

Purpose of Exhibit: This exhibit aims to document the technology resources of our top 5 Partnership districts, where over 50% of our candidates are placed in during early field or clinical practice. Following the chart summarizing technology assets, Future Ready Schools of NJ is summarized followed by excerpts from district documents are included to illustrate the resources available to our candidates when in clinical placements.

School District	Future Ready NJ School	School District size	Summary of Technology- Provided by Superintendents and Websites
Eatontown Public Schools	NO	1,100 students P-8 th grade Elementary Schools: 3 Middle Schools: 1	<ol style="list-style-type: none"> 1. The district has 1:1 computing from grades 2-8. 2. Every teacher has a Microsoft Surface. 3. Each classroom has a 65" SMARTboard. 4. All classrooms and offices have access to high speed internet. 5. The district supports Google tools and teachers use Google Classroom. 6. Benchmarking assessments are delivered online for grades 3-8. 7. Our ELA and Math textbooks have online resources for teachers, students, and parents. <p>-Provided by Mr. Scott McCue, Superintendent of Eatontown Public Schools. * Eatontown Public School Technology Plan excerpts are included in this document.</p>
Hazlet Township Public Schools	YES	Students:2,900 Elementary Schools:5 Middle Schools: 1 High Schools:1 Early Childhood: 1	<p>Hazlet Township Public Schools participates in <i>Future Ready Schools of NJ</i>. The Technology Department continues to implement cutting edge technologies throughout the Hazlet Public School District. Some of the more recent upgrades and implementations include additional Chromebook Carts throughout the district, additional Smartboards in classrooms in several schools, Document Cameras for general education classrooms, and new all-in-one student computers in grade 5 through 8 classrooms. Another major project that was undertaken during the summer was the migration of several of the district's physical servers to a new virtual environment. This virtual solution allows for more redundancy and saves monies with future upgrades. The Media Center at Middle Road Elementary School has also been updated with new all-in-one computers. New computers are installed on a regular basis throughout schools to help maintain an up-to-date infrastructure. The department also continues to serve its regular function of maintaining, upgrading and managing all technology within its borders. The district continues to utilize its Student Information Management System (Realtime) in order to manage important student data and student IEPs. The system is also tasked with delivering important messages and alerts to all of its stakeholders as well as, serving as the district's cafeteria management system. As the District continues to move forward in meeting the goals highlighted in the technology plan, Google Apps for Education has been implemented. This system allows an opportunity to extend the school day and assists with collaboration between students. With the migration to this platform, the district has afforded new opportunities for educational improvement and opportunities for student achievement. There was a great cost savings with the move to this system. (Hazlet Township Public Schools website).</p> <p>*attached to this chart are excerpts from the Hazlet Middle States self-study which indicated technology</p>

			assets by district and school
Long Branch Public Schools	YES	Students:5,841 Elementary Schools: 3 Middle Schools: 1 High Schools:1 Early Childhood: 3	In an effort to meet the rigorous standards of the <i>Future Ready Schools of NJ</i> consortium, Long Branch Public Schools has embraced the notion that the integration of technology must be fluid and seamlessly implemented into every classroom. Having a longstanding partnership with New Jersey's most progressive institute of higher learning, Monmouth University, has supported our efforts to modernize the profession. Monmouth University's Department of Education routinely provides us with students that are pure digital natives who assist with our premiere digital platforms such as Google Suite, our primary learning management systems, and/or LinkIt, our virtual data warehouse and assessment builder. We understand the importance of being a diagnostic connected educator; thus everyone who enters our schools is encouraged to leverage our digital tools to improve the teaching, learning, and leadership. – Dr. Mike Salvatore, Superintendent * The Long Branch Public Schools Technology Plan Presentation is included in this exhibit
Middletown Public Schools	YES	Students: Elementary Schools:12 Middle Schools: 3 High Schools:2	As a Future Ready Schools New Jersey certified district, Middletown Township Public Schools has prioritized digital learning and higher-level technology integration in all subject areas. Middletown provides all students in Grades 3-12 with Chromebooks, while students in grades K-2 have access to iPads and/or Chromebook carts. All teachers are expected to include meaningful technology integration into their lesson plans. Regular professional development and support from Educational Technology Specialists ensure that educators are able to effectively teach New Jersey Technology Learning Standards at all grade levels. Furthermore, Middletown has been a Google for Education district since 2010, which has resulted in greater opportunities for collaboration among educators, as well as students. The majority of teachers use Google Classroom as a learning management system. In addition to GSuite tools, students are regularly engaged with dozens of other digital tools and programs that increase personalized learning opportunities and provide educators with multiple measures for assessing learning. These include Seesaw, Pear Deck, Dreambox, Flipgrid, LinkIt, EdPuzzle, Newsela, and many others. In addition, all educators are encouraged to connect with colleagues both locally and globally on social media and celebrate student learning and success via the District hashtag #MTPSpride on social media. –Dr. Bill George, Superintendent *Excerpts regarding technology from the Middletown Public Schools Strategic Plan are included in this exhibit.
Township of Ocean School District	NO	Students:3,514 Elementary Schools:1 Middle Schools: 1 High Schools:3	Technology has become an important part of the curriculum for all schools throughout the state and nation. Technology directly affects the way in which teachers teach and students learn; administrative and support staff also benefit from the information and communication systems designed to improve their performance and productivity. It is the mission of the Ocean Township School District to equip students, staff, and parents with skills that will empower them to use technology as a tool for accessing, managing, evaluating and synthesizing information in order to solve problems and to create and communicate knowledge. –Township of Ocean School District Technology Plan *Attached to this document is an excerpt from the technology plan that outlines technology resources by district and school.

