



Technology Plan

2024-2027

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INTRODUCTION:

The district vision is Grand Prairie ISD will ensure student success through engaging learning experiences, collaborative leadership, and a focus on maximizing student achievement.

The mission of GPISD is to provide an exceptional learning community committed to student academic growth, innovation, and equity for all.

The core values of GPISD are:

Grow, attract, and retain students and staff through high quality programming.

Prepare scholars through college, career, and military readiness for the 21 st century and beyond.

Innovative and inclusive educational practices.

Secure the largest rate of return on the public's tax dollar by adopting conservative budget practices.

Develop high community standards through the engagement of parents, business, and the community in a collaborative and transparent process.

The GPISD graduate:

Prepares for academic success in post-secondary college and career endeavors

Communicates effectively

Values inclusiveness

Listens actively and empathetically

Thinks critically

Operates with integrity and high ethical standards

Possesses emotional intelligence

Practices self-awareness

Manages conflict to achieve successful resolution

Demonstrates responsibility and accountability

These tenets serve as a foundation and guiding principles for the development and continued improvement of the GPISD technology plan.

District Technology Advisory Committee:

This plan is a result of the hard work and thoughtful consideration by the following members of the technology Committee:

Dr. Melissa Steger, Chief Data and Information Systems Officer

Dianna Drew, Executive Director of Technical and Digital Solutions

Tara Cahill, Executive Director of Technology Support and Integration
Antwone Robertson, Director of Technology Services and Mobile Devices
Mark Bovinich, Manager of Cybersecurity and Network Solutions
Laighta Boyle, Principal Grand Prairie High School
Dr. Shelley Handcock, Principal Digital Arts and Technology Academy at Adams Middle School
Magdalena Garcia, Principal Eisenhower Elementary
April Wyatt, Principal Daniels Elementary Academy
Tanya Gilliam, Principal Truman Middle School
Diondria Phillips, Principal Dubiski Career High School
Rosie Zapeda-Acosta, Dual Language Facilitator, Bilingual/ESL
Lauren Plemons, Coordinator of Assessment and Related Services, Special Education
Veronica Benzvi, World Languages Facilitator, Teaching and Learning
Christian Cranfill, Secondary Math Strategist, Teaching and Learning
Julie Hungaski – Manager of Technology Integration and Library Services
Andrew Low - Instructional Technology Specialist
Sasha Hurtado – Teacher Eisenhower Elementary, Kindergarten
Valerie Sierra – Teacher Fannin Middle School, ELA
Christy Stone – Teacher Garner Fine Arts Academy, GT
Michael Garcia, Parent and Community Leader
Heather Anderson, Grand Prairie Education Foundation Officer

EXECUTIVE SUMMARY:

In spring 2021, the first of a three-phase upgrade to network infrastructure began. Phase 1 included refreshing core WAN/LAN switches, uninterruptible power supplies (UPS) for existing MDF and IDF closets, and wireless access points. The cost of the project at just over \$8.5 million, of which E-Rate reimbursements offset approximately \$6.2 million, leaving a net cost of approximately \$1.8 million for the district. This phase of the upgrade was completed in the summer of 2023.

Phase 2 of the network upgrades included core network equipment for non-instructional buildings; building new network closets; adding new edge switches with UPS to support new cameras, paging, and wireless access points; and to transition from maintaining individual switches in each classroom. The approximate cost of the phase II upgrades was \$8 million, of which E-Rate reimbursements offset approximately \$1.7 million. ESSER funds were used for the \$6.3 million balance of Phase 2. This phase of the upgrade was completed in the summer of 2023.

Phase 3 of the network upgrades is currently in progress and includes increases to our door access control system, replacement and increase to our security camera system, a complete voice (telephone) upgrade to the cloud, and cabling and equipment to transition our analog campus paging systems to an IP based system. This paging system upgrade enhances security for our staff and students by having the speakers connected to IDF switches supported by UPS back-ups allowing for continued service in the event of a loss of power. Phase 3 work began in August 2023 and is expected to be completed early 2026. The expected cost for all of Phase 3 is \$12M and has already been budgeted.

As of April 2024, we are 95% complete with additional door access control. Cabling for data, phones, paging, and additional cameras has been started at Travis, Bonham, and the Kennedy campus. We have completed 100% of the back-end voice system and have deployed all new handsets (phones) to all GPISD locations. Cabling each individual handset will occur during the cabling portion of the paging project.

In Fall 2023, a Community Visioning Committee was put together by the Board of Trustees to lay the groundwork for strategic planning of the district's future. The committee consisted of teachers, students, parents, administrators, and community leaders. This committee would work to set the course for student success in GPISD for years to come. During this time, it was determined that the immediate areas of focus for technology should be Classroom Technology and Cybersecurity. The technology department then began to develop a strategic plan to identify the best devices for students to use in the classroom and take steps to strengthen our network against threats and vulnerabilities. The specific technology objectives and action steps developed during the community visioning are included in Appendix B.

This technology plan addresses the two community visioning objectives as well as additional important areas in technology. Strategic planning involves establishing refresh cycles for student and staff devices as well as vital infrastructure equipment while budgeting for annual recurring costs for software licensing, inventory systems, monitoring tools for network security, and device management tools. This plan outlines the framework for technology integration in instruction and professional learning provided to staff; addresses artificial intelligence and its impact on district operations and instruction; provides information on the network infrastructure; describes current and planned cybersecurity measures; defines a replacement cycle for technology devices; and provides a three-year annual, tactical roadmap. The pandemic of 2020 created a dramatic change in the role of technology in education, and cybersecurity and artificial intelligence are rapidly evolving areas. Because of this, the tactical roadmap provided in the plan only outlines the next three years. However, technology staff and the advisory committee are strategically drafting out longer-range plans to serve as a foundation for the future tactical plans that will be published in 2027 and beyond.

This plan is a living document intended to be evaluated and updated on at least a quarterly basis.

