

Memorandum

Date: April 14, 2023

Submitted by: Jeff Kienitz, Director of Technology

Contact: Kienitzj@rockford.k12.mn.us

Subject: Rockford Area Schools – Five Year Technology Plan from 2023-2028

Note: First draft writing and subject to change. The plan is not approved at this stage.

Rockford Area Schools – Five Year Technology Plan (2023-2028)

Technology Vision

"Empowering stakeholders with equitable access to high-quality instructional practices through a secure digital environment, while providing exceptional support and customer service, is the overarching vision of the technology services department at Rockford Area Schools."

The technology services department of Rockford Area Schools is committed to guaranteeing that all stakeholders receive the necessary support and customer service to engage and empower individuals in the pursuit of learning. Our goal is to offer all stakeholders fair and efficient access to resources that facilitate engaging in high-quality instructional practices, available in a secure digital environment on and off-campus.

Rockford Area Schools aims to enhance the learning experience of our International Baccalaureate (IB) program students through the implementation of innovative and effective technology solutions. Our goal is to seamlessly integrate technology to facilitate student engagement and promote skill development that is required to thrive in a global, digital society. By providing access to cutting-edge technology and promoting its use in authentic, inquiry-based learning experiences, we aim to prepare our IB students to become successful global citizens and leaders in their fields.

The Rockford Elementary Arts Magnet School and the Rockford Middle School - Center of Environmental Studies will enhance the educational experience of their students by integrating innovative technology solutions. These schools will provide cutting-edge technology and resources that foster critical thinking, problem-solving, and creativity, which are essential skills for success in Arts and STEM fields. The use of technology will create an engaging learning environment that promotes collaboration, communication, and the development of 21st-century skills. The ultimate goal is to equip students with the tools and knowledge they need to become successful, lifelong learners who are prepared to tackle future challenges

Basic Core Strategies:

Engage and Empower

Recent advancements in educational technology have introduced novel ways for stakeholders to participate in the learning process, including learning management systems and communication platforms that enable connections between individuals from all around the world, providing students with access to tools and information with unprecedented speed. To ensure the success of all stakeholders, prioritizing the professional development of our staff is crucial to ensuring they can continue to provide students with a superior learning experience.

Our stakeholders will be informed about how we will establish and maintain best practice in the following areas:

- How to sustain and improve a one-to-one digital learning program.
- How to leverage technology to enrich instructional practices and foster student engagement.
- How to assess students' needs using different methods and respond appropriately.
- The significance of their online behavior and the importance of being a positive digital citizen within a diverse global community.

As a result of our understanding that:

- Learning environments are continually evolving, and students should have access to various learning formats to prepare for post-graduation opportunities.
- Technology provides genuine and real-world learning experiences that traditional education cannot replicate.
- Encouraging a culture that values growth, learning, and deliberate innovation will have a positive effect on our community.

Enabling Equitable Access and Effective Use

An effective technology program offers all stakeholders seamless and comprehensive access to available applications, resources, Engage and tools, and professional development opportunities. In our department, access comprises two distinct components: the ability to effortlessly connect to our network, enabling access to the global community, and equipping all students with the necessary tools to excel both inside and outside the classroom.

Our stakeholders will have confidence that we will implement best practices in the following areas:

- The function and operation of our infrastructure and the different systems required for its success.
- How to locate and utilize available resources for productive learning and knowledge.

- How accessibility options can remove obstacles and create an all-inclusive environment.
- The purpose and benefits of a program about personalizing the individual learning needs for our students through digital and technological tools, including student devices to bolster student self-esteem, career tracts, and further lifelong learning.

As a result of our understanding that:

- That technology enhances learning experiences and fosters global connections.
- That our infrastructure and resources are designed to support the diverse needs of our stakeholders in a secure and reliable manner.
- That equity and accessibility to resources are fundamental to our mission and goals.

Environment – Safe and Secure

In the modern era, ensuring safety and security is of utmost importance in all settings, whether physical or digital. A secure digital environment shields stakeholder from unsuitable content, both internal and external hazards, and offers education and training to mitigate risks across all platforms.