Future Ready Schools-New Jersey

Future Ready Schools – New Jersey is a certification program designed to promote transformational change in schools and districts throughout New Jersey. Whether they are public, private, or charter, FRS-NJ provides the guidance, support, direction, and resources schools need to achieve “Future Ready” goals, while fostering inclusive collaboration within schools and districts, and between them throughout the state.

The program is a coalition of the New Jersey Department of Education (NJDOE), the New Jersey School Boards Association (NJSBA) and New Jersey Institute of Technology (NJIT). It is based on the work of the national Future Ready Schools initiative, and the structure and success of the Sustainable Jersey for Schools Certification Program.

The national Future Ready Framework, developed by the Alliance for Excellent Education, serves as an organizational umbrella for all discussions and decisions related to the use of technology in the classroom and the technical, professional, and leadership support needed to ensure the most effective and efficient Future Ready practices.

The FRS-NJ certification program started with the foundation of the Future Ready Framework, and “New Jersey-ized” it so the state’s districts, schools, educators, and leaders have a local support structure and framework.

The state model of the national framework has been created by FRS-NJ task forces, made up of hundreds of educators, leaders, and stakeholders, who dedicate their time and expertise to create the New Jersey Indicators of Future Readiness. These indicators help guide schools and districts towards future readiness by providing them with the knowledge of what successful Future Ready practices look like in a given “gear,” or section, of the national framework. At the same time, they provide guidance, support, and connections to resources that can help them achieve success.

The FRS-NJ Indicators of Future Readiness are the heart and soul of the FRS-NJ certification program. Organized at all levels into three overarching themes: Leadership; Education and Classroom Practice; and Technology Support and Services. These themes further condense the national Future Ready framework for the context of New Jersey.

Eatontown Public Schools
Three-Year District Technology Plan
2013-2016

Eatontown Board of Education Technology Committee

Mrs. Shellie Miller, Chairperson

Mr. Carl Lawson, BOE Vice-President

Mr. Pete Siano

Scott T. McClue

Superintendent of Schools

Lori Youngelaus

Business Administrator/BOE Secretary

Michael C. Brown

Technology Coordinator

Technology Specialists

Mrs. Megan Ferraioli

Mrs. Faith Ende

Technology Technician

Mr. Jeffrey Dingfeld

I. TECHNOLOGY INVENTORY:

1. Describe the technology inventory needed to improve student academic achievement in the 2013-2014 school year that informs the basis for the Form 470. Include in the description the internal connections and basic maintenance for 12 months of the years funded year, such as the following areas:
 - a) Technology equipment including assistive technologies
 - b) Networking capacity
 - c) Filtering method
 - d) Software used for operational support and filtering
 - e) Technology maintenance and support
 - f) Telecommunications equipment and services
 - g) Other services

