23/2023 – Liaison meeting held; One with WNYRIC component BOCES and one including hosted RICs and Big 5. Instructional Reporting/Visualizations Webinars: 38
Incorporate data privacy and security information into service delivery	 Processes are in place to authorize appropriate access to and for the use of data. 9/22/2022 - Communications are in process to request district contacts to audit current L0 and Level 1 security. 12/8/2022 - DW Support is sending e-mails to districts as part of audit process. Data privacy and security are topics at the first DDC meetings of the year—Sept/Oct. DW and LvI 0 password changes are automated to occur every 6 months. 3/23/2023 - L0 now uses multifactor authentication 5/18/2023 - L0 Security review and outreach conducted with districts to ensure security is up to date. Internal meetings set up with SMS managers and coordinators to review L0 security and identify changes needed. SpEd, completed. E-School Data and Powerschool in process.



Goal #4: Support the initiative for Computer Based Testing (CBT)

Objective	Results
Communicate and support current NYS requirements regarding CBT	 Districts are provided appropriate information and support to successfully implement NYS Computer Based Testing (CBT). 9/22/2022 – All districts received the memo regarding schools utilizing CBT by 2026. Planning for Fall presentation for districts new to CBT. 12/8/2022 – Multiple communications sent: Ordering processes for NYSED and WNYRIC concerning CBT; access to Nextera, data requirements and deadlines, lead scoring entities. Participate in weekly calls and review weekly spreadsheets from NYSED, communicate any changes required in preparation for testing. 12/8/22 - Vendor Scoring RFP was awarded to Ed Vistas and Premier Assessment Services 3/23/2023 - Winter Roadshow with NWEA/Questar & WNYRIC 5/18/2023 - Webinar delivered for districts, BOCES, charters and non public schools to provide details about assessment processing and CBT. 98 participants.



Goal #5: Continue to enhance existing services with updated functionality and new product offerings

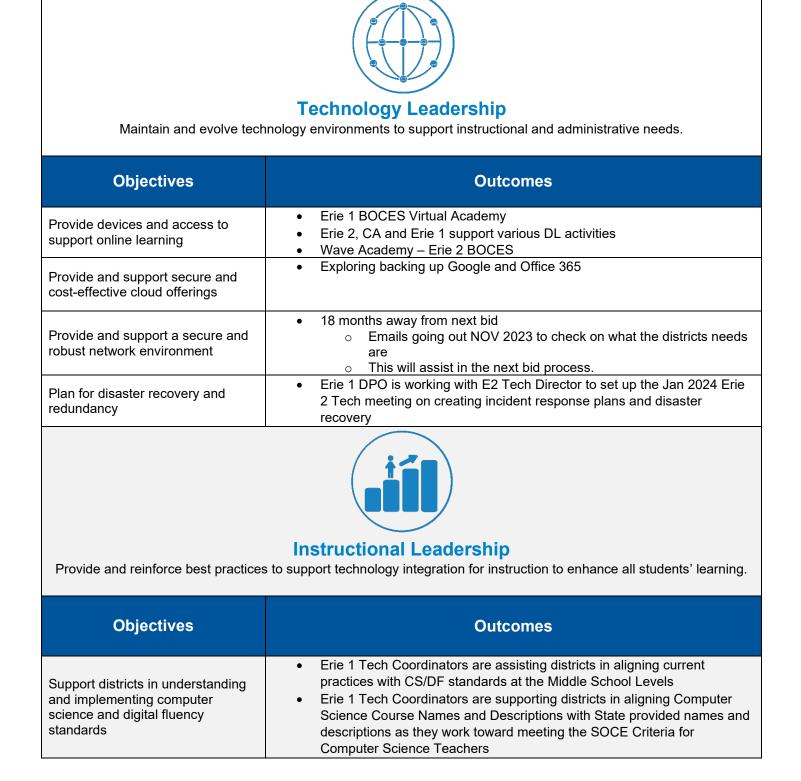
Objective	Results
Implement and support solutions to meet the needs of school business and Human Resources including emerging district needs.	 Solutions for Financial, HR and Administrative Services are implemented and supported. 9/22/2022 HR team is now implementing Onboarding and eForms solutions from PowerSchool and SchoolFront. 12/8/2022 - A new mandatory NYS Health Care Worker Bonus Program began October 1st. The nVision and WinCap software teams communicated to the 89 WNYRIC supported school district's vendor guidance on this reporting. The announcement was made to the 17 districts on PDP Premier that this application will sunset June 30, 2026. Webinar demos are being scheduled for districts to review other options. 3/23/2023 - Additional services available within the Applicant Tracking System: The Request to Post; This efficient addition will allow supervisors to fill out paperless job requisitions that will follow an internal approval path, to post in Applicant Tracking. The Internal Application; Shorter applications for current employees that apply for internal postings. 5/18/2023 - Investigating support for the PowerSchool Unified Talent Professional Learning product in the 2023-24 fiscal year, a module used to assist staff in tracking their professional development goals and additional option as a replacement for PDP Premier. This will allow for applicant recruiting, onboarding and storing personnel records all in one integrated system. Successfully collaborated with Harris School Solutions, to create an automated export from WinCap to PowerSchool Employee Records site, exporting employee demographics on
5.2 Implement and support solutions to meet the needs of Facilities including emerging district needs.	a nightly basis. Solutions for Facilities Services are implemented and supported. 3/23/2023 - New Facilities Planning RFP to be released in the Spring of 2023. 5/18/2023 – Will begin supporting Raptor Emergency Management System modules in 2023-24 school year. We will also communicate with local Safety/Risk BOCES services. Demonstrations are scheduled for May 31.
5.3 Implement and support solutions for the effective management of information about students, including emerging district needs.	Solutions for student related data needs are implemented and supported. 12/8/2023 - • No new implementations of WebSMARTT. Support for WebSMARTT to end as of 6/30/2025. There are currently 20 districts remaining in the WebSMARTT service, with several of