We will establish and review best practices regarding:

- The importance of cyber security practices, including device security, data privacy, and managing digital footprints.
- Rockford Area Schools is committed to providing the highest levels of digital security possible while maintaining academic freedom.
- How to assess the credibility of online resources, communications, and websites, and how to report any suspicious activity.

As a result of our understanding that:

- Safety and security are crucial elements of the learning environment.
- We recognize the importance of data privacy for all stakeholders and are committed to upholding this fundamental right.
- The protection of the physical and intellectual assets of the school district is crucial and requires the active participation of all stakeholders.

Educational Technology Support

Educational technology support refers to the services and assistance provided to educators, students, and other stakeholders in the use and integration of technology into the learning environment. This includes technical support, training, professional development, and resources to ensure that technology is being used effectively and efficiently to enhance teaching and learning outcomes. Educational technology support also involves ensuring that technology is accessible, safe, and secure for all users. The goal of educational technology support is to

empower educators and students with the necessary tools and skills to succeed in a rapidly evolving digital world.

Providing excellent service to every stakeholder is a crucial element in ensuring the smooth functioning of a sophisticated technological network. Customer service goes beyond merely resolving issues; it encompasses assistance, communication, efficiency, and politeness throughout the entire process. Our department is committed to delivering top-notch and courteous customer service.

Stakeholders will be knowledgeable about:

- How to communicate with members of the technology department to obtain assistance with their questions.
- How to utilize the tools and resources available to support learning among stakeholders.
- Where to access on-demand articles, videos, and other informational materials to receive additional support.

As a result of our understanding that:

- Our stakeholders will trust in their ability to expand their technical skills and understand that seeking assistance is a normal part of the learning process.
- We want our stakeholders to feel empowered to improve their technical proficiency, and confident that our support team will provide timely and expert guidance.
- It is our aim that our stakeholders feel confident in their ability to navigate technology tools and have faith in our team's ability to provide responsive and effective assistance.

Strategic Goals and Focus Areas

Engage and Empower (Instructional Technology)

- **Strategic Goal 1:** How to define, sustain, and improve a one-to-one digital learning program.

Focus: Some potential innovative and creative funding sources for implementing a 1:1 initiative could include:

- Grants: Seek out grants from government organizations, private foundations, and corporate sponsors that support educational technology initiatives.
- Fundraising: Create a campaign or organize fundraising events to generate community support and funding.
- Partnerships: Partner with local businesses or organizations to sponsor technology purchases, such as through sponsorships or in-kind donations.

- Leasing: Consider leasing devices instead of purchasing them outright, which can help spread the cost over time.
- Bond and/or Levy issues: Work with the community to explore the possibility of issuing bonds or levy to fund educational technology initiatives.
- E-rate funding: Apply for E-rate funding, a federal program that provides discounts on internet access and related technologies for eligible schools and libraries.

Focus: Establish clear standards for student devices, including requirements for learning and access, as well as device specifications such as screen size to support state testing. Define consequences for inadequate care of the devices.

Focus: Provide comprehensive instructions and training for students, teachers, and staff on the use of technology tools and devices, including training at the time of device issuance. This will ensure that all stakeholders have the necessary skills to effectively and efficiently use the devices and tools for teaching and learning.

- **Strategic Goal 2:** How to replace, integrate, and train stakeholders with classroom interactive boards in grades K-12.
- **Strategic Goal 3:** Our goal is to establish and maintain a safe, secure, and technologically advanced learning environment that fosters personalized learning, student engagement, and digital responsibility for all stakeholders. We will provide access to high-quality digital resources and support the development of best practices for technology integration and online behavior. We will strive to ensure that our stakeholders have the necessary tools, skills, and knowledge to succeed in a rapidly changing digital world, while also promoting collaboration, creativity, and innovation.

