

“It is a great day to be a  
SABER!



EVERY KID IS MY KID

### Compelling Vision

**It is our moral imperative** to change until all of our systems measurably work for each and every student.

**Our focus must be** on ensuring each member of our organization maintains **high expectations** and provides **unwavering support** for each of our student learners.

**It is our responsibility** to make sure each and every student receives **quality core instruction** and develops **agency** when it comes to their own learning.

## Technology Update 2024





*Purpose: This report allows us to provide a comprehensive overview of technology deployment in the district, updates on current and upcoming projects, and clarity on how technology funds are spent and how staff and students benefit as a result. It also provides transparency on the Capital Projects (Technology) Levy passed in 2015 and each iteration of the report serves as a running record of how the objectives of the levy are being fulfilled. The impact of the levy cannot be overstated and we believe our learning environment is stronger not simply for the device each student has, but for the breadth of opportunities we can offer.*

### Instructional Technology Department Vision

Shakopee Instructional Technology Services  
will support the district's educational goals  
by providing high levels of reliability, service, and support.

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# Tech Update Report Introduction

This is the fourth version of the technology department report with a focus on the Capital Projects Levy (commonly known as the technology levy, which is how it will be referred to throughout this document). This report strives to provide transparency, accountability, and clarity around the use of technology funding. While a portion of technology funding continues to be sourced from the general fund, the majority is now funded via the tech levy.

Nobody who voted for the tech levy in 2015 could have predicted where we would be in a few years, but it's fair to say that the levy funding has been crucial to the district's ability to innovate in curriculum, provide services during a pandemic, and to continually strive to level the playing field in offering all of our students the best possible learning opportunities.

## Tech Levy Promises

One piece of documentation provided to voters prior to the Capital Projects (Technology) Levy in May 2015 was a timeline covering various goals for the use of the increased funding. In reviewing those goals, it should be noted that many have been met or are on track toward completion (we have progressed beyond the chart now, currently in year 8). In fact, out of all of the goals listed the only one that we have had to push back to later in the timeline is the replacement of classroom multimedia systems (Smartboards and projectors).

## Shakopee Public Schools Proposed Initial Plan for Technology Levy Funding *If voters approve Question 2 on May 5, 2015*

Technology has become a critical part of all learning environments, but it has to compete with other important needs for funding. If voters approve the technology levy request, it would provide a stable and dedicated source of annual funding to give students access to the technology they need to learn, teachers the technology they need to teach and staff the training they need to use technology effectively.

GOAL	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Network/ Infrastructure	Replace network switches on 6-year replacement cycle					
	Increase and update data storage and capacity			Monitor use; increase as demand dictates		
	Replace 6 year old Smartboards/Projectors with Interactive Projectors increasing teaching space				Projectors: 6-year replacement cycle	
	Wireless access; target dead zones in academic areas		Replace access points on a cycle to ensure capacity and speed			
	Update aging systems (e-mail, telephone, information system for HR/Finance)					
Devices for students & staff	Replace/Add Computers and devices in Elem. Schools (approx. 1510)	Replace/Add Computers and devices in Elem. Schools (approx. 645)	Replace/Add Computers and devices in Elem. Schools (approx. 2090)	Replace/Add Computers and devices in Elem. Schools (approx. 1275)	Replace/Add Computers and devices in Elem. Schools (approx. 1375)	Replace/Add computers and devices in Elem. Schools on cycle
	Replace/Add computers and devices in Sec. Schools (approx. 2500)	Replace/Add computers and devices in Sec. Schools (approx. 2215)	Replace/Add computers and devices in Sec. Schools (approx. 365)	Replace/Add computers and devices in Sec. Schools (approx. 910)	Replace/Add computers and devices in Sec. Schools (approx. 2620)	Replace/Add computers and devices in Sec. Schools on cycle
Technology Support	Add additional tech support staff to provide technology training and support		Continue to provide instructional and technical support across all buildings and programs			
Training	Provide teacher training that directly supports academic design and curriculum needs. Training will be on demand, just-in-time, and personalized for teachers to support them in high quality uses of technology.					

