

MPCSD TECHNOLOGY SERVICES

TECHNOLOGY PLAN

JUNE 2023 - JUNE 2026





DISTRICT VISION

Educating and empowering students while embracing childhood and adolescence.

DISTRICT MISSION

We provide an outstanding education where all students learn about themselves, one another, and the world so they can engage, achieve, and thrive.

DISTRICT CORE VALUES

Compassion, Perseverance, Creativity, Inclusivity, Teamwork

MPCSD Strategic Directions

2024-2030

OVER THE NEXT 6 YEARS, WE WILL:

- 1.**
Grow
student belonging
- 2.**
Strengthen
academic excellence
- 3.**
Create
inspiring environments

engage, achieve, thrive

FOREWORD

We wish to thank the members of the MPCSD Technology and Innovation Committee for their participation in the revision of this plan. The committee met on three occasions in 2023 to review the previous Technology Plan - which was written in 2018 - identify areas of improvement, and provide feedback on the new draft. The input of these educational partners was instrumental in creating a thoughtful, comprehensive, forward-looking plan.

The following individuals attended at least one of these meetings:

Brian Benelli
Jarrod Coombes
Linda Creighton
Mike Doroquez
Matthew Glotzbach
Willy Haug
Maria Hilton
Sandra Horwitz
Huck Hunt
Katrina Hsieh
Erin Pindar
Carl Sjoberg
Jed Scolnick
Frances Wong
Alli Zeiser

Technology Services values the District's Technology and Innovation Committee as an incubator of innovation and continue to seek meaningful partnerships with technology companies and thought leaders around EdTech who share our purpose and vision.

TABLE OF CONTENTS

MPCSD VISION, MISSION, STRATEGIC DIRECTIONS, AND GUIDING PRINCIPLES

THE FUTURE OF TECHNOLOGY AND HOW IT WILL IMPACT EDUCATION

CLASSROOM TECHNOLOGY

STAFF DEVICES

CLASSROOM STANDARDS

DISPLAY/PRESENTATION

WIRELESS SCREEN MIRRORING

STUDENT DEVICES

VOICE AMPLIFICATION

OTHER PERIPHERALS

ED TECH EVALUATION AND IMPLEMENTATION

SUPPORTING THE FULL RANGE OF LEARNER VARIABILITY

DIGITAL WELLNESS AND FAMILY ENGAGEMENT

DIGITAL WELLNESS

FAMILY ENGAGEMENT

INFRASTRUCTURE AND OPERATIONS

INTERNET CONNECTIVITY

NETWORK

COPIERS AND PRINTERS

TELEPHONE VOIP SYSTEM AND HARDWARE

SPECIALIZED LABS, BROADCAST STUDIOS, AND PERFORMANCE SPACES

STEAM LABS

BROADCAST STUDIOS

COMPUTER SCIENCE

PERFORMANCE SPACES

STUDENT AND STAFF DATA SYSTEMS

STUDENT INFORMATION SYSTEM (SIS)

ONLINE STUDENT RESERVATION

LEARNING MANAGEMENT SYSTEM (LMS)

ATTENDANCE TRACKING AND REPORTING

VISITOR MANAGEMENT

STUDENT ASSESSMENT SYSTEM

COMMUNICATIONS

STAFF AND STUDENT COMMUNICATION AND COLLABORATION

FAMILY COMMUNICATIONS

DISPOSAL/REUSE OF TECHNOLOGY ASSETS

TECHNICAL SUPPORT

SAFETY AND SECURITY

INVENTORY

VISITOR MANAGEMENT

STUDENT DATA PRIVACY

EMERGENCY COMMUNICATIONS

PAGING, BELL, AND CLOCK SYSTEM

DIGITAL SIGNAGE

SURVEILLANCE CAMERAS

ACCESS CONTROL

CYBER SECURITY/SYSTEMS INTEGRITY AND DISASTER RECOVERY

EXECUTIVE SUMMARY

DOCUMENT MAIN SECTIONS

This document is divided into six main sections:

1. MPCSD Technology Services Vision, Mission, Strategic Directions, and Guiding Principles: The why behind our use of technology
2. The Future of Technology and How it Will Impact Education: Trends that we see influencing our plan and to which we must respond.
3. Classroom Technology: A summary of our current state of hardware and software that supports teaching and learning daily.
4. Digital Wellness and Family Engagement: A focus on the human element and how we should educate students and families to use technology responsibly and efficiently
5. Infrastructure and Operations: The backbone of our technology that supports not only teaching and learning, but also the daily operations of the district.
6. Safety and Security: Hardware, software, and systems keep our students and staff safe.

ACTION ITEMS

Each subsection, where applicable, concludes with one or more “Action Items.” Action Items represent work that needs to be done. Action items are labeled with a number that indicates the section (1-5) and the number of the action item within the section (e.g., 2.3).

MPCSD TECHNOLOGY PLAN 2023 - 2026 GOALS TIMELINE

The 2023-2026 MPCSD Technology Plan has a companion document entitled “MPCSD Technology Plan 2023 - 2026 Goals Timeline.” Every Action Item in the plan also shows up in the Goals Timeline. The timeline breaks down each action item and describes the planned work to be accomplished over the three years, as well as a prioritization.

MPCSD TECHNOLOGY SERVICES VISION MISSION, STRATEGIC DIRECTIONS, & GUIDING PRINCIPLES

VISION

All students will engage in their work, achieve their academic potential, and thrive emotionally and physically with the support of technological resources and tools that enhance their learning experience.

MISSION

The Technology Services Department provides timely and efficient service to all MPCSD students and staff by ensuring the good working condition of hardware and software, with the ultimate goal of supporting student learning.

STRATEGIC DIRECTIONS

STUDENT OUTCOMES

Our vision is to leverage technology as a bridge that connects students to limitless learning opportunities, fostering engagement and achievement at every stage of their educational journey. By providing secure, innovative, and accessible tools, we empower students to explore their interests, collaborate effectively, and gain skills essential for future success. Through purposeful integration of technology, we enhance classroom experiences, enabling educators to personalize learning and inspire curiosity. Together, we build a dynamic, digital ecosystem that not only supports our mission but propels each student toward realizing their full potential in a global, interconnected world.

CLASSROOM TECHNOLOGY

We are committed to equipping teachers with seamless, reliable, and intuitive technology that transforms classrooms into vibrant hubs of exploration and discovery. By empowering educators with tools that enhance instructional delivery, enable real-time feedback, and foster collaborative learning, we support the creation of powerful, personalized learning experiences that engage every student. We envision technology as a catalyst in the hands of teachers, amplifying their ability to inspire, connect, and adapt to diverse learning needs. Together, we create a classroom environment where technology brings ideas to life, cultivates curiosity, and prepares students their futures.