Objective	Results
	 them already planning to migrate to Mosaic Cloud. We have 32 districts on Mosaic Cloud. Family ID is a great option for district e-forms. PowerSchool districts may want to consider eCollect for this purpose, while Operoo is an excellent choice for eSchoolData districts. Portfolio+ (formerly webEDGE) offers districts a single sign-on solution to display assessments, reports, and documents to parents and guardians via the SMS parent portal. 3/23/23 - RFP for Student Information Systems is being released. There are now 36 districts on Mosaic Cloud, with 17 remaining on WebSMARTT. 5/18/2023 - Partnering with districts to implement Single Sign-On (SSO) with student management systems, eSD and PS Currently reviewing responses to SMS RFP
5.4 Implement and support solutions for the effective use of the website and notification services, including emerging district needs.	 New and enhanced solutions are implemented and supported. 12/8/2022 - Planning to release an RFP for website solutions. Blackboard K-12 purchased by Finalsite, transition from BB to Finalsite website platform is planned. Other website solutions will also be considered. 3/23/2023 - RFP for website solutions - Evaluation process underway. 4 vendors will present for an April award. 5/18/2023 - Vendors awarded at board meeting 4/12/2023. Contract negotiations have begun: Apptegy, Inc., Active Internet Technologies, LLC, dba Finalsite, Intrado Interactive Services Corporation, ParentSquare, Inc.
5.5 Incorporate data privacy and security information into service delivery	Data privacy and security information is provided.



2023/2024 Progress Monitoring





	 Erie 1 Tech Coordinators have assisted districts in the development of Computer Science courses at the Elementary/Middle School level- developed around the standards. Continually Developing Research backed best practices for implementing the CS/DF standards Provide Regional and district requested PD Lead Tech Integrator Groups engaging district tech integrators in the work around supporting teachers with the rollout of the standards Incorporate the CS/DF standards into all applicable PD sessions.
Availability of programs to support online learning	 Online academy available to all WNYRIC districts. Erie 1 is offering asynchronous professional development to educators across the state through the TRLE Phase III grant. Distance learning collaborations to provide access to online courses for electives as well as credit recovery options for all our districts. As requested, provide professional development centered around remote/hybrid instruction and best practices. Training on different LMS options (Google Classroom, Microsoft Teams, Schoology, Canvas, D2L, etc.) preparing teachers to deliver content as effectively virtually as they do in person. Professional Development around feedback and opportunities that exist to provide feedback virtually to students, in real time, to promote success in any mode of learning.
Prepare students for college and/or careers	 Authentic experiences and collaborations with business community, 43 North, Arts and Cultural Institutions Consortiums like the Consortium for Student Empowerment Through Innovation (CSETI) which focuses on real-world problem solving and Project Based approaches to make learning meaningful for students Focus on pedagogical shifts that place priority on student communication and skills aligned to the Blue-Ribbon Commission's portrait of a NYS graduate. Offering pilot programs that include game design, Virtual Reality, and Drones that are applicable to future careers for students. Teaching students and teachers how to leverage different technologies in new and impactful ways and showing them skills they will employ in college and career.
Access and engagement for all students	 Promotion of tech integration to enhance instruction. Professional development centered around the effective use of technology to engage and empower students who typically do not have a voice in the classroom. Leveraging technology to provide all students with access to the same digital resources to provide equitable opportunities for success. Professional Development around software and products that provide student choice in product creation. Coaching opportunities for teachers as they integrate technology into their classrooms to support teachers and students as they engage with new technologies.