As stated in the voter-approved levy: “The money raised by the capital project levy authorization will be used to provide funds for the acquisition and maintenance of technology and technology systems, and to pay the costs of technology-related personnel and training.”

# Tech Levy Promises Report Card

Here is another view of the levy goals and progress that has been made.

Key:



Not started



On-going – A project or task with annual targets that are being met.



Completed – A stand-alone project or task that has been finished.

Goal/Item	Status	Notes
<i>GOAL: Network/Infrastructure</i>		
Replace network <a href="#">switches</a> on 6-year replacement cycle.		Currently projecting a 10 year lifespan for majority of this equipment, so this goal would be revised. For purposes of evaluating progress, would consider this goal met.
Increase and update data storage and capacity.		Completed 2019; Additional improvements in 2023.
<a href="#">Replace SmartBoards/Projectors</a> with interactive projectors increasing teaching space.		On-going audio-visual refresh cycle expected to continue through 2028-2029.
<a href="#">Wireless access</a> ; target dead zones in academic areas (and replace on a regular cycle).		Coverage is excellent and most significant problem areas addressed in 2022.
Update aging systems: e-mail.		Completed 2016

Update aging systems: <a href="#">telephone</a> .		Refresh Summer 2019
Update aging systems: information system for <a href="#">HR/Finance</a> .		Completed 2015 & 2020
<i>GOAL: Devices for students and staff</i>		
<a href="#">Replace/Add computers</a> devices in Elementary and Secondary schools (various amounts year over year).		Students 1:1 with devices, all staff who need a device have one and they are on a continual refresh cycle.
<i>GOAL: Technology support</i>		
Add additional <a href="#">tech support staff</a> to provide technology training and support.		Staffing is monitored and has been adjusted several times over the years to meet our needs.
<i>GOAL: Training</i>		
Provide <a href="#">teacher training</a> that directly supports academic design and curriculum needs. Training will be on-demand, just-in-time, and personalized for teachers to support them in high quality uses of technology.		Available formerly via Digital Learning Coaches and now Blended Learning Coordinators, occasional professional development sessions, staff courses in Canvas, and other resources.

Years 7-10 and beyond - Completed items removed; modified and new items noted.

Goal/Item	Type	Next Steps
<i>GOAL: Network/Infrastructure &amp; Security</i>		
<del>Replace network switches on 6-year replacement cycle.</del> Update network infrastructure on a regular cycle to meet demands for capacity and usage.	Revision	Revised; continue to maintain network infrastructure.

Increase and update data storage and capacity.	Continue	Monitor and maintain.
<del>Replace SmartBoards/Projectors with interactive projectors increasing teaching space:</del> Update audio-visual equipment to leverage tools and environment.	Revision	Revise and continue.
<del>Wireless access, target dead zones in academic areas (and replace on a regular cycle).</del>	Revision	Combined with network infrastructure item.
Update aging systems: telephone.	Continue	Maintain and update system as needed.
Improve resiliency and recovery of systems - including infrastructure for back-ups, redundancy, <a href="#">disaster recovery</a> , and preventative maintenance	New	Most hardware acquired; redesign of infrastructure and potential downtime to implement.
Improve systems, processes and training in the broad area of cybersecurity, and in specific domains of account management, data retention and privacy, multi-factor authentication, and breach prevention and policy.	New	Implementing security measures such as multi-factor authentication, rolling out software to monitor and protect systems, on-going training, and general planning and procedural work to improve cybersecurity processes and response.
Ensure that technology aspects of security systems are maintained and properly integrated with the network and physical infrastructure.	New	Examples of this would be <a href="#">camera</a> systems, door security, phone or network integrations with alarms and similar systems.
<i>GOAL: Devices for students and staff</i>		
Replace/Add computers devices in Elementary and Secondary schools (various amounts year over year).	Continue	Continue to support 1:1 and curriculum specific devices.