Focus: With the increasing use of digital resources and technology in education, it is important for students to learn how to use them responsibly and ethically. Educators and parents play a crucial role in teaching students about digital citizenship, which includes topics such as online safety, privacy, cyberbullying, plagiarism, and appropriate online behavior. By teaching students about these issues, we can help them become responsible digital citizens who use technology in a positive and productive way.

- **Strategic Goal 4:** Review and Improve the ability for stakeholders in different disciplines to utilize integrity-based data - driven analytics.

Focus: Review and improve the ability to collect useful data through the student information system.

Focus: Providing real-time data with relevant actionable information can help teachers make informed decisions about their teaching strategies and enable them to adjust their course content and teaching methods based on student progress. Utilizing online testing and student data warehouses can make this information readily available and easily accessible to teachers, allowing them to spend more time with students and less time on administrative tasks. This approach can also enable teachers to identify students who may be struggling or need additional support, and provide timely interventions to help them succeed.

- **Strategic Goal 5:** How to determine, implement, and monitor adaptive and individualized learning based on student needs and activities.

Focus: Learning Management Programs that are empowering, personalized and flexible.

Focus: Student centered and Adaptive learning which focuses on the needs and interests of the students.

Focus: Reimagined Learning Spaces: To successfully implement personalized learning, classrooms may need to be redesigned to create active learning spaces that cater to different types of learning. This can include creating collaboration areas, project spaces, and maker-spaces, as well as offering choices for how students can interact with their learning materials. Additionally, school buildings need to be used differently to accommodate these changes, and appropriate power, connectivity, and technology resources need to be available to support them.

Enabling Equitable Access and Effective Use (Enterprise Systems)

Strategic Goal 1: To achieve a more efficient and scalable technology infrastructure, the district will evaluate current and ongoing investments in legacy systems and hardware, and prioritize the replacement of outdated technology with innovative solutions.

Focus: When purchasing switches and related infrastructure, there are several important considerations that need to be considered, including:

1. **Network Capacity:** The switches and related infrastructure must be able to handle the expected volume of network traffic without any lag or slowdowns.
2. **Port Density:** The number of ports available on the switches should be sufficient to support all the devices that need to be connected to the network.
3. **Power over Ethernet (PoE) Support:** If there are devices that require power, such as IP phones or security cameras, the switches should support PoE to eliminate the need for separate power sources.
4. **Network Management:** The switches should have robust network management capabilities, including the ability to monitor and troubleshoot network performance issues.
5. **Security:** The switches and related infrastructure should have advanced security features such as access control, port security, and encryption to prevent unauthorized access and protect sensitive data.
6. **Scalability:** The switches and related infrastructure should be scalable, allowing for easy expansion as the network grows.
7. **Reliability:** The switches and related infrastructure should be highly reliable with redundant components to minimize downtime.
8. **Compatibility:** The switches and related infrastructure should be compatible with existing network infrastructure and devices to ensure seamless integration.
9. **Cost:** The cost of the switches and related infrastructure should be reasonable and within budget, while still meeting all the required specifications and features.
10. **Cabling requirements** including the planning, installation, and maintenance.

Strategic Goal 2: To ensure effective management and support of district K-12 school operations, the technology services department will review and upgrade enterprise systems, including legacy systems approaching end of life, to meet current and future needs, and to provide the necessary infrastructure for secure and efficient data management, communication, and learning. Some examples of these K-12 school enterprise systems are:

1. Student Information Systems
2. Learning Management Systems
3. Financial Management Systems
4. Human Resources Information Systems
5. School Nutrition Systems
6. Transportation Management Systems

7. Library Management Systems
8. Facilities Management Systems
9. Health Services Management Systems
10. Data Analytics and Reporting Systems
11. Early Childhood Information Systems
12. Community Education Information Systems
13. Special Education Information Systems
14. Media Center Information Systems