DIGITAL WELLNESS AND FAMILY ENGAGEMENT

We are dedicated to fostering a safe, responsible, and wellness-focused digital environment for all students. Through digital citizenship lessons, content filters, and tools that enable teachers to guide and oversee device usage, we promote a balanced, secure online experience that empowers students to make informed, respectful choices in the digital world. We recognize the importance of digital wellness beyond the classroom and are committed to partnering with parents by providing resources, hosting events, and sharing best practices. Together, we support families in cultivating healthy digital habits, ensuring that students can thrive academically and personally in a mindful, digitally responsible community

INFRASTRUCTURE AND OPERATIONS

We are committed to building and maintaining a robust, resilient infrastructure that underpins every educational experience in our district. We prioritize seamless network connectivity, reliable WiFi, dependable telephony, and efficient devices and applications that empower teachers and students alike. By ensuring uninterrupted access to these essential tools, we create a foundation where learning can thrive, free from technological barriers. We are committed to continuously improving our systems to anticipate and swiftly address challenges, enabling a stable, responsive environment that supports every classroom, office, and student in reaching their highest potential.

SAFETY AND SECURITY

We are unwavering in our commitment to creating a safe and secure environment for all staff, students, and assets within our district. We prioritize a comprehensive approach to security that includes advanced endpoint protection, multi-factor authentication, and

robust user training to help users recognize and respond to phishing attempts and other digital threats. Safeguarding student data privacy at every level is imperative. Beyond digital safeguards, we ensure physical security through systems such as visitor management, access control, and surveillance cameras, protecting our campuses and resources. Together, these measures create a fortified, vigilant environment, safeguarding both the well-being of our people and the integrity of our district’s tangible and financial assets. Our mission is to instill confidence and peace of mind, knowing that security is at the core of our operational excellence.

GUIDING PRINCIPLES

ENTERPRISE VALUE

We aim to provide maximum long-term value to the District by providing solutions that reduce the operational complexity and cost of ownership.

DATA GOVERNANCE

Data is an enterprise asset owned by the business. We ensure the integrity of this asset through sharing and integration of data that results in appropriate, timely, and simple access to information.

SECURITY

We manage security to ensure a stable and secure environment that protects students and enterprise assets.

COLLABORATION

We support teamwork that is fostered through mutual communication, collaboration, and a culture of respect across the organization.

COMPLIANCE TO LAWS AND REGULATIONS

We operate in compliance with all applicable laws and regulations.

INNOVATION

We seek innovative ways to utilize technology to support student learning.

SERVICE ORIENTATION

We partner with our stakeholders to deliver the best experiences with our solutions and services.

ACTION ITEMS

1.1

In collaboration with Educational Services, develop a sustainable staff professional development program focused on technology and innovation with the input of site Tech Leads and the Technology and Innovation Committee. Currently, MPCSD does not have Tech Leads, and these teachers should be immediately identified and tapped to support MPCSD technology efforts and advance innovation.

THE FUTURE OF TECHNOLOGY AND HOW IT WILL IMPACT EDUCATION

One can never say with certainty what awaits on the horizon, and the landscape of technology can shift abruptly. We have nevertheless done our due diligence to research what trends we might expect to influence our plan over the next three years. Key documents that inform our summary of these trends include the following:

- Breaking with the Past: Embracing Digital Transformation in Education by Jean-Claude Brizard of Digital Promise - April, 2023
- The Future of Education - Google in Collaboration with Canvas8 - 2022
- 2022 EDUCAUSE Horizon Report, Teaching and Learning Edition - April, 2022

Examples of trends that are on our radar include the Rise of Artificial Intelligence (AI), Empowering Educators with Data, and Augmented Reality and Gaming.

THE RISE OF ARTIFICIAL INTELLIGENCE (AI)

Artificial intelligence presents both opportunities and challenges in education. Key benefits include the ability of educators to meet learners where they are, tailor experiences to their interests and needs, and adapt content to the diverse needs of different learners. In addition, AI promises to elevate the teacher by automating certain tasks and freeing up 13 hours of teacher time a week, enabling them to establish a better picture of how students are performing and understand the most effective way to teach and engage them.

On the flip side, the emergence of ChatGPT and other AI tools is disrupting the learning environment, highlighting the need for more teacher education about AI, as well as the importance of teaching students how to ethically use AI tools in their learning. With more education on this front, teachers and students can find ways to intentionally and positively leverage AI in the classroom.

EMPOWERING EDUCATORS WITH DATA

With better data and more access to evidence-informed resources, teachers, school leaders, and policymakers have greater visibility over which teaching styles and tools actually support student learning outcomes. Platforms that help educators quantify the return on investment of various approaches and products will enable them to pivot to meet learners' needs. Improved data sources also are improving assessment and the ability of educators to find better indicators of student attainment that spotlight the strengths and abilities of each individual without limiting anyone to a single grade or test score. This further allows teachers to provide feedback on students' ongoing progress in a way that motivates learners to continue to develop.

AUGMENTED REALITY AND GAMING

With augmented reality, educators can create a simulated science lab that allows students to step inside a nuclear reactor to understand the process of nuclear fission — and enable other experiences that would not be possible in real life. Game-based learning, or learning that borrows characteristics from gaming, has been particularly successful because of its emphasis on active, self-guided learning. Teachers are using tools like the University of Colorado Boulder's Physics Education Technology (PhET) to make learning more concrete, and some schools are investing in full-blown eSports centers where students apply gaming skills to their learning.

CLASSROOM TECHNOLOGY

STAFF DEVICES

MPCSD issues all certificated staff and administrators MacBook Air laptops and iPads, which are leased from Apple. These devices can be screen-mirrored to the classroom display using “AirPlay.” All of these devices are on a 4-year refresh cycle. The most recent cycle began in 2024, which means the district will undertake a new 4-year lease in 2028.

All other staff are provided with the appropriate technology for their job function. This ranges from cell phones for our MOT Department, Windows computers for our Business Office, iMacs for our office managers, iPads for our paraeducators at Hillview, and Chromebooks for a large number of classified staff. Our staff Chromebooks are currently end-of-life, and the lease fell off the books in FY 2024. Classified staff have indicated that these Chromebooks do not meet their needs, and we are evaluating various “Chromebook Plus” models to replace the end-of-life devices beginning in August of 2025.

ACTION ITEMS

2.1

In a 2023 Classroom Technology survey, results revealed that for about 25% of our teachers, the iPad is “somewhat important” or “not at all important” to teaching and learning. When renewing our lease with Apple, we will poll teachers so that they can opt into having this device.