Three-Year Educational Technology Plan Inventory Table			
Area of Need	Describe for Frate Funded Year 1 2013-2014	Describe for Frate Funded Year 2 2014-2015	Describe for Frate Funded Year 3 2015-2016
Technology Equipment including assistive technologies	1. Continue installing projectors and interactive whiteboard devices in all classrooms in the district 2. Purchase Adobe Photoshop for Middle School Art classes and make available on all student computer to be used in the Art room 3. Purchase Nintendo Wii for Physical Education department 4. Purchase a Windows 8 touch 2 in 1 laptop for all grade 7 and grade 8 teachers 5. Purchase a Windows tablet with keyboard for all Grade 7 and 8 students 6. Provide 5 Windows laptops in every Grade 1 and 2 classrooms 7. Provide iPads to all ELL and G & T classrooms 8. Upgrade SAN to allow for 10 GB iSCSI connections 9. Increase server RAM and NICs to allow for greater expansion of virtual machines	1. Continue installing projectors and interactive whiteboard devices to all classrooms in the district 2. Purchase a Windows 8 touch 2 in 1 device for all grade 4, 5 and 6 classroom teachers 3. Purchase a Windows tablet with keyboard for all grade 4, 5 and 6 students 4. Purchase touch desktops for Grade K classrooms 5. Provide Windows laptops to all grade 1 classrooms to achieve a ratio of 1 computer for every 2 students 6. Provide iPad to all Speech classrooms	1. Continue installing projectors and interactive whiteboard devices to all classrooms in the district 2. Increase district copier inventory to 3 copiers per school including one color copier and 2 black and white copiers 3. Upgrade all grade 4, 5, 6, 7, 8 laptops carts 4. Provide at least 2 iPads in every Speech classroom as well as credits for purchasing speech related apps
Networking Capacity	1. Install cat 6 drops to connect all IP surveillance cameras	1. Install a dedicated 500 mbps upload, 500 mbps download	1. Install Cat 6 infrastructure for VoIP phone system

	<ol style="list-style-type: none"> 2. FTOS 50 mbps download 20 mbps upload internet circuit 3. Purchase a new Cisco Nexus 5548UP WAN core switch to allow for 10Gb connections to all remote schools 4. Purchase new Cisco 3750X switches to act as the core for all remote schools and allow for 10Gb connections back to the hub 5. Upgrade server room switches to accept 10 Gb connections 	<ol style="list-style-type: none"> 1. Intranet circuit with enterprise support 2. Purchase access point in order to have one access point per state testing classroom 	<ol style="list-style-type: none"> 2. Install dedicated Cat 6 drops for district desktops, additional access points and copiers 3. install backup (SP) to be used as failover for new VoIP phone system
Filtering Method:	Block	Block	Block
Software used for curricular support and filtering	<ol style="list-style-type: none"> 1. Destiny renewal 2. Type to Learn renewal 3. Microsoft desktop bundle (operating system, Office) 4. Microsoft server software 5. Accelerated Reader 6. Discover Education 7. Study Island 8. Education City 9. eBoard 10. Tracker 11. point of sale software Digital textbooks? 	<ol style="list-style-type: none"> 1. Destiny renewal 2. Type to Learn renewal 3. Microsoft desktop bundle (operating system, Office) 4. Microsoft server software 5. Accelerated Reader 6. Discover Education 7. Study Island 8. Education City 9. eBoard 10. Upgrade special education software 11. Upgrade point of sale software 	<ol style="list-style-type: none"> 1. Destiny renewal 2. Type to Learn renewal 3. Microsoft desktop bundle (operating system, Office) 4. Microsoft server software 5. Accelerated Reader 6. Discover Education 7. Study Island 8. Education City 9. eBoard 10. Upgrade special education software 11. Upgrade point of sale software Edmentum
Technical Support and maintenance	<ol style="list-style-type: none"> 1. Cisco SMARTNET renewal 2. Digicert wildcard certificate renewal 3. Zuma (district website) renewal 4. Genesis (sms) renewal 5. Barracuda spam filter renewal 6. Purchase bulbs for all projector models in the district 7. Purchase toner for all district printers 8. Citrix Xen Desktop, Xen Server renewal 	<ol style="list-style-type: none"> 1. Cisco SMARTNET renewal 2. Digicert wildcard certificate renewal 3. Zuma (district website) renewal 4. Genesis (sms) renewal 5. Barracuda spam filter renewal 6. Purchase bulbs for all projector models in the district 7. Purchase toner for all district printers 8. Citrix Xen Desktop, Xen Server renewal 9. Block renewal 10. UPS support renewal 11. EMC SAN support renewal 12. Genetec renewal 13. Citrix Xen Desktop, Xen Server 	<ol style="list-style-type: none"> 1. Cisco SMARTNET renewal 2. Digicert wildcard certificate renewal 3. Zuma (district website) renewal 4. Genesis (sms) renewal 5. Barracuda spam filter renewal 6. Purchase bulbs for all projector models in the district 7. Purchase toner for all district printers 8. Citrix Xen Desktop, Xen Server renewal 9. Block renewal 10. UPS support renewal 11. EMC SAN support renewal 12. Genetec renewal 13. Citrix Xen Desktop, Xen Server 14. Assurance support renewal
Telecommunications equipment and services	<ol style="list-style-type: none"> 1. Maintain contract with RFP for phone system. 2. District Verizon phone lines 	<ol style="list-style-type: none"> 1. Maintain contract with RFP for phone system. 2. District Verizon and Xtel phone lines 	<ol style="list-style-type: none"> 1. Install a VoIP phone system