- **Strategic Goal 3:** Establish a comprehensive enterprise level program that leverages digital and technological tools, including student devices, to personalize learning for each student, bolster their self-esteem, and prepare them for future career paths and lifelong learning opportunities. The program will comply with the MN Student Data Privacy Act and focus on providing students with resources and applications to develop their unique talents, strengths, and learning styles, while promoting a growth mindset and equipping them with critical digital literacy and citizenship skills. The ultimate goal is to improve academic outcomes, increase student engagement, and prepare students for success in a rapidly changing digital world.
- **Strategic Goal 4:** To ensure the reliability and efficiency of all critical school infrastructure, the strategic goal is to implement a comprehensive maintenance program that includes regular checks, upgrades, and replacements of phone systems, public address systems, point of sale terminals, servers, and wireless networks to ensure they are always up-to-date and meet the evolving needs of the K-12 school community.

Focus: During this planning period, the phone system, public address system, point of sale terminals, wireless network, and switches will reach their end-of-life and require replacement or upgrades to maintain functionality and security.

- **Strategic Goal 4:** Upgrade communication systems to comply with K-12 school security procedures and 911 reporting laws, enabling swift and effective emergency response to ensure the safety and security of all stakeholders.

Environment – Safe and Secure. (Operations and Infrastructure)

- **Strategic Goal 1:** Develop and implement Action Plans and Best Practices to assess risks based on industry standards and prioritizing cybersecurity resources to address the greatest risks is an essential step in ensuring the security and privacy of student data.
- Focus:** Best practices include conducting regular risk assessments to identify potential vulnerabilities and threats, implementing appropriate security measures to address identified risks, and prioritizing resources to address the highest risks.

Focus: Review insurance, federal, and state rules and regulations to determine compliance.

Focus: Conduct timely reviews and audits of operations to ensure the confidentiality, integrity and assurance of data. Regular security audits should also be conducted to identify vulnerabilities and potential threats, and remediation plans should be developed and implemented to address any identified risks. This will help reduce the risk and vulnerability of the organization's information systems and ensure the safety and security of stakeholder data.

- **Strategic Goal 2:** Determine and implement adequate resources to effectively manage the security program and reduced risk and vulnerability of the organization's information systems.

Focus: To ensure adequate resources for managing the security program, it is important to have a dedicated team or staff responsible for cybersecurity. This team should be trained and equipped with the necessary resources to effectively manage and maintain the organization's information systems.

Focus: Budget and resources should be allocated to implement and maintain security measures such as firewalls, intrusion detection and prevention systems, data encryption, regular software updates, and employee training programs.

- **Strategic Goal 3:** Rockford Schools aims to upgrade its information systems to comply with regulatory reporting requirements. This includes staff development and implementation of modern and efficient enterprise systems to enable secure and accurate data collection, analysis, and reporting. By enhancing data reliability and accuracy, we can improve decision-making, enhance student achievement, and foster transparency and accountability. We will need to allocate necessary resources and establish clear timelines for system upgrades and data uploads.

Focus: Here are some of the agencies and reports that Minnesota K-12 schools are required to complete:

1. Minnesota Department of Education (MDE)
 - MDE Data Submissions (student and staff data, finance data, etc.)
 - MDE Special Education Data Reporting
 - MDE English Learner Data Reporting

- MDE Graduation Rates and Dropout Data Reporting
- 2. US Department of Education (USDE)
 - Civil Rights Data Collection (CRDC)
 - Individuals with Disabilities Education Act (IDEA) Data Collection
 - Every Student Succeeds Act (ESSA) Reporting
 - National Assessment of Educational Progress (NAEP): NAEP is a federally mandated assessment of student achievement in reading, mathematics, and other subjects.
- 3. Minnesota State High School League (MSHSL)
 - MSHSL Participation Data Reporting
- 4. Minnesota Department of Health (MDH)
 - Immunization Data Reporting
- 5. Minnesota Department of Employment and Economic Development (DEED)
 - Career and Technical Education (CTE) Data Reporting
- 6. Minnesota State Legislature
 - Various reports as required by legislation

Those were some examples, and there are additional reporting requirements not listed.