CLASSROOM STANDARDS

K-2 Classrooms	Grades 3-5 Classrooms	Grades 6-8 Classrooms
Large format TV, wall mounted or on a rolling cart	SmartBoard and projector or large format TV, wall-mounted or on a rolling cart	SmartBoard and projector or mounted large format TV*
Wireless Screen Mirroring device such as Apple TV	Wireless Screen Mirroring device such as Apple TV	Mac Mini (allows for wireless screen mirroring)
Document Camera	Document Camera	
6-10 iPads	Chromebook or iPad Cart (1:1 ratio)	1:1 Student iPads

**Large format TV's are installed in Classrooms that do not need the touch capability, such as Music and Drama rooms.*

DISPLAY/PRESENTATION

The primary presentation tool depends on the grade level of students. The standard is consistent in grades K-2 (large format TV) and in grades 6-8 (SmartBoard). Where it varies is in grades 3-5, where some classrooms have a large format TV and some have a SmartBoard. These displays should include the ability to connect to the district's standard staff device via a compatible standard, such as HDMI, and should display a resolution that is also compatible with that device (e.g. 1080p).

WIRELESS SCREEN MIRRORING

Teachers and students are able to mirror their devices to the TV or SmartBoard either through an Apple TV in K - 5 classrooms or through a MacMini in 6 - 8 classrooms. Mirroring is currently device-dependent. Apple products such as Macbooks and iPads can stream through the Apple TV or the MacMini; Chromebooks cannot stream.

STUDENT DEVICES

Elementary devices remain on campus and are assets for classroom use only. In K-2 classrooms, students share a small number of iPads. 3-5 classrooms are equipped with a cart of devices at a 1:1 ratio. Devices range from iPads, to Chromebooks, and in a single case, Macbooks. At Hillview, we issue an iPad to all students in a protective case for use in the classroom and at home.

There are a small number of carts available for shared use at most school sites. Encinal has one iPad cart, Upper Laurel has a Chromebook cart and a Macbook Air cart, and Hillview has 3 Chromebook carts.

Student devices will be on a 5- year refresh cycle. We currently have just over 800 5th-generation (2016) and 6th-generation (2018) iPads, and these will be replaced by 9th-generation iPads for the 2023-24 school year.

DOCUMENT CAMERAS

Document cameras are a K-5 standard. Only two (2) Hillview teachers report using a document camera.

VOICE AMPLIFICATION

Of 117 teachers who responded to the Spring 2023 Classroom Technology Survey, 34, or about 30%, report having some voice amplification device in their classroom. Such a system is more common in elementary classrooms (35%) than in middle school classrooms (15%). Voice amplification systems were the exception rather than the rule prior to the pandemic hybrid learning, with units only being deployed to assist deaf and hard of hearing (DHH) students. During the days of blended learning and after the return to school by all students, more teachers turned to these units either because they were masked and were harder to hear, or because they needed to preserve their voices, or both.

OTHER PERIPHERALS

K-8 Classrooms also include a number of headphones and keyboards (especially where iPads are in use). The number varies by classroom and site, and each year, Technology Services ensures that there are sufficient headphones and keyboards to support annual state testing.

ACTION ITEMS

CLASSROOM DISPLAY/PRESENTATION EQUIPMENT

2.2

Classroom presentation equipment is an area of priority. The results of the Spring 2023 Classroom Technology Survey show that SmartBoards have the lowest reliability rating of all classroom equipment, averaging a 3.4 on a 5-point scale. This is not surprising, given that with two exceptions, SmartBoards are more than 10 years old. It is interesting to note that while SmartBoards come equipped with special interactive software and have touch-screen capability, and that they allow teachers to annotate content or have students interact with the content, these features are not consistently utilized. Results of our survey show the following:

- 53% of teachers never use special software.
- 30% of teachers never have students interact with the boards.
- 29% of the teachers never annotate content on the boards.
- 23% of teachers never use the touch features of the board.

This begs several questions, including, “Do interactive panels help us meet our goals for learner outcomes?” and “Have we not invested enough professional development to help teachers learn how to leverage the special features of the interactive panels?” and “Are teachers essentially using a SmartBoard like a large format TV? In which case, should we reevaluate the standard?” 42% of these teachers who have SmartBoards indicated that they would either switch to a TV “in a heartbeat” or that they would eventually prefer one. Interestingly, this sentiment was expressed equally by elementary school teachers and middle school teachers.

We will conduct a classroom presentation device pilot beginning in the 2023-24 school year, examining multiple solutions, both interactive panels and televisions, and determine what features are desired by teachers.

With regard to presentation, whether through a TV or an interactive panel, we need to consider the mounting of the device vs. placing it on a rolling cart. The placement of a

large display front and center in a classroom has the unintended consequence of reinforcing the traditional “sage on the stage” teaching paradigm, whereas the ability to relocate a display to support the intent of the instruction or lesson gives teachers more options and leads to more learner-centered solutions. In our interactive panel pilot, we will include carts to test out the advantages of presentation device mobility.

Other advantages come with new interactive panels. For example, it is becoming more common for these devices to include a management interface, which allows for easier updates and energy conservation. Interactive panels now often have built-in emergency signage. In an emergency situation, messages, evacuation routes, or even video can be sent to all panels simultaneously, interrupting current lessons with important updates.

Modernizing all our interactive panels would be an expensive undertaking. As an example, if all 107 classrooms that currently host a SmartBoard were to be updated with a new 75” SmartBoard MX with a rolling stand, the cost would be approximately \$5,500 (\$4,000 for the panel, \$1,200-\$1,300 for the stand) per classroom, for a total of \$588,800, not including tax and shipping. Other solutions would have different price points. Of note, new interactive displays no longer require projectors, so these would not be needed. By comparison, were these 107 classrooms equipped with a TV and wall mount, the cost would be approximately \$1,400 per classroom (a total of \$149,800); a TV and rolling stand would amount to approximately \$2,700 per classroom (a total of \$288,900). These estimates include tax and shipping. The what has to happen within the next two years; the how will be determined by our pilot evaluation.

ELEMENTARY PRESENTATION STANDARDS

2.3

Not all K-2 classrooms currently have a TV, and efforts should be made to prioritize this standardization. With 3-5 classrooms, there are currently two acceptable standards. The advantage of this is that teachers can play to their strengths by using the display they prefer; the disadvantage is that room or school site moves, resignations, and retirements create expensive problems to solve, in that displays must be removed, remounted, or purchased. We will explore further standardization in 3-5 classrooms.

PRESCHOOL AND TK PRESENTATION STANDARDS

2.4

MPCSD has not established Preschool or TK standards for classroom presentation equipment. Preschool and TK standards will reflect those of K-2 classrooms.

VOICE AMPLIFICATION

2.5

There are many proponents of classroom voice amplification tools who cite research to show how schoolwide systems improve student learning outcomes. It's not just the teacher's voice that needs to be heard, but student voices as well. We will explore the integration of voice amplification solutions into classrooms as a standard. As one researcher has noted, "The problem with acoustics is, it's not evident to people. If you had half the lights on in the classroom, everyone would complain."