Implement tech integration strategies that align with NYS learning standards	 Professional Development structured to focus on pedagogical shifts to support the NYS Learning Standards. Professional Development including ways to communicate learning targets and standard to be met throughout the lesson. Assisting Teachers in the development of flipped classrooms where instructional videos to deliver content are created freeing up class time to focus on student mastery of skills and targets. Professional development on products and software that can make the content of lessons more engaging for students Training on opportunities that exist with technologies like AI and how they can be leveraged as learning tools to support student learning and growth toward mastery.
Lead, guide and	Data Leadership support regional instructional and administrative data initiatives.
Objectives	Outcomes
	Cognos Upgrade Project: Commenced last Spring with initial upgrade in Test.
Provide data views and reports for use in a multiple measure data approach to assess, analyze and prescribe learning plans for all students	 Component BOCES were provided with test accounts to review and provide feedback. Feedback was positive on the look, the new navigation, the and the new District Dashboard. We moved to production the first of November. Training sessions for new navigation have been scheduled. Evaluation of the current Common Data Views for update and/or additions of new reports for the 23-24 assessment year. Report Development: Launched Program Data Visualization. Updated Data Quality Report Card with some additional edits. Civil Rights Data Collection Report updates.



Implement and support new and existing data management systems that enhance regional services	 Supporting 2 applications to manage electronic forms for human resource processes including posting, hiring, onboarding and offboarding. Districts can assign and track documents, electronically sign forms, and centrally monitor it all online. Supporting new programs as add-ons to the PowerSchool application to enhance districts' use of the system. Report Creator allows districts to create templates for report cards, transcripts, and custom reports. Districts can now publish report cards to the parent and teacher portals for easy access and to save on printing/mailing. Attendance Monitor allows districts to set attendance thresholds and notify parents of excessive absences based on the district's policies. Communication can be done through the Parent Portal, and attendance dashboards are available at district-, school- and student-levels. 			
Data Privacy and Security Provide and maintain a robust security environment to support the protection and reliability of data.				
Objectives	Outcomes			



	 Regional Tech Coordinator Meetings – Information provided on regional cybersecurity posture, issues, and improvements needed. Enhanced Cybersecurity Service 	
	 Information on Cybersecurity risks 	
Provide cybersecurity guidance	 Actionable reports 	
	 IDS/IPS 	
and support	 Vulnerability Scans 	
	 Penetration Testing 	
	 Phishing Testing 	
	 Suspicious E-mail evaluation and malicious notifications 	
	 New – EDR, SIEM, and MDR Vendors available through service 	
	 New – Cyber Summit 1/25 & 26 	



Appendix A: Regulatory Requirements Summary

Required Element	Page(s)
A description of the regional collaborative planning process	3
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.	
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;	
State Priority 1: Improving digital equity, including increasing student and teachers access to devices and broadband internet both in school buildings and in place(s) of residence;	5
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)	5
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;	5
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;	5
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;	5
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.	5
A list of regional priorities and needs that the regional technology plan will address;	4
A description of the methods used to identify and priorities needs in the region, which shall include engagement with key stakeholder groups;	
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;	4-6
Performance objectives for the first two years of the plan;	5
A description of the procedures which will be put in place to monitor the plan's implementation;	3
An evaluation of the performance objectives for the previous two years; and	7-17
Appendix A	18
Appendix B	19
Appendix C	20 (attached documents)



Appendix B: Cooperative Planning Assurances

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.

Scott Payne Cattaraugus/Alleghany BOCES	Date
Dr. Michael Capuana Erie 1 BOCES	Date
Dr. David O'Rourke	Dete
Erie 2/Chautauqua/Cattaraugus BOCES	Date
Dr. Clark I. Cadaball	Dete
Dr. Clark J. Godshall Orleans/Niagara BOCES	Date



Appendix C: Agencies Use of Applications

Please see the separate enclosed document for a complete list of service applications.