<p>Other Services.</p>	<ol style="list-style-type: none"> 1. Install Axis IP surveillance cameras at two main entry doors at all schools and BOE wing 2. Install server infrastructure for Genetec Security Desk suite to centrally manage and access security surveillance system 3. Install monitors in all school and BOE main offices to monitor view surveillance camera feeds 4. Purchase dedicated surveillance storage to allow all surveillance video to be kept for a minimum of 15 days 5. Install an AC unit dedicated to the server room 6. Purchase a natural gas generator to be dedicated to the server room 7. Purchase a centralized UPS for the server room 8. Purchase digital signage monitors for all schools 	<ol style="list-style-type: none"> 1. Purchase new backup software that can integrate into a virtualized infrastructure 	<ol style="list-style-type: none"> 1. Install IP based door entry system at all schools, BOE wing and Special Education building 2. Purchase network ID card printer 3. Replace existing split AC unit in the server room that is to be used as a backup to the main server room air conditioning unit
------------------------	--	--	---

HAZLET TOWNSHIP PUBLIC SCHOOLS

**Excerpt from most Recent Self-Study Middle States
Commissions on Elementary and Secondary Education
Technology Assets**

Type of Information/Technology Resource	Quantity of Resource	Quality and Adequacy of Resource		
		S	NI	U
in Information Resources Center				
Networked Computers for Students in Information Resources Center	129	X		
Networked Laptop Computers for Students in Information Resources Center	313	X		
Networked Desktop and/or Laptop Computers for the Staff	25	X		
Stand Alone Desktop and/or Laptop Computers for the Staff in Classrooms/ Offices	N/A			
Networked Desktop and/or Laptop Computers for the Staff in Classroom/ Offices	283	X		
Classrooms with Hard-Wired Internet Access	251	X		
Classrooms with Wireless Internet Access	251	X		
LCD Projectors with T.V. Capabilities	191	X		
Overhead Projectors	10	X		
Classrooms with TV Monitor	30 (RHS) 1 (LMS)	X		
Classrooms with Monitor Connected to Computer	16	X		
PDAs for Staff	N/A			
PDAs for Students	N/A			
Video Cameras	11	X		
Video Recorders	19	X		
Classrooms with Smart Board	115	X		
iPads (Total Number)	330	X		
Other:				

**INFORMATION RESOURCES AND TECHNOLOGY
STANDARD FOR ACCREDITATION
20130322**

A. ISSUES RELATED TO THIS STANDARD

The following requirements ask the school system to provide a self-assessment of expectations for quality included in this Standard for Accreditation. The information and data requested in this section are not for evaluation purposes. Instead, the information and data assist the school system in making the determination whether it meets the Standard and its Indicators of Quality.

A.1. INFORMATION RESOURCES AND TECHNOLOGY—SCHOOL SYSTEM

Type of Information/Technology Resource	Quantity of Resource	Quality and Adequacy of Resource		
		S	NI	U
Curriculum Focused Printed Books	16,000	X		
Reference Printed Books	1,000	X		
Leisure Reading Printed Books	7,500	X		
Magazine/Journal Subscriptions	50	X		
Online Subscriptions	19	X		
Curriculum Specific Application Software Programs	6	X		
Administrative Application Software Programs	5	X		
Application Software Programs Available on School System Network	1	X		
Networked Desktop Computers for Students	513	X		
Networked Laptop Computers for Students	331	X		
Stand Alone Desktop Computers for Students	60		X	
Stand Alone Laptop Computers for Students	N/A			
Stand Alone Computers for Students in Information Resources Center	N/A			
Stand Alone Laptop Computers for Students	N/A			

A.1.a. Identify in the table below any component school for which the ratings for information resources and technology differ significantly from the system's average ratings.