CURRENT ENVIRONMENT: INVENTORY AND USE OF TECHNOLOGY IN GPISD

Grand Prairie Independent School District is a public school serving approximately 26,600 students with a workforce of approximately 3,500 employees. The district has 39 campuses consisting of 24 elementary schools, 6 middle schools, 5 high schools, three 6-12 grade schools and 1 alternative school. The district has one administration building that houses the Technology department and one technical building that houses our Digital Solutions Team.

What technology encompasses

Student, Staff, and Other Internet Devices	Security Technology	Audio Visual	Infrastructure (Internet)	Software
<ul style="list-style-type: none"> • iPads • Laptops • Desktops • Monitors • Printers • HVAC controls/thermostats • Child nutrition point of sale (POS) devices • Children’s Health scopes • Refrigerator/freezer controls • Environmental monitoring 	<ul style="list-style-type: none"> • Security cameras • Phones • Paging • Door access control - Badge readers • Door phone cameras • Raptor visitor scanners 	<ul style="list-style-type: none"> • Projectors • Interactive panels • Displays/TV • Apple TV and NovoPRO display streamers • Digital signs • Theater sound systems and control panels 	<ul style="list-style-type: none"> • Core network gear • Servers • Wireless access points • Switches • Uninterruptible power supplies (UPSs) • Storage arrays • Cables and wires 	<ul style="list-style-type: none"> • Microsoft Office • Ticketing system • Learning management system • Cybersecurity monitoring • Device management • Skyward Student and Finance

While not all of these devices are explicitly discussed in this plan, they are all considerations in strategically planning for long-term budgeting and staffing.

When considering instructional technology, the primary purpose in GPISD is to create and implement a dynamic, adaptive and real-world learning environment that fosters the four C's of communication, collaboration, creativity, and critical thinking skills. Grand Prairie ISD is a one-to-one district with each student in grades PreK-12 issued an iPad and each teacher issued a MacBook and an iPad. There are approximately 1100 Windows machines issued to students throughout the district. These machines are required to support special programs like Onramps, Early College, and Dual Credit courses. Additionally, some career and technical education (CTE) courses necessitate access to additional student devices.

Technology Staffing

Technology staffing supports the areas of helpdesk, technical support, technology integration, library services, audio/visual, networking and infrastructure, mobile device management, and digital solutions.

Focus Groups and Surveys

The District Technology Advisory Council (DTAC) is comprised of principals, teachers, teaching and learning staff, special programs, parents, and community members. The group collaborates in developing the technology plan and provides feedback on key performance indicators in the plan and reflections on survey results pertaining to technology.

Student Technology Advocates provide feedback on technology integration while helping develop lessons for students and teachers.

Our district uses survey data from the BrightBytes Clarity Dashboard to look at trends in technology and learning. The online survey provides questions to students in grades 3-12, teachers, and parents. The survey includes questions related to three categories: Classroom, Access, Skills, and Environment.

Data from the survey can help assist the Technology Department in planning items such as professional learning needs, future technology purchases, curriculum integration, trends, access to technology and more. GPISD's current overall rating is Advanced on a five-level scale: Beginner, Emerging, Proficient, Advanced, Exemplary.

Current Category Ratings for GPISD

Category	Rating
Classroom	Proficient
Access	Exemplary
Skills	Advanced
Environment	Advanced

THE GRAND PRAIRIE ISD FRAMEWORK: RESEARCH ON THE IMPACT OF TECHNOLOGY IN K-12

To begin the planning process, it is important to have a framework for the role of technology. The district has gathered resources based on research, best practices and lessons learned since technology was first infused into lessons.

The framework is aligned to the following national and international planning documents:

- International Society for Technology in Education (ISTE) Standards
- Renaissance Framework
- Elements of Learning
- Innovation in Schools

Each of the resources GPISD uses is based on current research and principles outlining practices ensuring instruction is student-centered and allows students a voice in their learning.

The Renaissance Framework is a resource developed from over 30 years in actual K-12 settings and it breaks down the following elements that can positively impact teaching and learning. Under each of the four elements are additional details that show how meaningful technology enhances student learning.

1. ***Connecting the Learner: Ensuring universal access to appropriate technology for all students, teachers, and staff***

Enhanced Learning Materials

Technology devices should facilitate access to interactive and dynamic learning materials, such as eBooks, simulations, and multimedia content, to make lessons more engaging.

Collaborative Learning

Technology should enable students to collaborate on projects, share ideas, and engage in group activities through online platforms, fostering teamwork and communication skills.

Parent-Teacher Communication

Technology should be used to facilitate communication between teachers and parents,

providing regular updates on student progress, assignments, and classroom activities.

2. **Promoting Learning:** *Developing skills for students and staff for online, blended, and technology-enhanced classroom instruction*

Research and Information Retrieval

Students should be able to use technology devices to access the internet for research purposes, encouraging them to gather information from various sources.

Digital Literacy Skills

Technology should be incorporated into the curriculum to teach students essential digital literacy skills, including online safety, information evaluation, and effective internet use.

Coding and Computational Thinking

Staff should integrate coding and computational thinking into the curriculum, helping students develop problem-solving skills and a deeper understanding of technology.

Real-World Applications

Technology should be employed to simulate real-world scenarios and virtual labs, allowing students to explore and experiment in subjects like science and mathematics.

Multimedia Presentations

Students should be encouraged to create multimedia presentations using technology devices, enhancing their communication and presentation skills.

Preparation for Future Careers

Classroom instruction should equip students with the skills necessary for future careers by integrating relevant technologies, such as 3D printing, robotics, and virtual reality, into the learning environment.

3. **Leveling the Playing Field:** *Ensuring all learners have equal access to the content using accessibility standards and adaptive/assistive technology*

Personalized Learning

Technology should be used to provide personalized learning experiences, adapting to individual student needs and pacing, allowing for a more customized educational journey.