WIRELESS SCREEN MIRRORING SOLUTIONS

2.6

AirPlay is not the most reliable streaming solution for our classrooms, and the Apple TV interface is not built for education. Furthermore, only Apple devices can stream to an Apple TV, whereas other solutions are device agnostic and would allow Chromebooks to stream to them. The Vivi box is one example that we are currently piloting, and it also comes with features such as central management, emergency signage, and more. Were we to install Vivi devices in all spaces where we have the need for streaming, the estimated annual cost would be \$26,000.

INTEGRATION

2.7

It is important that the above Action Items (presentation, voice amplification, and wireless screen mirroring) are considered a complete package. Audio, visual, document cameras, and streaming all need to work together seamlessly. We will explore a control system that allows teachers to easily plug and play any component, and also to standardize how the various components are turned on and used, allowing for intuitive use of all classroom spaces. This has the further advantage of allowing us more flexibility on brands and models of the various elements of the systems in the classrooms.

ED TECH EVALUATION AND ADOPTION

The 2023-2026 Technology Plan includes a new section in the Classroom Technology section. When we consider the various tools that are being leveraged daily in classrooms to support teaching and learning, we must also consider digital resources. The district, as well as individual school sites, annually invest significant time, energy, and resources in various EdTech Products that supplement our adopted curriculum. These resources range from those that are purchased district-wide and are available to certain grade levels, to an app or website that is chosen by an individual teacher.

MPCSD has seen an increase in the number of Ed Tech products it uses. Like many districts, during the days of distance and hybrid learning, teachers were seeking and finding apps and products that helped them deliver instruction in ways that reached and engaged their students. In March of 2023, we began an audit on our tech Product usage. So far, we have identified over 850 distinct applications in use, a number that far exceeds what is listed on our approved apps list.

2.8

Leverage LearnPlatform to provide us with the analytics to monitor our digital ecosystem, protect student data privacy, and build the MPCSD Ed Tech Product Library, following the plan below:

- Involve stakeholders in discussions around our tech product use and in the decisions about the products we adopt.
- Create a teacher-facing and public-facing Ed Tech product library with links to privacy policies and vendor contracts, and share this list annually with families for full transparency.
- Analyze Ed Tech products for redundancy and pare down our library as needed.
- Analyze Ed Tech products for effectiveness, fidelity to established guidelines, and return on investment.

SUPPORTING THE FULL RANGE OF LEARNER VARIABILITY

MPCSD is committed to supporting the full range of learner variability within the district. Hardware and software, including assistive technology, are essential to this end in our

schools' Learning Centers and in programs such as Advancing Independent Minds (AIMs).

Technology Services will continue to partner with Student Services to ensure that Learning Centers have up-to-date technology and that we provide students with assistive technology that gives them access to learning. Annually, the two departments will meet to review needs and refresh technology.

2.9

In earlier iterations of our plan, we specifically called out technological investments for students with IEPs. We must expand our view of those students who can benefit from technology-based resources to include English Learners, socio-economically disadvantaged students, and students with 504 plans. In what ways can technology support Universal Design for Learning (UDL) and our district's Multi-Tiered Systems of Supports (MTSS)? Moreover, how can technology support the "jagged learning profile" of all students, to quote *The End of Average's* Todd Rose? Such efforts go hand in hand with MPCSD's focus on equity. When we invest in technology that removes barriers to learning for some students, all students benefit. Technology Services will work hand in hand with both Educational Services and Student Services to evaluate and implement technological solutions that support the full range of learner variability.

2.10

Furthermore, we will research voice amplification and ratio viewing and establish standards in our classrooms. Based on a recent survey of classroom technology, a voice amplification system is one of those items that is least likely to be present in our classrooms, and yet students benefit immensely from being able to clearly hear the teacher.

2.11

Identify safe, cost-effective, and promising Artificial Intelligence tools for both students and teachers and pilot them on a small scale to evaluate their promise.

DIGITAL WELLNESS AND FAMILY ENGAGEMENT

DIGITAL WELLNESS

MPCSDt has a strong commitment to student wellness. In the area of technology, this commitment can range from physical to finding a healthy balance of screen time with media and technology, online safety, use of social media, and age-appropriate use of technology. In the elementary schools, students experience a robust digital citizenship curriculum from Common Sense Media, focusing on the following topics:

- Media Balance and Well-Being
- Privacy and Security
- Digital Footprint and Identity
- Relationships and Communication
- Cyberbullying, Digital Drama, and Hate Speech
- News and Media Literacy

These lessons align with a number of standards, including standards from English Language Arts Common Core (ELA), American Association of School Librarians (AASL), International Society for Technology in Education (ISTE), and Core SEL Competencies from the Collaborative for Academic, Social, and Emotional Learning (CASEL).

At the middle school, sixth-grade students enrolled in the Elective Wheel have a six-week module focused on digital citizenship which again uses the six Common Sense Media topics as the basis for instruction.

Another way MPCSD supports students with healthy digital habits is through our content filter, Linewize. This platform sends designated administrators “red flag alerts” when students attempt to access potentially problematic or harmful content. Categories

include depression, violence, hate speech, adult content, suicide, bullying, and substance abuse, and these alerts give us the ability to intervene and educate students about their online behavior.

ACTION ITEMS

TECHNOLOGY USAGE STANDARDS

3.1

With students spending so much time on screens at home, we need to be thoughtful and intentional about how much time students spend on their devices at school, and also in what ways they are using their devices. What does MPCSD believe about the following?

Based on grade level/age, how many hours per day should students be consuming digital media during school hours?

In what ways should we be using technology in the classroom? For example, previous iterations of this plan focused on the SAMR Model, encouraging us to use technology for higher-order thinking and activities.

How does a student's individual learner profile influence the choices that teachers provide them to access content, and whether that content is digital or "pencil and paper"?

How do our teacher tools reduce distraction and allow students to focus on their learning tasks?

Answering these questions and developing appropriate standards is an important goal.

EXPANDING MIDDLE SCHOOL DIGITAL WELLNESS PROGRAMS

3.2

Middle school students have fewer opportunities to learn healthy digital habits. Not all 6th graders enroll in the Elective Wheel (about 82% in 2022-23), and that is the only way to access the content of the Media Literacy class. 7th and 8th graders get occasional lessons, but it is not a structured and consistent approach. Given that Hillview is a 1:1 iPad school, expanding our digital wellness curriculum to the entire school is critical.

PUBLIC-FACING DIGITAL WELLNESS RESOURCES

3.3

We also have an opportunity to share more with families as students engage in their digital wellness curriculum. Technology Services will create a public-facing website that includes all of the resources families can refer to. For example, every Common Sense Media lesson comes with three resources: a Family Activity, Family Tips, and an SEL Conversation Starter. These are available in both English and Spanish.

TEACHER CONTROL OF STUDENT DEVICE FUNCTIONALITY

3.4

Another pressing need at the middle school is the implementation of software that can help students focus intentionally when using the iPad. Our Mobile Device Management system, JAMF, includes a teacher app that gives the instructor the ability to preselect those apps, functions, and websites that are pertinent to a lesson, restricting anything else that would be unnecessary to the lesson. We will pilot this app in select classrooms no later than September of 2023 and roll out this capability to all classrooms.