Focus: Here are some major federal laws or regulations regulating K-12 internet and data:

1. Family Educational Rights and Privacy Act (FERPA) - regulates the access and disclosure of student education records
2. Children's Online Privacy Protection Act (COPPA) - regulates the collection of personal information from children under 13 online
3. Children's Internet Protection Act (CIPA) - requires schools and libraries receiving federal funding to implement internet safety policies and filters to protect children from harmful online content
4. Individuals with Disabilities Education Act (IDEA) - ensures that students with disabilities have equal access to education and educational technology
5. Health Insurance Portability and Accountability Act (HIPAA) - regulates the privacy and security of health information, including student health records in school settings
6. Every Student Succeeds Act (ESSA) - requires states to submit plans to the U.S. Department of Education outlining how they

will use federal funds to improve student academic achievement and ensure accountability

7. General Data Protection Regulation (GDPR) - applies to all organizations that collect and process personal data of individuals in the European Union, including data collected by K-12 schools for students studying abroad.

Focus: The Minnesota Student Data Privacy Act (SDPA) was enacted in 2014 to regulate the collection, storage, use, and sharing of student data by schools and third-party service providers. The law requires schools to adopt policies and procedures for data privacy and security and to obtain written consent from parents or eligible students for the use of their data by third-party service providers. The law also requires schools to provide annual notice to parents and students about their data privacy rights and to report any data breaches to the Minnesota Department of Education and affected individuals.

Minnesota State Statute 13.32 is also relevant to K-12 internet and data regulations in Minnesota. This statute provides guidelines for the management and classification of government data, including data collected by K-12 schools. It outlines the rights of individuals to access government data and the responsibilities of agencies to maintain the security and confidentiality of data.

- **Strategic Goal 4:** To enhance the safety and security of all stakeholders in K-12 schools, the strategic goal is to upgrade, replace, maintain, and provide appropriate access to security camera systems and door control systems. This goal aims to ensure that all school facilities are equipped with state-of-the-art security camera and door control technology that provides comprehensive coverage of critical areas, enables timely detection of potential security threats, and allows for quick and effective response to emergency situations. The program will include regular maintenance and updates of existing systems, replacement of outdated or malfunctioning equipment, and the provision of appropriate access to authorized personnel to ensure effective monitoring of school facilities. By achieving this goal, we aim to create a secure learning environment that supports student success and well-being.

Focus: The TruVision camera system has reached end of life and is no longer supported. The approximately 70 cameras need to be replaced and merged into the current system which contains about 70 cameras. The district has identified additional needs for additional security cameras in dozens of areas throughout the district. In addition, a

replacement schedule needs to be developed to ensure ongoing operations.

Educational Technology Support (Customer Service and Supports)

- **Strategic Goal 1:** The strategic goal of the district is to cultivate a culture of exceptional customer service that prioritizes technology as a tool to support student learning and success. The goal is to equip stakeholders with the necessary knowledge and skills to effectively communicate with technology staff, access resources, and efficiently utilize available tools. The technology department will also provide on-demand access to articles, videos, and other informational materials to supplement ongoing support. Improving the customer service experience will enhance student outcomes, increase stakeholder satisfaction, and promote a culture of innovation and excellence in technology.
- **Strategic Goal 2:** To ensure a safe and secure learning environment, Rockford Schools will maintain appropriate staffing levels of technology personnel while also contracting with managed services providers to supplement and enhance the expertise and resources available. By leveraging a combination of in-house staff and external resources, we will ensure that critical systems and infrastructure are monitored and maintained, cybersecurity threats are identified and addressed, and the district is able to respond promptly and effectively to technology-related issues. We will prioritize the allocation of resources to support this goal, including investments in training and professional development for in-house staff and ongoing evaluation of managed services providers to ensure they meet our standards for quality and effectiveness.
- **Strategic Goal 3:** Rockford Schools aims to provide comprehensive technology professional development opportunities to all stakeholders, including administrators, teachers, and staff, to enhance their knowledge and skills related to online safety, cybersecurity, systems training, and other technology-related topics. The goal is to ensure that all stakeholders are equipped with the necessary skills to use technology effectively and safely in the classroom and beyond. This will include training on identifying and preventing phishing scams, addressing cyberbullying, and promoting responsible online behavior. By providing ongoing technology professional development, we can improve the overall quality of instruction and support services, enhance student learning outcomes, and ensure a safe and secure environment for all stakeholders. We will prioritize the allocation of resources to achieve this goal and establish clear metrics to track progress and measure success.