Time Management and Organization

Staff should utilize educational apps to help students develop effective time management and organizational skills, aiding them in managing assignments and deadlines.

Inclusive Education

Staff should ensure that technology devices have accessibility features to support students with disabilities and diverse learning needs, promoting inclusive education and facilitating access for all learners.

4. **Measuring the Impact:** *Using modern data tools and techniques to measure learning and provide accountability and documentation*

Assessment and Feedback

The district should use technology for formative and summative assessments, providing real-time feedback to both students and teachers, allowing for timely intervention and support.

The research is also clear that when technology is not implemented properly, it can become a distraction and undermine the personal connections critical to teaching and learning. This technology plan aligns the Grand Prairie ISD Framework to the unique needs of the district and makes recommendations for improvements in technology access, training, and the infrastructure to support the district’s vision.

Key Performance Indicators

Item	Responsible	Detail
Lesson plans with technology integration	Manager of Technology Integration	Provide evidence of professional development (PD) offered teachers and those accessing it, PLC support from instructional technology staff and lesson plans including digital literacy skills, coding and computational thinking, virtual labs and real-world scenarios
Student, parent, and teacher awareness of accessibility features available on student devices	Manager of Technology Integration	Provide evidence of professional development support for general education and special programs teachers regarding accessibility features available on student devices and modeling how they can be used in instruction. Additional evidence will demonstrate efforts to raise awareness with students and parents of students with disabilities and diverse learning needs of the features available to support their learning. This will be accomplished through professional development targeted toward teachers and coordinators of programs

		supporting students with disabilities and diverse learning needs.
Digital literacy	Manager of Technology Integration	Digital literacy lessons and resources for students aligned to the ISTE 5 Competencies of Digital Citizenship

Essential Instructional Technology

In summer 2024, technology staff in conjunction with Teaching and Learning staff will complete a table of essential instructional technology broken out by campus, grade level, content area, and programs. The list will be used as a basis for categorizing existing professional development, determining additional needs, and prioritizing needed devices and refresh cycles.

Key Performance Indicators

Item	Responsible	Detail
Essential instructional technology	Executive Director of Technology Support and Integration	Essential technology list and alignment of professional development

INTEGRATION STRATEGIES AND SUPPORTS IN GPISD

Learning with Technology Resources

These teacher resources, created by the GPISD Learning with Technology Specialist team and GPISD classroom educators, can be used by any teacher in GPISD. All lessons are TEKS-based and integrate technology to enhance student learning. Students will complete the lessons using their iPad devices.

We use these lessons in GPISD because they:

- target course-specific TEKS
- are student facing
- are immediately able to be implemented
- span all grade levels and allow for differentiation
- promote creativity over technology consumption
- utilize the same apps and programs as industry professionals
- include tutorials and examples that can alleviate the fear of integrating with technology

Elements of Learning

This eBook created by Apple helps our educators design lessons that incorporate five elements of learning.

1. Teamwork
2. Communication and Creation
3. Personalization of Learning
4. Critical Thinking
5. Real-World Engagement

The five elements help to “design deeper, more meaningful learning experiences for our students and prepare them to be productive, empowered creators in the future workplace and in the world.”

Excerpt From *Elements of Learning*

Apple Education

<https://books.apple.com/us/book/elements-of-learning/id1367981260>

The Elements of Learning book also include a special rubric which is a spreadsheet to help “identify the degree to which a lesson supports the elements of learning. The rubric is used by teachers to help reflect on past lessons or design new ones that support deeper learning experiences.”

Excerpt From *Elements of Learning*

Apple Education

<https://books.apple.com/us/book/elements>

Innovation in Schools

Apple has created a book that shares innovative practices for leaders, teachers, and students that help a school go from vision to implementation. GPISD campus leaders leverage this book during professional learning experiences with their strategic planning teams.

“When leaders connect the potential of technology with the vision for their schools, they expand what’s possible for learning, create new opportunities for teaching, and establish a dynamic environment that inspires both.”

The Innovation in Schools book contains a chapter with a practical Learning Snapshot tool. Since innovative practices look different in every school, the “School Snapshot Tool”, an interactive spreadsheet, is used on campuses in walk-throughs to capture and share learning, teaching, and environment practices at our schools.

Excerpt From *Innovation in Schools*

Apple Education

<https://itunes.apple.com/WebObjects/MZStore.woa/wa/viewBook?id=1259499861>

Everyone Can Create

This collection of eBooks created by Apple is an excellent resource for teachers and students as they learn to create using their district devices. These books give step by step examples for all content areas with accessibility features built in to support all learners. Apple “developed **Everyone Can Create** with the idea that you should have the opportunity to learn skills across different creative mediums to become the next generation of **innovators, artists, and creators.**”

Excerpt From Everyone Can Create Photo

Apple Education

<https://books.apple.com/us/book/everyone-can-create-photo/id1434898103>

Digital Citizenship

GPISD uses Common Sense Media lessons to create engaging activities and allow time for students to practice the ethical and effective application of technology as well as to develop an understanding of cybersecurity and the impact of a digital footprint to become safe, productive, and respectful digital citizens.

Key Performance Indicators

Item	Responsible	Detail
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Common Sense Media lesson implementation	Manager of Technology Integration	Provide evidence of the implementation of the lessons by school.

PROFESSIONAL LEARNING AND STUDENT ENRICHMENT IN GPISD

Apple Teacher Badges

This is a professional learning program designed to support and celebrate educators using Apple products for teaching and learning. New to GPISD teachers are expected to take the self-paced journey to learn foundational skills on iPad and Mac and continue as they integrate Apple technology into their lessons. With three badges to explore, teachers can be recognized for understanding the best teaching — teaching that gives students more connected, creative, collaborative, and personal learning experiences.

Distinguished Leadership Academy

This event, held annually in the summer is a specialized learning experience to equip campus and district leaders with time to practice the strategies necessary for embedding technology into inspiring lessons that maximize student achievement. Leaders are invited to explore how to create success, empower others and lead by example with the best practices of effective technology integration.