In implementing this solution, which was accomplished in December of 2024, we discovered that we have the ability to extend this technology to the elementary schools, and different solutions can be used to monitor and control iPads and Chromebooks. As of the February 13, 2025 Technology Plan Update, the following tools are available to teachers:

- JAMF Teacher for elementary and middle school iPads
- (Apple) Classroom for middle school iPads
- ClassWize for elementary school Chromebooks

RED FLAG ALERTS AT THE ELEMENTARY SCHOOL LEVEL - EXPANSION OF 1:1 DEVICE ASSIGNMENT

3.5

Our content filter red flag alerts give us actionable information for our middle school students due to the 1:1 program. At the elementary level, however, when there are shared devices, alerts don't always point to the user whose behavior generated them. When

feasible, we will assign devices for 1:1 use in grades 3-5, or require log-ins so that any alerts can be traced to the student who needs intervention and education.

FAMILY ENGAGEMENT

MPCSD partners with its families to make technology more accessible and understandable. This means ensuring that all families have access to home internet for learning. The district assists any qualifying family by issuing district-provided hotspots when requested. In addition, in our elementary school sites, where we do not have a 1:1 device that students take home, the district provides an iPad or Chromebook to check out and use as a learning tool. Finally, when possible, the district releases retired assets in good working condition to families who need computers at home. MPCSD's Family Engagement Coordinator assists with these programs.

The district occasionally hosts family meetings and workshops to engage and support students, families, and the community with technology. These sessions are targeted to help families understand and support their students' use of district technology tools and platforms, as well as to educate them about trends in technology that they need to be aware of.

MPCSD also maintains a public-facing website with resources to support families with school technology and technology in general. We have added a resource to our repertoire, the MPCSD Online Safety Hub, which is maintained by Linewize, our content filter provider, and which contains family advice, online safety tech, and app and game reviews.

ACTION ITEMS

3.6

Technology Services will partner with both the middle school and the elementary schools to present a "Demystifying MPCSD Technology Tools and Platforms" to families in the fall of each year. In addition, at least one event in our Speaker Series will address a topical technology-related issue.

INFRASTRUCTURE AND OPERATIONS

INTERNET CONNECTIVITY

MPCSD's current agreement is with Cogent for Internet services and AT&T for transport to all our school sites. Our bandwidth has increased from a 2Gbps connection in 2018 to a 10Gbps connection. Our agreement will expire in June of 2027, which will require us to begin the process for an RFP for a new contract in 2025.

NETWORK

Most of MPCSD's non-core switches have been replaced and standardized with a single model. Core switches will be replaced in the summer of 2023. In addition, in 2023 MPCSD completed an RFP to replace our Uninterruptible Power Supply (UPS) in most of our main distribution frames (MDF) and to replace all the batteries in the UPSes in our intermediate distribution frames (IDFs), a project that will also be completed in the summer of 2023. We will evaluate our switches again in 2026 for possible replacement in 2027, and will most likely need to purchase new batteries for all of our UPSes in or around 2027.

The MPCSD on-premise server infrastructure is completely virtualized, with hardware replacement and upgrades planned for the summer of 2023. Once these are in place, the expected life span of the new hardware is around 4 years, meaning that planning for future upgrades and replacements should be started in early 2026. These servers are in place to support multiple services, such as Jamf MDM, Smoothwall (Firewall), and PaperCut (printing Software), among others. During the span of this technology plan, there should be no need to replace any of these servers. However, the need for additional file storage space continues to grow so there is a possible need to expand the storage, which can be done with minor upgrades at any time.

All school sites and the district office are equipped with Extreme Networks wireless access points, including several outdoor access points in select locations. Each classroom has a dedicated access point to support teaching and learning. The management of the access points is a cloud-based solution that allows the Technology Services the flexibility to monitor and make changes while off-site if needed. We will revisit the state of our access points in 2026 to consider replacement or simply license renewal.

MPCSD uses JAMF Pro as its Mobile Device Management (MDM). This system allows us to manage all Apple products, including iPads, Macbooks, iMacs, Mac Minis, iPhones, and Apple TV's.

MPCSD's content filter is Linewize. This system is new as of July, 2022, and filters content on all student and staff devices when using our network on campus. In addition, take-home devices, including Hillview's 1:1 iPads and devices checked out to elementary school students, are filtered off campus. As noted earlier in this report, site administrators receive "red flag alerts" if students are trying to view or search for harmful or inappropriate content.

MPCSD makes use of a Smoothwall Firewall, a next gen-Firewall solution that allows for layer 7 application packet inspection, intrusion prevention, and all the protections found in a traditional firewalling solution

The district utilizes Microsoft's Active Directory as the network for our centralized user authentication service. Active Directory provides flexible interoperability with other district technology systems, allowing for us to establish a central point of truth when it comes to user authentication and identity management. The district is currently evaluating a variety of services that will allow us to modernize and better secure our network resources as well as secure our identity management allowing for a more secure and convenient user experience.

ACTION ITEMS

WINDOWS DEVICE MANAGEMENT

4.1

JAMF allows the district to manage all our Apple devices, but it cannot manage Windows devices. We need to find a management solution for those few Windows-based machines that are used primarily at the district office.

COPIERS AND PRINTERS

The district provides each school with leased, professionally serviced copy machines that include network printing capabilities, and our agreement includes toner and service. We moved to Canon machines, which were installed in the fall of 2022. The district has moved to a four-year lease based on the usage and the needs of sites. The current lease is set to expire in June 2026.

Each classroom in the district is equipped with a printer. In most cases, this is a black-and-white printer. The elementary schools do have color printers, which are strategically located throughout school sites to allow easy access to color printing jobs. In 2023, the district entered into a contract with Caltronics, the same company that services our copiers. In exchange for purchasing printer toner at a substantially reduced price from Caltronics, we receive service in the form of labor and parts for routine repairs.

There is still a need to “democratize” printing, as not all devices can print to copiers and printers. Many classified staff whose standard issue device is a Chromebook, for example, are unable to print, and in some cases, preparing photocopied materials is part of their job description.

ACTION ITEMS

PHOTOCOPIER RFID ACCESS

4.2

Currently, there are no passcodes on our photocopiers. This is intentional to reduce barriers to printing. However, there are advantages to using RFID cards to release jobs from the copiers. We do notice waste in the form of uncollected copy jobs, and there are

times when confidential documents are left in the copier. The way this would work would be a staff member would send a print job to a copier, and they would need to use the RFID card at the copier to release the job and receive the copies. We will pilot the use of RFID cards at one campus in the 2023-24 school year and compare the quantitative and qualitative data against baseline data from 2022-23. Part of our new system allows us to glean usage insight from all our copiers, and this information will be useful to manage our costs.