5 Year Budget Discussion:

Sustain District 1:1 program

Chromebooks - Generally speaking, Chromebooks are designed to last for several years. Google, the company behind the Chromebook operating system, typically offers 5-6 years of software updates for its devices, meaning that even older models can continue to receive security updates and other important software improvements.

However, the hardware lifespan of a Chromebook can be affected by factors such as physical wear and tear, battery life, and performance issues. Over time, components such as the battery and keyboard may need to be replaced or repaired, and the overall speed and responsiveness of the device may decline.

We've been getting about four years.

Devices:

Location	Type	Available	Out	End of Life
Elementary	Acer Spin	616	616	Jun 2027
Elementary	Acer Spin	24	0	June 2026
MS/HS	HP14 G5	173	74	June 2024
MS/HS	HP14A G5	1178	1008	June 2026
		1991	1698	(293 available) Carts, staff, in repair, spare registration, media ctr.

Chromebook – unit cost is about \$340 which is the item and a license fee (\$30.00).

Using a 4 Year Cycle:

1991 units at \$340.00 is \$676,940.00.

Google for Education: \$4,500 annually for 5 years is \$22,500.00

Aristotle K-12 Management is \$12,500.00 annually for 5 years is \$62,500.00

Repairs – currently estimated at \$15,000 annually and over 5 years is \$75,000.00

Estimated: \$836,940.00 (based on current prices)

Complete classroom Interactive Boards Replacement/Installation:

Clever Touch: Generally speaking, Clevertouch interactive boards are built with durable materials and designed to withstand heavy use in educational settings. The company provides a 5-year warranty on their products, which suggests that they expect their devices to last for at least that long. With proper care and maintenance, it's possible for a Clevertouch interactive board to last for several years beyond its warranty period.

MS/HS – HS readied by fall 2022, MS will be readied by fall 2023 and the hope is for the elementary to be readied by fall of 2023 or fall of 2024.

Afterwards we can work to integrate into the public address system and emergency communications system.

Cost to complete is at \$130,000.

Phone System:

Mitel phone system – cloud based currently with phones exceeding several years in age. The systems have reached end of life and we are forced to look at the dwindling used market for replacement parts.

In speaking with a phone vendor – plan on about \$1,000.00 per extension.

Estimated cost to complete is at \$285,000.

E911 – Would require an additional \$16,000.00 investment with a \$1300 annual fee thereafter. This is mandated by new legislation and we are currently not in compliance.

Note: District is supporting about \$6,000 annually in mobile phone technology. (not included in this cost)

Phone system and E911 compliance is estimated at \$310,000.

Classroom Amplification – Public Address systems

Juno system: The systems have reached end of (5 year) warranty a few years ago. With proper care and maintenance, it's possible for a Juno classroom amplification system to last for several years beyond its warranty period. We need to begin the process of planning replacement.

Server side: (3 buildings) Estimated cost for replacement if servers, software, and installation is \$73,800.00

Classroom side: Each unit cost is \$2450 and we currently have 140 units in classrooms: \$343,000.

Consulting/Installation guidance is \$10,000.

Cost of PA system replacement in kind: \$426,800.00

(This doesn't account for additional units, cabling, or switch capacity.)

Server infrastructure and core software:

Server systems – The servers are expected to last several years. The previous servers were replaced about the 9-year mark.