Coaching Cycles with Teachers

Engaging in coaching cycles with our Apple Professional Learning Specialist cultivates learning
Grand Prairie ISD Technology Plan 2024-2027

environments that address the needs of all learners. These cycles help create innovative approaches to curriculum and assessments through personalized engagements designed to meet the teacher where they are comfortable with technology and willing to grow. As a result, educators are innovating across every subject. Science lessons combine hands-on work with augmented reality — students use iPads to research topics, document their findings, and create visuals of their solutions. In mathematics, students use animations in Keynote to better recognize and understand the logic behind equations. In the past, the focus has been on providing the opportunity to pursue extracurricular activities that harness creative thinking and problem-solving skills, such as joining Swift coding enrichments to develop apps.

Apple Learning Coach

GPISD encourages participation in a unique professional learning program designed to coach educators to support teachers in getting more out of their use of Apple technology in classrooms. Coaches engage in an online course that provides a dynamic mix of self-paced lessons and virtual workshops with Apple Professional Learning Specialists and fellow coaches. Participants complete personal creative projects — resulting in custom Coaching journals and actionable takeaways.

Apple Executive Leadership Coaching

Apple Executive Coaching is a 6-part coaching experience designed to help leaders identify, explore, and create new opportunities for innovation on their campus. When leaders connect the potential of technology with the vision for their schools, they expand what is possible for learning, create new opportunities for teaching, and establish a dynamic environment that inspires both. This coaching experience inspires GPISD leaders to raise their expectations for technology and the role it can play for their students.

Apple Learning Academy

Since 2017, GPISD has had a small group of educators that were able to attend this specialized, robust, week-long robust opportunity for critical thinking and conversations around creativity, building culture and enhancing personalized learning. The group developed a working definition of culture in regard to the five cornerstones: collaboration, respect, relationship, trust, and growth mindset. This group continues to model and lead the same five cornerstones in GPISD.

Technology Application TEKS

Beginning in the 2024-2025 school year, TEA is updating the [Technology Applications TEKS for grade K-8](#). In summer 2024, the instructional technology team will collaborate with Teaching and Learning to integrate technology application TEKS into appropriate content areas and develop PD to communicate and support the expectations with teachers.

Student Summer Camps

The program's primary objective is to ignite passions, unleash potential, and empower students to explore their interests and develop new skills. GPISD Technology provides three summer camps: Digital Arts Camp, Coding and Robotics Camp, and App Development Camp. In the Digital Arts Camp, students express themselves through music, the arts, making videos, or acting—anything that allows them to be unique and to be seen. Students are immersed in the world of digital arts on the iPad. In the Coding and Robotics Camp, students interact with robots and games, as well as leverage problem-solving skills in innovative ways using their iPad. In the App Development Camp, students learn the skills of a coder and the mindset of an entrepreneur by building apps. They will build an actual app for the iPad. Last year's camp launched an app idea that is currently available worldwide in the Apple App Store. Students use their district-issued iPad and their strong desire to delve deep into learning this in-demand skill preparing them for our app-driven world.

Student Technology Advocates

The goal of the Student Technology Advocate program is to engage GPISD students in offering support services for peers and faculty in the use of Apple devices and creativity apps. Not only will students help determine technology areas of focus, but they will also develop customer service and interpersonal communication skills. As a capstone to the 3-day learning experience, students are invited to a speed learning experience. These are short sessions designed for the advocates to teach a strategy the students determine to be essential to teachers' integration success. Learners will provide feedback to the Tech Advocates as they develop these mentoring skills.

Key Performance Indicators

Item	Responsible	Detail
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Apple teacher badge completion	Manager of Technology Integration	Reports will break out teacher and administrator completion by campus.
Teacher and administrator coaching sessions	Manager of Technology Integration	Logs will report the coaching sessions by campus and identify where the team can provide additional support.
Technology application TEKS	Executive Director of Technology Support and Integration	Sessions designed in collaboration with Teaching and Learning staff to raise awareness and support implementation of the updated TEKS

ARTIFICIAL INTELLIGENCE IN EDUCATION

Artificial intelligence is a rapidly evolving area in education. Procedures outlining responsible and ethical use of Artificial Intelligence (AI) tools and resources by students, teachers, and staff within the GPISD learning environment are being developed for inclusion in student and staff handbooks. The procedures will be regularly reviewed and refined as AI continues to develop. The intent of the procedures is to emphasize transparency, fairness, and adherence to ethical principles in all AI applications.

Educational Alignment:

- AI use will directly support and enhance learning experiences, aligning with established Texas Essential Knowledge and Skills (TEKS) standards.
- Student privacy and data security will be prioritized throughout AI implementation.

Operational Integration:

- The use of AI will align with the district improvement plan, aiding in the development of best practices for standard operating procedures across all departments.

Acceptable Uses of AI:

AI tools can be utilized for a variety of purposes within GPISD schools, including:

- Personalized Learning: Tailoring instruction to individual student needs.
- Accessibility Tools: Supporting students with disabilities and diverse learning needs and enhancing learning opportunities.
- Research Projects: Facilitating research, data analysis, and exploration of complex concepts.
- Creative Expression: Fostering innovation and imagination through AI-assisted creative endeavors.
- Collaboration: Encouraging collaborative projects, online discussions, and communication across diverse learners.
- Assessment: Providing personalized assessments and feedback to support student growth.

Responsibilities:

The district's Acceptable Use Procedures assign specific responsibilities to teachers, students, staff, and administrators to ensure the responsible and ethical use of AI. Because the area of artificial intelligence is rapidly evolving, the procedures will be published in a document separate from the student and staff handbooks. These responsibilities will be outlined in detail within the procedure documents and referenced in both student and staff handbooks. Training will be developed and delivered to both students and staff about appropriate uses.