Name of Component School: Raritan High School

Describe the degree to which this school's performance differs from the average for the system:

The Science Department has 60 iPads in two carts with 30 apps for use in Chemistry, Biology, Genetics, and research. These iPads are also used for creating tutorials and accessing Google docs for surveys and document storage. A variety of projectors, SmartBoards and televisions are installed in classrooms throughout the Raritan High School as a means for teachers to present information and resources and for the television studio to deliver announcements. A media distribution system pushes the morning announcements via our network to each classroom and office. Raritan High School also houses a Television Studio with a Macintosh Lab where morning announcement videos are developed, edited, and broadcast to the school. The Global Communications Department has an additional Macintosh Lab for use within the program, separate from the Television Production. Final Cut Pro and Adobe Creative Suite are the software used by students to create high end video productions.

The Media Center is equipped with 27 computers for research and projects/assignments that can be used by any department in the school.

Additionally, Raritan High School has 120 net books and three laptop carts each containing 20 to 25 laptops for use in all discipline areas including English, Math, Social Studies and elective courses.

A lab with 30 computers is used for courses including Computer Construction, Computer Graphics and Animation, Technology Education, and Computer-Aided Design. In conclusion, a Business classroom has 26 computers for using business applications and Microsoft Office Suite.

Name of Component School: Hazlet Middle School

Describe the degree to which this school's performance differs from the average for the system:

Hazlet Middle School has 90 iPads in three mobile carts for various grade levels and discipline areas. The iPads have 60 apps installed for all discipline areas and are also used to create teacher and student made tutorials to create a "flipped classroom" environment. Many classrooms have a projector and SmartBoard to display instructional content and provide an interactive method to deliver instruction. Also, several mobile projection

carts are equipped with laptops and projectors to provide teachers with a means to present information and resources to their students. This school has two computer labs located in the media center that teachers may use for whole group instruction. There are three stand alone Macs in the back of the Media Center lab for video creation via iMovie.

There are two additional computer labs for teaching Computer Literacy and Technology Education. Computer Literacy provides students the opportunity to learn software and web-application skills, and Technology Education offers Computer Aided-Design elements and problem solving projects.

Name of Component School: Beers Street School, Cove Road School (grades 5&6)

Describe the degree to which this school's performance differs from the average for the system:

A Net Book cart and a Laptop Cart are available for teachers to use in their classrooms for whole or small group instruction. All general education classrooms have a teacher computer connected to a SmartBoard to display instructional content and provide an interactive method to deliver instruction. In addition, the Special Education classrooms and the Read 360 classrooms have an additional three computer stations.