ENABLING PRINT CAPABILITY FROM ALL DEVICES

4.14

One reason Classified Staff report that they are unable to complete work tasks is due to limitations on their devices. Chromebooks, which are the standard issue for many Classified Staff, cannot print reliably to photocopiers or printers, and to that end, we are evaluating solutions that allow all staff, regardless of their device standard, to print to a photocopier or printer.

TELEPHONE VOIP SYSTEM AND HARDWARE

Currently, the district hosts its own Cisco Voice over Internet Protocol (VoIP) phone system, Unified Call Manager. This technology allows us to make voice calls using a broadband Internet connection instead of a regular analog phone line. The system was initially installed in 2007 under the Measure U Bond program and upgraded in 2016. The majority of our phone handsets are over 15 years old, and replacements are no longer available. MPCSD staff also benefit from “voicemail to email” service, with voicemail calls being recorded, transcribed, and sent to the recipient’s email inbox.

The district currently uses two separate Primary Rate Interfaces (PRIs) circuits for outgoing and incoming calls, which integrate with the Cisco VoIP phone system.

All classrooms and common room phones integrate with a Bogen paging system at each school site that provides the ability to page school-wide in case of an emergency.

The MPCSD phone system is housed in the district MDF data center located on the Encinal campus and is maintained by the Technology Services.

ACTION ITEMS

UPGRADE VOIP PHONE SYSTEM

4.3

Our current handsets are no longer in production, and the interface that allows us to manage our many extensions is outdated and clunky. In the 2022-23 school year, MPCSD began to research other solutions. Based on several preliminary quotes, we estimate the cost to replace our current system to range from \$65,000 - \$90,000.

UPGRADE PRI TO VOIP

4.3

PRIs are outdated technology, and we must prioritize the replacement of our PRIs with SIP/VoIP technology.

REPLACE POTS LINES

4.4

POTS stands for “Plain Old Telephone Service,” and these phone lines connect to our emergency failover lines, fax lines, elevators, and fire alarm systems. They are not resilient in the face of power outages and regional emergencies, and need to be upgraded.

SPECIALIZED LABS, BROADCAST STUDIOS, AND PERFORMANCE SPACES

STEAM LABS

Currently MPCSD has specialized spaces where students can engage in STEAM (science, technology, engineering, and mathematics)-based activities. These include Encinal’s Enspire Lab, STEAM A and B at Upper Laurel, and Oak Knoll’s STEAM Lab. In addition, Hillview visual art and industrial technology electives feature STEAM and makerspace components, such as a laser cutter and Lego robotics kits.

BROADCAST STUDIOS

Hillview’s Broadcast Studio provides a space for students to learn video production and broadcast skills. Its daily HawkTalk segments and occasional HVTV specials are a key element to the school’s welcoming climate and culture. In addition, Oak Knoll makes great use of KNOL. EN TV is filmed regularly and recorded for classroom viewing. Laurel’s

program, Squirrel TV, operates in the same way as Encinal. Broadcasting studio equipment provides students with an outstanding opportunity to learn the technical arts and also creates a strong sense of belonging. Hillview's Tricaster was most recently replaced in 2019 at a cost of around \$30,000. Tricaster Minis for the elementary schools will be on a 5-6 year replacement cycle, with Encinal's and Oak Knoll's to be evaluated for replacement in the summer of 2023, with an estimated cost of \$10,000 each.

COMPUTER SCIENCE

Direct instruction of Computer Science skills occurs at Hillview Middle School in the form of the Coding 1 and Coding 2 electives. Students in these classes use CODE.org curriculum to complete project-based learning challenges.

PERFORMANCE SPACES

MPCSD is blessed to have a thriving performing arts program. The Hillview Performing Arts Center is our flagship state-of-the-art facility that hosts both middle school and elementary school plays and musicals, musical performances, dance shows, and district Speaker Series events. This facility is maintained and regularly updated by PCD, the company that designed and installed all the original equipment.

The district has a number of additional performance and presentation venues, including the following:

- Hillview Gymnasium
- Encinal Large Multi
- Encinal Small Multi
- Lower Laurel Multi (including outdoor audio)
- Upper Laurel Gym
- Oak Knoll Gym
- Oak Knoll Small Gym
- Board Room

ACTION ITEM

4.6

With the exception of the Upper Laurel Gym, audio and video equipment is aging and does not provide an adequate setting for site-based performances and assemblies. We would like to engage vendors in assessing these facilities and providing quotes for their enhancement. Funds for these spaces will come from the district's deferred maintenance plan.

STUDENT AND STAFF DATA SYSTEMS

STUDENT INFORMATION SYSTEM

The district utilizes PowerSchool, a hosted solution that provides for all database administration, support, and maintenance and allows district Technology staff to focus administrative efforts on data analysis and reporting that informs instruction and curricular planning.

All schools and the district office use PowerSchool as the Student Information System (SIS), which is hosted by Pearson. PowerSchool houses all official student data and is the central hub for all instructional database applications, including CALPADS, Illuminate, and Clever, along with the Follett Destiny library and textbook management system, school lunch system, and Google Apps for Education. All teachers take their attendance using PowerSchool and Hillview Middle School uses PowerTeacher Pro for recording student assignments and grades.

LEARNING MANAGEMENT SYSTEMS (LMS)

MPCSD has no learning management system in grades K-2. K-2 teachers report that they use Clever and SeeSaw as proxies for an LMS, and some K-2 teachers are interested in using Google Classroom. Beginning in August of 2024, MPCSD made the investment of upgrading to a paid Google Workspace Edition that promises many more teacher- and student-friendly features.

- In grades 3-5, there is an even split between Altitude and Google Classroom, with some teachers using both platforms.

- In grades 6-8, 100% of the teachers report using Schoology as their Learning Management System.

ATTENDANCE TRACKING AND REPORTING

All classroom teachers record daily student attendance directly into PowerSchool. Parents report absences using School Messenger’s “Safe Arrival.” In addition, in 2023 MPCSD implemented Attendance Monitor, a PowerSchool plugin created by Marcia Brenner Associates, that allows school sites to seamlessly send out attendance notices to families whose students have met certain thresholds.

ONLINE STUDENT REGISTRATION AND ENROLLMENT

All student registration/enrollment, including annually updating existing student information by families, is done through the PowerSchool online registration system. This process minimizes the use of paper, as well as ensures that accurate student information is input into the SIS on a timely basis.

STUDENT ASSESSMENT SYSTEM

The district utilizes Illuminate Education (now owned by Renaissance Learning) for assessment, data analysis, and reporting that informs instruction and curricular planning. Using Illuminate, teachers are able to provide assessments to evaluate each student’s learning in a timely manner and adjust instruction as needed. Elementary school teachers use Illuminate for student report cards.