Key Performance Indicators

Item	Responsible	Detail
Acceptable use procedures for AI	Chief Data and Information Systems Officer	The AUP will be referenced in the student and staff handbooks and will be posted on the same webpage as the handbooks.
AI training for staff and students	Chief Data and Information Systems Officer	Evidence will include the training materials, mode of delivery, and statistics on engagement

NETWORK INFRASTRUCTURE

Once the elements of the framework have been outlined, we focus on the infrastructure requirements to accommodate the instructional and business needs of the district. Infrastructure includes technology staff and support, data networks, information systems, document workflows, and wireless networks.

Staffing: Skilled staff who can communicate effectively are crucial to achieving the district's objectives. Staff will be equipped with training and resources to stay updated on technology advancements.

Current Infrastructure Environment

- Multiple Datacenters
- 192 Network Closets (MDFs/IDFs)
- 62 Physical Servers
- 195 Virtual Servers
- Multiple ISPs (totaling 20Gbps)
- 80Gbps WAN to each school
- 2812 Wi-Fi 6 Wireless Access Points
- 2542 Network Switches
- 188 UPS Battery Backups Systems
- 555 Printers

Connectivity

The reliability and speed of the network are critical to supporting the main elements of the framework. Technology will ensure key infrastructure is upgraded to provide adequate bandwidth needed to connect the learner and support the district's operations.

Actions

- Maintain internet capacity to meet or exceed SETDA's recommendations
- Upgrade internet routers and firewalls to meet internet capacity requirements.
- Upgrade campus local area network (LAN) switches and upgrade structured cabling
- Expand partnership with our regional service centers to interconnect the district with Fiber Network Consortium and participate in shared network services.
- Expand wireless network capacity throughout campuses including non-traditional learning spaces.
- Provide battery backup for classroom paging, emergency alerts and classroom phones.
- Increase the network bandwidth required for the use of high-resolution security cameras.

- Comply with E-Rate rules and regulations to ensure the district is eligible for funding.

Key Performance Indicators

Item	Responsible	Detail
Measures of internet capacity in relation to SETDA recommendations	Manager of Cybersecurity and Technical Services	Reports of internet capacity in relation to SETDA recommendations. Additional reports will provide district traffic in relation to the available capacity
Upgrades and expansions for network equipment and wireless access	Manager of Cybersecurity and Technical Services	Schedule of upgrade and expansion completions and added wireless access points
Schedule of category 1 and 2 E-Rate funds	Executive Director of Technical and Document Services	Reports of expenses available through E-Rate and how the funds are used by the district. The reports will be used in planning the refresh years for integral core network gear.

CYBERSECURITY

The district has enacted a comprehensive cybersecurity plan based upon the National Institute of Standards and Technology (NIST) cybersecurity framework. This plan outlines key domains to govern, identify, protect, detect, respond, and recover from cyber-related challenges. It provides a roadmap to prioritize security measures necessary to achieve the outcomes in the framework. In addition to the cybersecurity plan, the district maintains an Emergency Operation Plan which includes a Cybersecurity Annex. This annex includes roles, responsibility, and actions when responding to a cyber related incident. Through proactive measures and ongoing training initiatives, we foster a culture of cybersecurity awareness district wide. By strengthening our digital defenses and remaining vigilant, we safeguard our data infrastructure and ensure data security.

In 2023, with the support of the Texas legislature, the TEA enacted the K-12 Cybersecurity Initiative to support school districts in efforts to protect against cyberattacks. Initiatives provided through the K-12 Cybersecurity Initiative are currently focused on small and mid-sized districts. As the initiative evolves and expands to include larger districts, this section of the technology plan will be updated to include that information.

Actions

- Audit compliance with district board policy CQB
- Perform regular audits of the district security posture against the cybersecurity plan
- Implement controls based on risk data and district requirements
- Provide cybersecurity awareness training to our staff, students, and the greater educational community
- Sponsor cybersecurity champions to promote the safe and responsible use of cyberspace within each campus and department
- Implement a 24x7x365 managed Security Operation Center (SOC) and the accompanying security information & event management (SIEM) platform
- Earn CoSN Trusted Learning Environment Seal (TLE Seal) for Student Data Privacy Practice

Key Performance Indicators

Item	Responsible	Detail
Cybersecurity champions and training	Manager of Cybersecurity and Technical Solutions	Evidence will provide the dates of training, rosters of attendance, content of the trainings, and references to repositories for on-demand training
Cybersecurity micro-training communications	Manager of Cybersecurity and Technical Solutions	Documented communications sent to parents, staff, and students raising cybersecurity awareness with dates and delivery methods
CoSN Trusted Learning Environment Seal	Chief Data and Information Systems Officer	Resource outlining the requirements of the seal and reports of progress toward those requirements each quarter