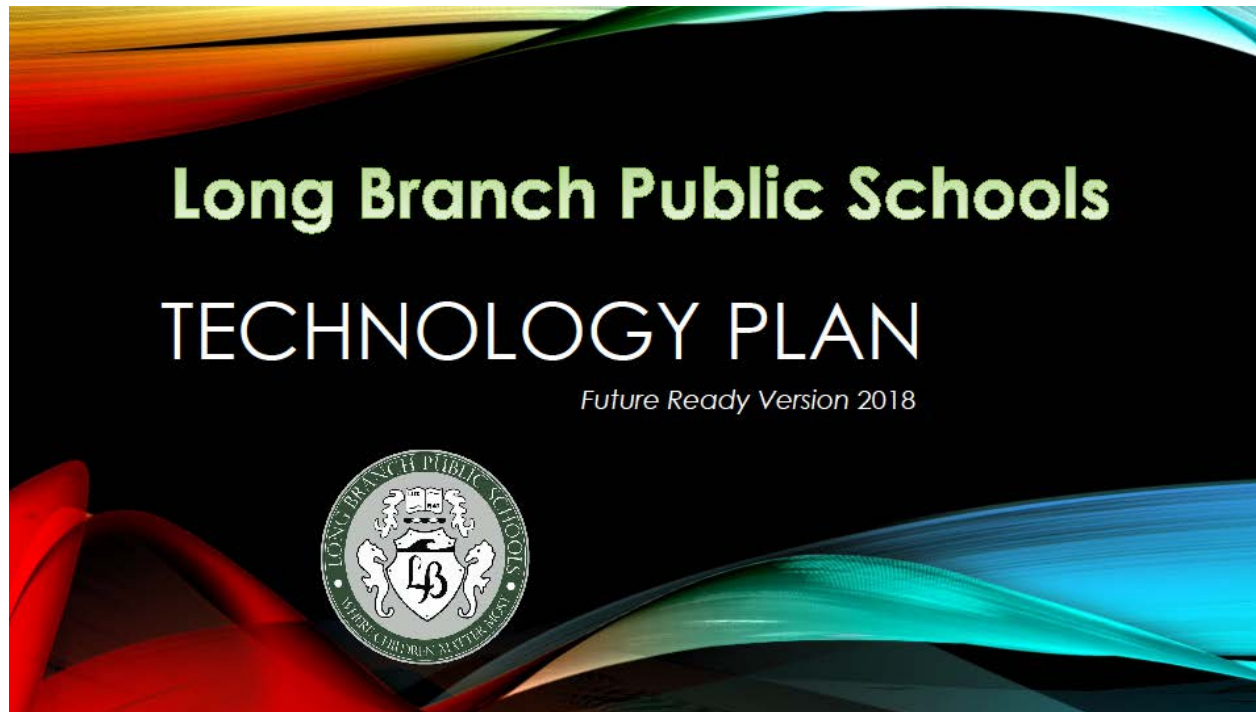
There is a Windows based computer lab in each building equipped with a SmartBoard for direct instruction. This lab is used for Computer Classes with a dedicated Technology Teacher that teaches in a project-based environment with a curriculum that meets academic goals and reinforces 21st century skills.

Name of Component School: William Drive, Middle Road, Raritan Valley (grades 1-4)

Describe the degree to which this school's performance differs from the average for the system: Each school has 25 net books with a cart for storage and charging and is used for all discipline areas. There is a SMART Board in every general education classroom and a computer lab with 26 computers and a SMART Board. Each school has a cart with 20 iPads with 50 apps installed for all discipline areas. Raritan Valley School has two iPad carts with 20 iPads each.

Name of Component School: Sycamore Drive Early Childhood Learning Ctr (PreK-K)

Describe the degree to which this school's performance differs from the average for the system: Sycamore School has three student computers and one teacher computer in each classroom. There is also a SMART Board in each classroom. There are seven iPads in the school with 75 apps for various discipline areas.





TOGETHER WE RISE

The Technical 12



- Technology Director
- Head of Technical Services
- Technology Secretary
- 2 Network Technicians
- 3 Technical Support Field Specialists
- 2 Audio/Video Technicians
- Communications Technician
- Inventory Technician

THE TEAM GROWS STRONGER



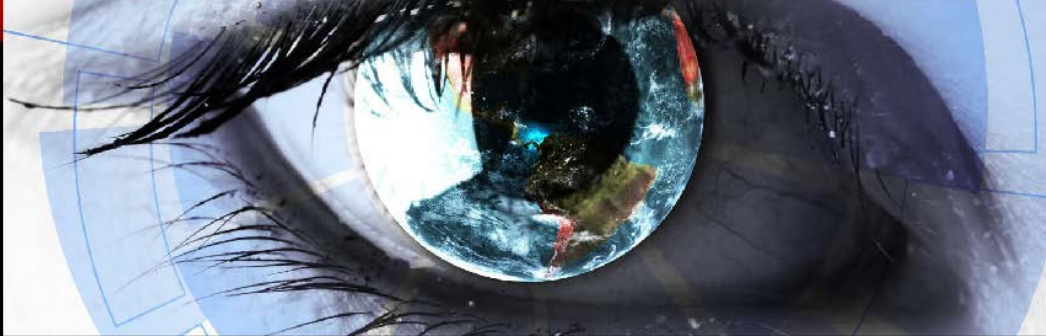
- 2018 – 2020
 - Plans to expand the roles of the Technology and Distant Learning Advisors inside schools are being reviewed
 - Plans to integrate the roles of the Technology Education Specialists more into the Technology Department are being reviewed



THE CORE OF IT ALL

A vast and robust enterprise class infrastructure

- * Dual Cisco 6509s with separate and redundant routes of fibers throughout the city feeding all of our schools and city locations
- * Dual power supplies on all critical networking equipment, battery backups, & whole building generators assure power at all times
- * Well over 1 million dollars in wired and wireless infrastructure equipment (Over 7000 data ports and over 500 wireless access points)
- * 2gbps Internet Connection
- * A Hyper V Virtual Server Farm