ACTION ITEM

4.7

With the exception of Hillview, there is not a consistent Learning Management System in the elementary schools. Altitude and Google Classroom are used commonly in the 3-5 space, and there are those who argue that Google Classroom is not a true LMS, although it does have the advantage of being free. There are many LMS solutions that are built specifically for elementary schools. It is worth noting that having an LMS in place, K-5, would prepare MPCSD in the event of another move to distance learning. We recommend evaluating LMS solutions for the elementary level that align with our Whole Child Learning and Development Framework. Notably, LMS solutions support competency-based approaches to teaching and learning, give students multiple ways to show what they know, and provide teachers with data and the ability to provide individual feedback.

COMMUNICATIONS

Information is being shared among all district stakeholders in order to foster collaboration and engage all members of the Menlo Park City School District community. The district is committed to providing timely communication among all families, students, staff, and community members. This section outlines the various electronic communication methods and tools supported by the Technology Services for use by students, staff, and volunteers in the district.

STAFF AND STUDENT COMMUNICATION AND COLLABORATION

The district utilizes Google Apps for Education for email, calendaring, and contact management for all staff. Students are also provided with Google Apps for Education accounts that include an email address. However, email is not enabled until a student enters the 5th grade.

Google Apps for Education is also utilized for its suite of messaging, integrated file sharing, productivity, and collaboration tools for both Staff and students.

MPCSD also provides Zoom as a teleconferencing tool. All staff have individual Zoom accounts, and the district also has a small number of large licenses for Board meetings and other family engagement events.

FAMILY COMMUNICATION

ParentSquare is the district's primary family-facing communication tool. School newsletters, school-wide announcements, and classroom updates all come from ParentSquare. The district's primary online presence is mpcsd.org and the district and all schools maintain websites that are currently hosted by Blackboard. By Fall of 2024, the website will move from BlackBoard to FinalSite.

The district office and schools also utilize a wide variety of Media platforms (ie. Twitter, Facebook, YouTube, Vimeo) to communicate news and activities happening in the district. All posted content is approved by the school principal or the district Superintendent.

ACTION ITEM

PLANNING FOR AND TRIGGER TO DISTANCE LEARNING

4.12

MPCSD was well-resourced in March of 2020 when we shifted to distance learning. Are we well prepared to do so again if needed? Some key questions to consider are as follows:

- Do we have enough devices for our K-2 students (or even TK and Preschool) were we to have to resort to distance learning? If not, what is our plan?
- Do we have the learning management systems that would allow teachers to easily provide resources and activities for online learning?
- Do we have the video conferencing capability to engage students remotely?
- Under what circumstances/conditions would we move to distance learning?

As of the 2024-2025 school year, California requires districts to plan for such events in their Learning Continuity Plan. Educational Services will present this plan, including elements related to technology use, in the spring of 2025.

DISPOSAL/REUSE OF TECHNOLOGY ASSETS

MPCSD uses the environmentally friendly Green Citizen for regular pick-up of technology that has no resale value. For assets that can be resold, we use GovDeals, an online auction site. For larger quantities of devices, we engage vendors in an RFP process and award that contract to that vendor who can provide us with a combination of a high resale value, secure erasure of hard drives, and customer service.

TECHNICAL SUPPORT

The district provides technical support to all sites using a central help desk , currently ML WorkOrders. The department is staffed by six full-time support staff, with three Level I IS Support Technicians, two Level II IS Support Technicians (Data Management, Mobile Device Administrator), and one Level III IS Support Technician (Network and Systems Admin, Cybersecurity Specialist). Level I IS Support Technicians support the initial

response and troubleshooting of all computer hardware and classroom presentation systems. Each site has a dedicated Tech I, with Lower and Upper Laurel sharing one staff member. Level II IS Support Technicians address network troubleshooting and advanced computer hardware configuration and setup. Technology Services has an Apple Certified Technician and is set up to do repairs/service on laptops and desktop computers owned by MPCSD. The district has access to Apple's Global Service Exchange (GSX) for parts and diagnostic software.

Staff requiring support can obtain this support by entering a ticket describing their problem on the district's Technology page on the district website. If it is not possible to request support using that tool, or if the support request is urgent in nature, the staff may call Technology Services for support.

Additional support is provided for user account management for PowerSchool (the Student Information System), CALPADS, and all data-associated applications , including Google Apps for Education. Help Desk supervision, website support, educational technology support, and all technology purchasing and project coordination are provided by the district Director of Technology.

It is imperative that Technology Services stay up to date with current technology and have the ability to take part in professional development. The Director of Technology allocates \$12,000 yearly from the technology budget for professional development so department members can attend training such as PowerSchool University, Mac Administrators Conference, Google, JAMF Users Conference as well as other conferences and training.

ACTION ITEM

4.13

Our work order system, Master Library, which is shared between Technology Services and Maintenance, Operations, and Transportation, is not a true Information Technology Service Management (ITSM) solution, nor is it user-friendly. As of February 2025, we are evaluating this solution against industry standards and comparing it to other solutions that are better aligned to our needs.

SAFETY AND SECURITY

INVENTORY

Technology Services maintains a fixed asset inventory that tracks all computer hardware as well as all other equipment. An operational goal will be to upgrade and standardize this inventory management process in conjunction with the adoption and implementation of standardized imaging and deployment systems for all computer hardware.

ACTION ITEM

5.1

Our inventory system includes a limited number of assets. We will expand those items cataloged in the system in order to provide us with actionable life cycle data. For example, televisions, SmartBoards, and projectors are items that are not currently in our system. With accurate information about the equipment and its year of installation, we can plan for replacement when any piece of equipment reaches end-of-life-cycle. As of February 2025, we are evaluating our hardware asset management practices with a third-party consultant in order to strengthen our current systems.

VISITOR MANAGEMENT

Beginning in August, 2024, MPCSD began using SchoolPass, a kiosk-based check-in system that verifies visitors against criminal databases, automatically prints out visitor badges and student late slips, alerts staff that visitors have arrived to see them, and passes back late arrival and early departure information to our Student Information System.

STUDENT DATA PRIVACY

The district takes student data privacy very seriously and reviews all vendor user agreements for all software and online subscriptions, verifying what data is being collected and how that data is being shared. With major subscriptions, this process is simple, but what is more complicated is the use of free apps or tech products that can be

used by teachers to supplement instruction or increase engagement. Early in this report, we advocated the adoption of LearnPlatform, which is able to track the use of all technology products and provide privacy information that will help us better safeguard our students' information.

ACTION ITEM

5.3

The recent PowerSchool Data Breach of December 2024 has made us re-examine our data storage practices. We will undertake an audit of all our systems that house student data and ensure that we only store data that is required by statute. In addition, we will reach out to all our vendors and have them sign a Data Privacy Agreement (DPA).

EMERGENCY COMMUNICATIONS

COMMUNICATION WITH FAMILIES AND STAFF

The district utilizes School Messenger for important emergency and non-emergency email and phone communication to families and staff. School Messenger is integrated with the district's SIS, PowerSchool. ParentSquare can also send out emergency notifications.