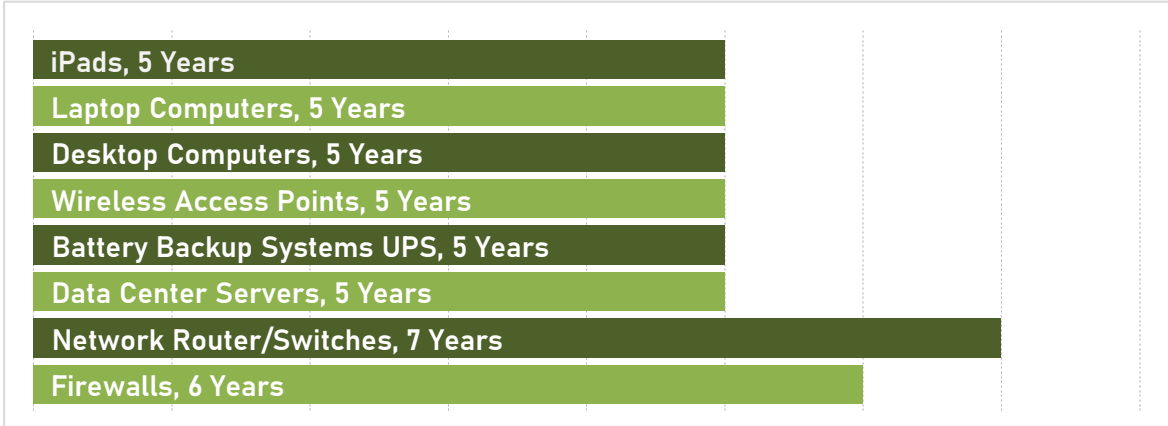
REPLACEMENT CYCLE

Strategic planning involves establishing refresh cycles for student and staff devices as well as vital infrastructure equipment while budgeting for annual recurring costs for software licensing, inventory systems, monitoring tools for network security, and device management tools. District technology will be placed on a defined replacement cycle as outlined below. Exact schedules and costs will be outlined year by year in the Roadmap included in Appendix A. Technology staff will continually explore funding options through grants and state and federal sources to offset costs for the district for the purchases.

Replacement Cycle

Technology	Replacement Cycle	Responsible	Next Cycle	Funding Source
Student Devices	5 years	Technology Staff	6 th -12 th grades – 2024 3 rd -5 th grades – 2025 PK-2 nd grades - 2026	Local
Network Electronics	7 years	Technology Staff		ERate/Local
Wireless Access Points	5 years	Technology Staff		ERate/Local
Teacher Devices	5 years	Technology Staff	2027	Local

Lifecycle Expectancy



POLICY CONSIDERATIONS

Policy has always been critical in the accountability and success of a K-12 technology program. The pandemic brought about a need to for the considerations for new policies and procedures to address remote learners and workers and other evolving educational needs. The continually changing landscape of education and the role of technology necessitates continual review of policies and procedures in GPISD.

Current technology-related policies and procedures in place for GPISD:

- AUP, Acceptable Use Procedures for students (included in the Student Handbook)
- AUP, Acceptable Use Policy for staff (included in the Staff Handbook)
- AUP for Artificial Intelligence for students and staff (referenced in student and staff handbooks)
- CIPA, [Childrens Internet Protection Act](#)
- COPPA, [Children’s Online Privacy Protection Rule](#)
- Cybersecurity Policy to meet needs of SB 820 - Board Policy CQB
- FERPA, [Family Educational Rights and Privacy Act](#)
- Policy for Student Use of Personal Electronic Devices – Board Policy FNCE
- Student Privacy and Virtual Learning: <https://studentprivacy.ed.gov/>

FUNDING AND PROCUREMENT

Procurement Laws and Best Practices

GPISD maintains a list of district-approved hardware and software that has been vetted to ensure alignment to instructional goals and interoperability with the district’s data networks and systems.

The district has implemented a Digital Review Process to vet new hardware, software, apps, and technology initiatives. The process evaluates the technology based on:

- The impact it will have on instruction and business operations
- Compatibility with network infrastructure and security
- The ability of the district staff and the district network to support the technology
- Total cost of ownership, which includes the initial cost plus training, support, and other ongoing costs

To initiate a digital review, there are software approval and technology equipment approval forms in Laserfiche.

GPISD follows Texas laws and local purchasing policies for procuring technology hardware and services. The district seeks vendors with purchasing authority under the Department of Information Resources (DIR) or co-ops with purchasing authority recognized by Texas bidding rules. In addition, GPISD seeks at least three bids for hardware and software purchases and chooses the best bid based on a universally accepted bidding rubric that takes into consideration initial cost, long range costs, total costs of ownership, and the company's ability to provide the services and equipment.

GPISD will leverage and maximize the federal E-rate program for up to an 85% discount on network electronics and services.

GPISD will also leverage state Instructional Materials and Technology Allotment (IMTA) funds for digital content and devices used in instruction. The district will also seek and utilize federal, state, and additional grant funding to maximize opportunities for students and staff.

MARKETING AND COMMUNICATING THE PLAN

Stakeholder Engagement

Communication plays a key role in developing a shared understanding of the role of technology in GPISD and the district's technology initiatives. The GPISD Technology Plan will be communicated in the following manner:

- Board of Trustees: May 16, 2024
- Add to District Web Site: May 17, 2024
- Central Administrator Update: June 2024
- Principal and Additional Staff Updates: Summer 2024

EVALUATING THE PLAN: ONGOING MONITORING AND ASSESSMENT

Evaluation of the technology program and plan will be a systematic ongoing process. Each strategy will be evaluated using the methods shown in the key performance indicators in each

section, and will be documented for evaluation and review. All aspects of the plan will be evaluated and updated on a quarterly basis.

Monitoring and ongoing assessment of progress in the technology plan includes real-time monitoring of critical milestones in the tactical roadmap found in Appendix A and quarterly updates on progress to district leadership.

The technology plan will be adjusted and amended based on the program evaluation as well as the arrival of new technology and integration strategies.

Evaluation Methods:

- Surveys of the staff, students, and parents are conducted at least once yearly with regard to their use of technology
- Informal interviews conducted as needed by the District Technology Advisory Committee representatives in their respective campuses, departments, or community groups
- Records of staff member participation in technology training monitored by sign-in sheets and teacher professional development records
- Integration of training into the classroom as measured by lesson plans and classroom observations
- Yearly inventory of hardware and software
- Support and maintenance of technology as documented by technical support record
- Monitoring of KPIs

APPENDIX A: ANNUAL TACTICAL ROADMAP

This is a living document. These initiatives will be monitored regularly and updated at least quarterly.

Year One: June 1, 2024 – August 31, 2025

Year one will include refreshing student devices for grades 6-12. These include iPads for general programming and laptops for identified special programs such as Early College High School, Grand Prairie Collegiate Institute (GPCI) upper classes and identified Dual Credit and OnRamps courses.

Cabling and internet-based paging systems will be installed as the beginning of the two-year Phase 3 of network upgrades enhancing safety for students and staff.