THE FUTURE OF SPEED
2018 – 2020

- * Over 180 pieces of Cisco networking equipment will be replaced (\$750,000 retail value : Winning E-Rate bid price = \$566,000 : Cost to the District = \$85,000)
- * 10gbps connections will be established between buildings and between all MDF/IDF closets



THE WATCHFUL EYE

- 2 Cisco enterprise class firewalls
- 2 Redundant content filters
- Symantec Endpoint Anti Virus & Network Protection on all clients
- Network policies to assure data privacy
- Daily offsite backups keeping our data safe

Safety in technology

The slide features a dark background with a colorful, wavy header at the top. The title 'THE WATCHFUL EYE' is in white, uppercase letters. Below it is a list of five bullet points in white text. To the right of the list is a blue graphic with the text 'Safety in technology' in a large, bold, white font. A white mouse cursor arrow points to the text. The background of the graphic shows a network of nodes and lines.

2018 – 2020

THE VOW OF PROTECTION

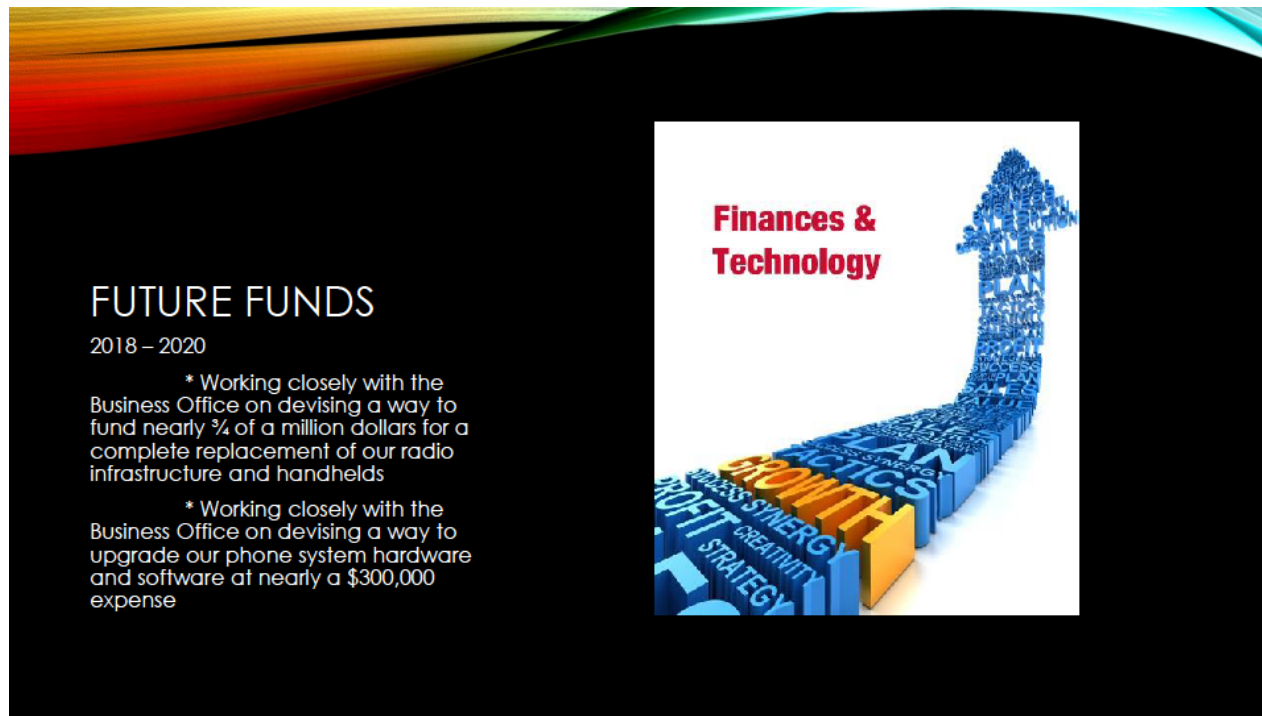


- Content Filter Version Upgrade
- Firewall Replacement
- Website Approval/Denial Committee