Previous main server cost was \$95,000.00 (Summer 2023)

Secondary Servers cost about \$8000.00 each. (SY 2022 for backup systems)

Storage Area Network – each unit is about \$30,000 and we have three, but may reduce to 2. (SY2022 and SY2023)

Microsoft Licensing runs about \$6,577, Backup about \$1800, VMware about \$3100 annually or est. \$60,000 over five years at current cost.

Servers and core software: \$240,000.00

General computers/devices:

We strive to maintain several years of use:

100 desktops and other various items, i.e. iPads, Tablets – estimate \$900 per unit – (most are end of life)

170 staff Laptops – estimate \$1000.00 per unit (SY2022)

Device replacement: \$260,000

Wireless Network:

We strive to maintain several years of use: (SY2019)

Today 116 Access Points (AP's)

Anticipated 130 in the near future. Cost today is 710.76 per AP and 155.56 for licensing (3 year)

Cost doesn't reflect outdoor AP's.

Estimated Cost (5 Years): \$165,000

Does qualify for Category 2 federal funding which ends June 2025. (60 percent reimbursement)

Cameras and Door Controls:

We strive to maintain ten years of use:

TruVision – excess of ten years and has reached end of life and is basically without support.

11 Analog and 55 digital

Avigilon – 73 digital and 2 Vape sensors

Total: 139 cameras. (Average cost seems to be \$1,900 per camera. (\$264,100.00)

We will need additional cameras and replace the TruVision systems. (\$125,400 TruVision and \$100,000 for new – which is about 15 per building) - \$225,400.00

Door Controls - \$100,000.00 over 5 years to continue the program

*Estimated Cost (5 Years): \$325,400

*Will need to add security costs for visitor management systems and doesn't include server replacement.

Cyber Security and Internet:

End Point Security is currently \$7,000 annual.

Phishing programs is currently \$6,500 annual.

Staff Development Training is currently \$1,500 annually.

Google for Education audits: \$4,000 with an \$1,250 annual collaborative fee (Audit every 2 years)

ECMECC - \$10,000 annual fee for audits. FrSecure was estimated \$20,000 every 2 years.

Internet – State of MN through ECMECC for \$12,408 annually (1Gb)

Hot Spots: Estimate cost for \$12,000 annually – not renewing fully. (est. \$2,000 annual)

Zayo – main line maintenance at \$5,000 annually.

Firewall services: Estimated expense: \$5,000 annually.

Web Hosting: \$8,500 annual

Total is \$61,158 annually or \$305,790 over five years

Innovation:

Recommend \$20,000 annually for technology related to innovation.

Robotics, Art software, Athletics, STEM, CADD, milling, 3D printing, Augmented Reality, Artificial Intelligence, Career Track, IB programs and more to be determined by a committee.

Total is \$20,000 annually or \$100,000 over five years

Cost Breakdown:

One to One: \$836,940

Interactive Panels: \$130,000

Phone/E911: \$310,000

PA system: \$426,800

Servers: \$240,000

Devices: \$260,000

Wireless: \$165,000

Switches: \$300,000

Security: \$325,400

Cybersecurity/Internet: \$305,790

Innovation: \$100,000

Estimated Amount: \$3,398,590 over five years or \$679,718 annually

This is not all costs – Staffing, copiers, software (i.e. Adobe, Infinite Campus, SPED, SMART), managed services, technology supplies, ink, tools, repairs, haven't been considered.

Sustainability:

This plan strives to provide sustainability of the existing services, highlighting how the technology infrastructure will be maintained and updated over time. This may include ongoing training and support, regular upgrades and replacements, and other measures to ensure the long-term success of the plan. AS stated above, this budget plan does not address all budgetary items relating to the implementation, deployment and sustainability of district technology services; however, it does portray a window into the operations and encourages ongoing discussion and transparency.

Respectfully Submitted,

Jeff Kienitz, M.S. Ed. Tech.
Director of Technology Services
Rockford Area Schools
6051 Ash Street, Rockford, MN 55373
Office: 763-477-7508
kienitzj@rockford.k12.mn.us
www.rockford.k12.mn.us