For internal emergency communications, the District employs an emergency radio system for its schools, administrators, buses, and vans. The system is managed by MetroMobile with local towers. The radio system allows for continued communication with the loss of power, land-based phones, loss of internet access, and loss of cell reception. In addition to being the emergency communication system for the District, it is also used by the Transportation Department to communicate with the schools and each other for all transportation-related issues.

PAGING, BELL, AND CLOCK SYSTEM

At each of the schools, the District has an integrated Bogen paging, bell, and clock system. The system allows for the interior, exterior, and classroom paging, bell schedule, and synchronized central clock system. The paging system can be accessed from regular classroom and office phones.

ACTION ITEMS

RESEARCH REPLACEMENT OF PAGING SYSTEM

5.4

The technology and functionality of paging systems have rapidly accelerated in recent years. Our Bogen interfaces are obsolescent technology, with the systems at Lower Laurel, Oak Knoll, and Encinal verging on obsolete. In the 2023-24 school year, we will research replacement solutions. New solutions may result in the changing out of some or all clocks and speakers in all classrooms, as well as the main consoles currently in offices and Main Distribution Frames (MDFs). Some solutions can connect to existing components, however. There is a possibility that such a replacement could tie into the proposed classroom audio systems, thereby allowing one solution to solve two problems simultaneously. **Note:** *This goal subsumes what was previously goal 4.8, which related to digital signage.*

DIGITAL SIGNAGE

A recent technological innovation that is showing up in schools is digital signage, and this has significant benefits for school safety. Through a central management system, a school (or the entire district) is able to send live or recorded broadcasts as well as emergency notifications and images. This content can furthermore be customized for the location: a school, a wing or floor, and even a classroom. Picture an emergency in the community that requires a school site to shelter in place. Through the management system, an alert would appear on every single screen in the school, interrupting current instruction and reminding the class of the proper protocols. Or imagine a fire drill, where a classroom-specific evacuation route is shown to help students visually understand where they will relocate. Digital signage can be packaged with a screen mirroring device, with the newer interactive panels, or with an intercom/paging system.

SURVEILLANCE CAMERAS

MPCSD has 62 surveillance cameras in operation. Located at every entrance to our five school campuses and district office, these cameras are accessible via a web-based interface and store up to 60 days of footage that can be easily reviewed and retrieved.

Vape detection technology is another kind of surveillance tool that has grown exponentially in recent years. MPCSD is not immune to the increase in youth vaping. We have had inquiries about installing vape detectors in the middle school restrooms. We do not currently plan to undertake this project, but it will be important to monitor vaping incidents at Hillview and revisit this possibility. The same company that provides our surveillance cameras could easily install vape detectors, and administrators would be to receive alerts of vaping and review the video footage outside the restroom and then follow up with students. Many vape detectors also include a “noise anomaly” feature that will trigger alerts when certain decibels are reached or when particular words are detected.

ACTION ITEM

ADDITIONAL SURVEILLANCE CAMERAS

5.5

Sites have identified additional areas where surveillance cameras are needed. In the fall of 2023 , we conducted site walks, identified locations for additional cameras, and had our partner AMS.net submit a quote for this work. The total quote was for \$97,916.00. We await recommendations of our Guidepost Safety Audit before pursuing this project.

ACCESS CONTROL

Per the Guidepost School Safety Assessment, “An enterprise access control system that provides the District with a fully unified platform across all facilities **should be deployed** [our emphasis]. This system should, by design, integrate with building intrusion alarm and video surveillance systems to provide technology capability to serve as a “force-multiplier” to existing security staffing.”

ACTION ITEM

5.6

To this end, MPCSD is currently engaged in a small-scale project for Access Control to select rooms and spaces, including our Multipurpose rooms that are used by outside vendors. Results of this small-scale project will inform us on the ease of use and deployment were we to fully scale to protect, say, all exterior doors.

CYBERSECURITY/SYSTEMS INTEGRITY AND DISASTER RECOVERY

MPCSD currently employs a training program for staff to help them recognize and avoid phishing schemes. We have seen a steady decline in our “phish-prone percentage,” and have incentivized low phish-prone rates with a friendly site competition. Twice a month we receive reports on our levels of vulnerability and have insight into which staff need more training.

Our use of the JAMF MDM is also a powerful security tool, as it allows us to configure all Apple devices appropriately and set policies that help protect our network.

Each year Technology Services evaluates the following factors with regard to cyber security:

- User training. Are staff receiving regular training on how to appropriately respond to attempts to compromise their credentials or our network?
- Authentication and identity management. Are only authenticated users gaining access to our network and platforms? How are we confirming that users are who they say they are when they log in?
- Endpoint security. Are we able to detect and respond to threats to our district-issued devices, such as malware attacks?
- Network safeguards. Are we aware of vulnerabilities to our network that could be exploited by bad actors, and can we take action to eliminate those vulnerabilities?
- Disaster recovery. In the event of a catastrophic emergency or a ransomware attack, are we able to recover our data quickly and get back up and running?

We invest significant time in this assessment and in the spring of 2023, we identified some Action Items that were communicated confidentially to the MPCSD Board of Trustees. These efforts will improve our cyber security posture significantly.

It is also clear that cyber security needs more owners, and our current organizational structure and job descriptions silo that responsibility in one place. It will be necessary to

revisit job classifications and revise them accordingly to allow more ownership of this important role.

ACTION ITEMS

CYBER SECURITY, SYSTEMS INTEGRITY, AND DISASTER RECOVERY

5.7

In the spring of 2023, we brought our assessment and Action Items to the Board in a confidential memorandum. These resulted in the implementation of Duo for multi-factor authentication and SentinelOne for endpoint protection.

ADDITIONAL TRAINING FOR HIGH-RISK USERS

5.8

Our bi-monthly phishing campaign provides us with actionable information to help certain users improve their knowledge of how to respond to phishing attacks. At this time, we do not require those users with higher risk factors to engage in additional training. We will develop this program so that those users who need additional support will receive it.

DISASTER RECOVERY AND BUSINESS CONTINUITY PLANS

To better prepare for a disaster or other event that would take our systems off-line, Technology Services has developed a draft Disaster Recovery Plan (DRP) and a draft Business Continuity Plan (BCP).

A DRP is a detailed document that evaluates risks to critical infrastructure, identifying the means by which such systems will be brought back online in the event of a disaster and the timeline for doing so.

A BCP is a detailed document that shows how an organization will continue to provide its core functions and services in the event of a disaster. These core functions and services include a broad range, such as classroom instruction, payroll, transportation, accounts receivable, and communications.

ACTION ITEM

5.9

Technology Services will refine and socialize its DRP at the Cabinet level in 2024-2025 and work with other departments in the 2025-2026 school year to co-develop the BCP.