Action	Responsible	Cost	Est Completion Date	Progress 6.1.24	Funding Source
Refresh student devices in grades 6-12	Chief Data and Information Systems Officer	\$6,700,000	August 13, 2024		Local
Cabling for and installation of internet-based paging speakers	Executive Director of Technical and Document Services	Portion of the approximately \$12M budgeted for Phase 3 outlined in Executive Summary	Summer 2026 - Continuation of Phase 3 network upgrades outlined in the Executive Summary section of this plan		Local
Implement a 24x7x365 managed Security Operation Center and the accompanying security information & event management (SIEM) platform	Manager of Cybersecurity and Technical Solutions	\$300,000	July 2024		Local
Establish cybersecurity champions and define an explicit training and communication plan	Chief Data and Information Systems Officer	N/A	May 2024 - cybersecurity champions defined June 2024 - establish training cycle for campuses and begin training for department champions		N/A
Establish Essential Instructional Technology by grade, content, campus, and program	Executive Director of Technical Support and Integration	N/A	June 30, 2024		N/A
Establish a resource outlining CoSN Trusted Learning Environment	Chief Data and Information	N/A	June 30, 2024		N/A

Seal requirements and to report progress each quarter	Systems Officer				
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Year Two: September 1, 2025 – August 31, 2026

Year two will include refreshing student iPads for grades 3-5.

Cabling and internet-based paging systems will continue for the two-year Phase 3 of network upgrades enhancing safety for students and staff.

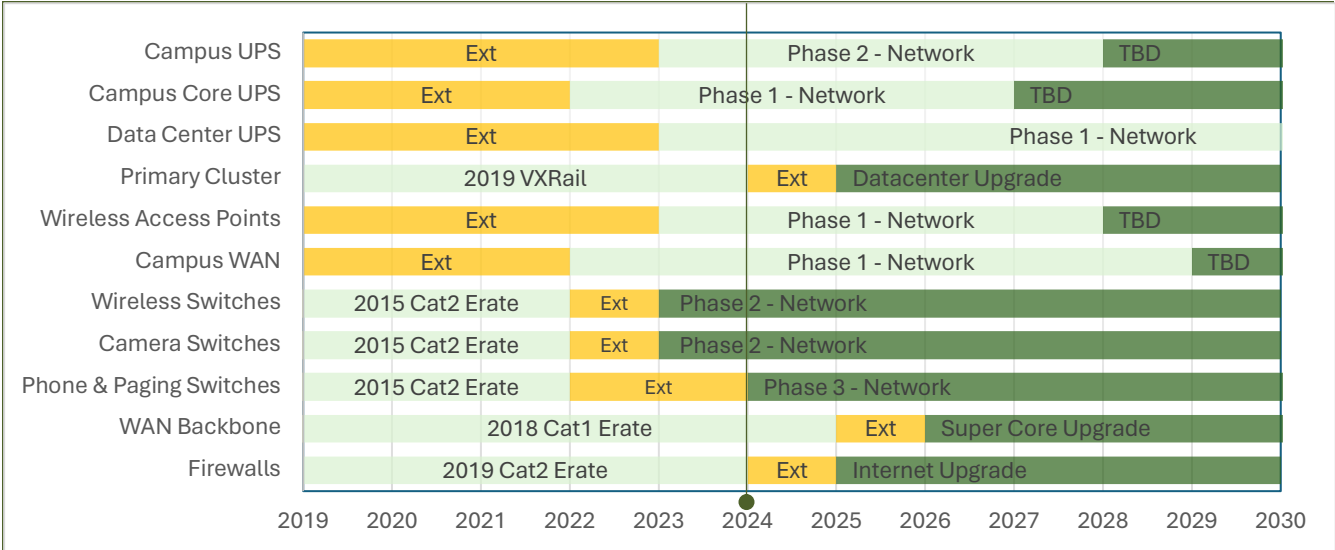
Action	Responsible	Cost		Est Completion Date	Progress 6.1.24	Funding Source
Refresh student devices in grades 3-5	Chief Data and Information Systems Officer	\$2,100,000		August 2025		Local
Cabling for and installation of internet-based paging speakers	Executive Director of Technical and Document Services	Portion of the approximately \$12M budgeted for Phase 3 outlined in Executive Summary	Summer 2026 - Continuation of Phase 3 network upgrades outlined in the Executive Summary section of this plan			Local

Year Three: September 1, 2026 – August 31, 2027

Year three will include refreshing student iPads for grades PK-2.

Action	Responsible	Cost	Est Completion Date	Progress 6.1.24	Funding Source
Refresh student devices in grades PK-2	Chief Data and Information Systems Officer	\$2,900,000	August 13, 2024		Local

Infrastructure Refresh Cycles



APPENDIX B: COMMUNITY VISIONING OBJECTIVES

Objective	Determine the best researched based technologies and integration and instructional strategies to create and implement a dynamic adaptive and real-world learning environment that fosters the four C's of communication, collaboration, creativity and critical thinking skills
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Measures	<ul style="list-style-type: none"> • Survey of staff and students to measure reliability, usage, and effectiveness of technology in the district • Comparison of GPISD Technology Plan to those of comparable districts
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Action Steps	Owner	Measure	Resources	Timeline
Establish a District Technology Advisory Council comprised of district and campus administrators, teachers, parents, and students to provide feedback and input in the development and regular reviews of the District Technology	Technology Department	Established council and meeting agendas	Community Visioning Committee, District and Campus Administrators	Early spring 2024