SHOW ME THE MONEY


- The overall Technology Budget for 2017-2018 was \$1.37 Million Dollars not counting salaries
- E-Rate was leveraged for over \$100,000 in savings (over ½ million dollars will be saved in 2018-2019)
- Tens of thousands of dollars were saved by utilizing state contracts and competitive shopping



FUTURE FUNDS
2018 – 2020

- * Working closely with the Business Office on devising a way to fund nearly ¾ of a million dollars for a complete replacement of our radio infrastructure and handhelds
- * Working closely with the Business Office on devising a way to upgrade our phone system hardware and software at nearly a \$300,000 expense

Finances & Technology

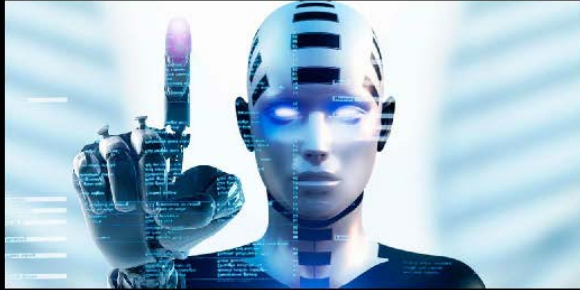


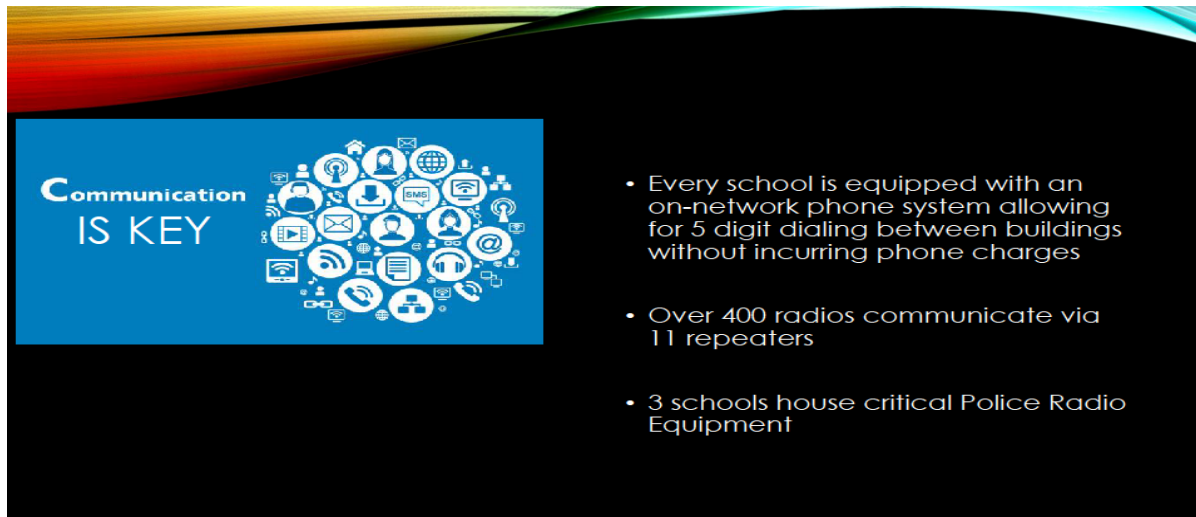
COMPUTERS NEVER SLEEP

- Building Controls**
 - Remotely accessible HVAC controls for all buildings
 - Real-time monitoring of burglar and fire alarms with text message alerts
 - Real-time monitoring of boilers and temperatures with text message alerts
- Networking**
 - Over 700 pieces of equipment and server processes monitored real-time with text message and email alerts
 - Active daily programmed routines set to run to shut inactive computers down to preserve energy
- Backups**
 - Nightly incremental backups copy data offsite
 - Weekly full backups copy data offsite

THE COMPUTER VOICES GET LOUDER

- 2018 – 2020
 - Our monitoring systems will grow to cover more equipment
 - Our backups will be adjusted accordingly based on software that is moved into the cloud





**Communication
IS KEY**

- Every school is equipped with an on-network phone system allowing for 5 digit dialing between buildings without incurring phone charges
- Over 400 radios communicate via 11 repeaters
- 3 schools house critical Police Radio Equipment



NEVER LOSE TOUCH
2018 – 2020

* 2 support buildings are slated to get equipped with IP Telephones connected via wireless bridges that tie into fiber equipped buildings nearby, thus reducing POTS lines and lowering phone bills.