<i>GOAL: Technology support</i>		
Add additional tech support staff to provide technology training and support.	Continue	Staffing has been adjusted as needed in response to needs and budgetary realities. A well functioning help desk and documentation resources are additional areas of support.
<i>GOAL: Training &amp; Learning</i>		
Provide teacher training that directly supports academic design and curriculum needs. Training will be on-demand, just-in-time, and personalized for teachers to support them in high quality uses of technology.	Continue	Addressing this goal with a mix of <a href="#">documentation</a> , training, and support staff.
Ensure digital aspects of curriculum are being delivered in a consistent, equitable, and reliable manner while leveraging our infrastructure to deliver personalized, appropriate, high quality content.	New	Technology is embedded in the curriculum adoption process and collaborates with LT&E and other departments to ensure alignment.

If we have completed the original goals, what does that mean moving forward? It means maintaining the systems and infrastructure that has been built and continuing to explore ways to leverage technology to benefit our students. For example, we are just scratching the surface of the potential for artificial intelligence to impact how we prepare lessons, personalize materials, and analyze data. That's a topic that was not even on the radar in 2015. Continuing to update and improve our technology infrastructure and support are essential to providing a competitive, productive experience for our students.

# Technology Finances

*This section provides an overview of technology-related revenues and expenditures. It includes the current year (Fiscal Year 2023-2024, or FY24), all levy years prior and some projections two years into the future.*

The numbers here are intended to give a high-level overview of the major categories of spending. One detail to be clear on from the outset is the revenue category: any reference to the General Fund indicates that the revenue source is regular district funding, specifically allocated for technology expenses. Any reference to the Levy is funding derived from the voter-approved May 2015 Capital Projects Levy, for which funds became available for use in the 2016-2017 (FY17) school year.

## Revenues

The primary categories of revenue for technology spending are the General Fund and the Capital Projects (Technology) Levy. The next chart provides a breakdown of revenue categories, where the funding originates, and the frequency or stability of each revenue stream.

Category	Source	Frequency
<b>General Fund</b>	State & Local	Annual
<b>Capital Projects Levy</b>	Local	FY17-FY26 (10 years per voter-approved cycle)
<a href="#">E-rate</a>	Federal	Annual
<a href="#">Telecom Equity aid</a>	State	Annual
<b>Mi-Fi Grant</b>	State	FY17-FY19
<a href="#">Surplus equipment sales</a>	3 <sup>rd</sup> Party/Commercial	Whenever surplus equipment is identified. (Deposits back to general fund through FY20; to tech levy projects as of FY21)
<b>Recycling</b>	3 <sup>rd</sup> Party/Commercial	Whenever recyclable items are identified. (Deposits back to general fund)
<a href="#">Device Insurance Fees</a>	Student Fee/Local	Annual for 1:1 take-home device usage; ended FY22.
<b>COVID Relief Funds</b>	Federal & State	Intermittent from 2020 - 2022 (for tech items).

## Capital Projects (Technology) Levy Revenue

The Capital Projects Levy that was voter-approved in May of 2015 was defined at the February 9, 2015 Board meeting. An excerpted section of those minutes is pasted below, with a few items emphasized for clarity.

*The board also finds and determines that it is necessary and expedient for the school district to submit a capital project levy authorization to fund technology to the voters for their approval. **The proposed authorization for technology will be in the amount of 5.837584% times the net tax capacity of the school district.** The proposed capital project levy authorization will raise approximately \$2,500,000 for taxes payable in 2016, the first year it is to be levied, and would be authorized for ten years. The estimated total cost of the projects to be funded by the proposed capital project levy authorization is approximately \$25,000,000. The money raised by the capital project levy authorization will be used to provide funds for the acquisition and maintenance of technology and technology systems, and to pay the costs of technology-related personnel and training.*

One purpose of this specific report is to provide on-going documentation not just about the entirety of technology department funding and initiatives, but also to clearly note the impact of the levy on the district's technology program. Transparency in this regard helps in reassuring the community that what was voted on is what is actually happening. It also helps in developing informed and appropriate long-term plans.