Plan				
Develop and maintain a detailed strategic and tactical technology plan that addresses equitable access, appropriate use of technology, outlines key performance indicators, and evaluates the effectiveness of instruction and business practices.	Technology Department	Completed plan presented to the Board of Trustees	District Technology Advisory Council (DTAC), Technology Department	Spring 2024
Implement a digital review process to ensure that the district considers various factors to ensure that the technology aligns with educational goals, enhances the learning experience, and meets the need of all students and educators.	Technology Department	Documented alignment to established standards, Technology survey results	Technology and Teaching and Learning Departments, District Technology Advisory Council (DTAC)	Spring 2024
Establish a recurring district budget line item for a refresh cycle for student and staff devices and infrastructure equipment.	Technology and Finance Departments	Technology budget	District and Technology funds	Spring 2024
Raise awareness of the appropriate role of technology in instruction through trainings for our staff and students by creating a culture of	Technology, Communications, Teaching and Learning and additional District	Professional development offerings and attendance, Technology survey results	Technology, Teaching and Learning, and Communications Departments, Apple Professional Learning staff	Ongoing

positive collaboration and personal responsibility.	Departments			
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Objective	Implement research-based best strategies in Cybersecurity and Data Loss Prevention
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Measures	Evidence of network monitoring Utilization of Cybersecurity Champions to increase awareness Reports of badge/certificate attainment CoSN Trusted Learning Environment seal attainment
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Action Steps	Owner	Measure	Resources	Timeline
Create campus and department Cybersecurity Champions	Technology Department, District and Campus Administrators	Roster of Cybersecurity Champions	Technology Department, District and Campus Administrators, Campus Staff	Spring 2024
Raise awareness through trainings for our staff and students by creating a culture of positive collaboration and personal responsibility	Technology Department	Badge/certificate system to indicate culture	Technology Department, Cybersecurity Champions, Campus Staff	Ongoing
Implement Network Monitoring to identify threats and vulnerabilities	Technology Department	Reports of monitoring findings	District Network Staff, Security Information and Event Management (SIEM) tools	Ongoing
Earn CoSN Trusted Learning Environment Seal (TLE Seal) for Student	Technology Department	Seal attainment	CoSN Standards, Technology Department, Cybersecurity	Spring 2026

Data Privacy Practices			Champions, District and Campus Staff	
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APPENDIX C: GLOSSARY OF TERMS

- E-Rate:** The FCC's E-Rate program makes telecommunications and information services more affordable for schools and libraries. With funding from the Universal Service Fund (fcc.gov/general/universal-service-fund), E-Rate provides discounts for telecommunications, Internet access, and internal connections to eligible schools and libraries.
- IDF:** An independent distribution frame is a remote room or closet connected to the MDF, in which you can expect to find hubs and patch panels.
- LAN:** A local area network is a computer network that interconnects computers within a limited area such as a school or office building
- MDF:** A main distribution frame is the main computer room for servers, hubs, routers, DSL's, etc. to reside
- UPS:** Uninterruptable power supply for IDF/MDF closets are backup “batteries” used to provide temporary power to equipment during power outages & work as surge protectors during spikes and dips in the power stream
- WAN:** A wide-area network is the technology that connects offices, data centers, cloud applications, and cloud storage together. It is called a wide-area network because it spans beyond a single building or large campus to include multiple locations spread across a specific geographic area. A WAN not only covers a larger geographic distance but also generally involves leased telecommunication circuits

APPENDIX D: DETERMINING THE BEST DEVICES FOR USE IN THE CLASSROOM

Choosing the best device for K-12 classrooms involves careful consideration of various factors to ensure that the technology aligns with educational goals, enhances the learning experience, and meets the needs of both students and educators. By carefully considering the factors listed, GPISD will choose devices that seamlessly integrate into the educational environment, supporting effective teaching and learning in our classrooms.

Educational Goals and Curriculum:

Ensure that the device supports the goals and objectives of the educational curriculum.

Consider how the device can enhance specific subjects or areas of focus within the curriculum.

Durability and Build Quality:

K-12 environments can be demanding, so select devices that are durable and can withstand everyday wear and tear.

Look for devices with rugged designs, reinforced corners, and spill-resistant features.

Adaptability and Versatility:

Choose devices that can adapt to various teaching styles and learning activities.

Consider devices with features like touchscreens, detachable keyboards, or stylus support for versatility.

Battery Life:

Longer battery life is crucial to ensure devices can last throughout the school day without frequent recharging.

Consider devices with power-efficient components and technologies.

Manageability and Security:

Select devices that are easy to manage, both in terms of software updates and security settings.

Explore device management solutions that allow centralized control and monitoring for deploying software updates and ensuring security protocols are in place.

Affordability and Total Cost of Ownership:

Consider the initial cost as well as long-term costs, including maintenance, support, and software licensing.

Look for devices that offer good value for money and have a reasonable total cost of ownership.

Accessibility Features:

Ensure that devices have built-in accessibility features to support students with diverse learning needs.

Consider features such as screen readers, magnification options, and customizable settings.

Collaboration and Connectivity:

Choose devices that facilitate collaboration and communication among students and teachers.

Ensure devices have sufficient connectivity options, such as USB ports and wireless capabilities.

App and Software Compatibility:

Verify that the chosen devices are compatible with the educational apps and software used in the curriculum.

Check for a diverse range of applications that support various learning activities.

Internet Connectivity:

Ensure devices have reliable internet connectivity, especially if online research and collaboration are integral to the curriculum.

Consider devices with both Wi-Fi and, if possible, cellular connectivity options.

Device Size and Portability:

Consider the size and weight of devices, especially for younger students.

Balance portability with screen size to ensure a comfortable and practical user experience.

Teacher Professional Development:

Provide professional development opportunities for teachers to become proficient in using the selected devices for educational purposes.

Consider devices with intuitive interfaces and user-friendly features.

Privacy and Data Security:

Ensure that devices comply with privacy regulations and have robust security features to protect student data.

Implement strict policies regarding data privacy and security.

Technical Support and Warranty:

Choose devices from reputable manufacturers with reliable technical support and warranty services.

Consider extended warranty options for added peace of mind.

Parental Controls:

Consider devices that have features or support third-party apps that allow parents to set controls and monitor their child's device usage.