It should be noted that the levy funding is based on a **percentage**, not a fixed amount. The estimated amounts in the board motion reflected the first year of assessments based on property values at the time. Key factors influencing the amount collected are property values (which have risen) and the number of tax-paying properties in the district (ie., new construction would add to the tax capacity). The ten year total as described to the board in 2015 made a projection based on the first year baseline; as stated this was an estimate. Through eight years of levy funding, the actual amount collected has been about \$27,997,000. If the remaining two years follow a similar progression, an additional \$11,140,000 would be collected, yielding a ten year total exceeding \$38,000,000. Not to put too fine a point on it, but this is another reason why the information in this report is so very necessary for documenting not just the fact of what revenue was collected, but how the funding was used to continuously improve the technology ecosystem throughout the district.

## Additional Revenues

Revenue categories beyond the General Fund and Levy are not a significant contributor to the technology budget, but they are helpful.

- E-rate aid is diminishing as the federal government reduces the types of qualifying expenses, but still helps with costs related to our Internet service.
- Telecom Equity Aid is a state allocation that also helps offset some of the Internet access costs.
- Surplus equipment sales represent an area that we intend to pursue more aggressively and strategically as a counterpart to our device replacement cycle. Additional detail is noted below.
- Recycling of items such as unused wires and cables, bulk metal, and obsolete technology with no other resale value brings in the least amount of money but allows us to squeeze every last dollar out of unused (and unusable) items.

*Phased out or currently inactive revenue sources*

- Device Insurance Fees are used to repair damaged devices; additional detail is noted below.
- The Mi-Fi grant was a competitive grant awarded to the district for several years, with a fixed amount of funds that have been expended at this point.
- COVID Relief Funds were applied to support some non-budgeted distance learning needs for technology, such as additional mi-fi hotspots, unexpected damage or loss of devices, and increased licensing of curriculum software for credit recovery.

## Surplus equipment sales revenue

Maintaining a consistent and predictable replacement cycle for devices and other hardware helps to ensure that we have well-functioning equipment in the district and also clarifies budget expectations from one year to the next. There are fewer surprises with items breaking down and better overall reliability. Whenever possible, we solicit bids for the bulk sale of surplus technology (per board policy 802). For now we are using revenue from those sales to work on a refresh of our security camera systems. Details on that project can be found later in this document.

*2017-2024 Surplus Equipment Sales*

Date	Device Type	Device Count	Winning Bidder	Revenue
2017 - October	iPad Minis	585	iPhone Antidote	\$51,540
2017 - December	MacBook 11" Air	182	Tech Defenders	\$48,600
2018 - March	MacBook 11" Air	330	Second Life Mac	\$101,397
2018 - March	iPad Various	124	Second Life Mac	\$5,330
2018 - August	MacBook various	261	Tech Defenders	\$68,020
2018 - September	iPad Various (4th gen mostly)	528	iPhone Antidote	\$36,038
2018 - October	Chromebooks - HP G1	219	Classform	\$845

2019 - May	iPad various 2nd, 4th, Mini 1st and 2nd gen	750	Second Life Mac	\$34,310
2019 - May	MacBooks - 11" and 13" Air	322	Planitroi Inc	\$30,283
2020 - March	iPad	213	Second Life Mac	\$54,212
2020 - May	Apple TV	496	Tech Defenders	\$7500
2020 - May	MacBook various (2/3 damaged stock)	354	Second Life Mac	\$110,293
2020 - September	iPad	1533	Total Technology	\$97,634
2021 - May	iPad	1027	Second Life Mac	\$165,050
2021 - November	MacBook	296	Diamond Assets	\$38,104
2021 - December	iPad	500	Total Technology	\$53,006
2022 - February	MacBook	600	Mac of All Trades	\$80,128
2022 - June	iPads, various older models	491	Total Technology	\$24,370
2022 - June	MacBooks		Total Technology	\$53,760
2022 - October	MacBooks, 2015 and various others	700	Diamond Assets	\$45,498
2022 - November	iPads, 5th gen and various others	900	Total Technology	\$52,101
2023 - April	MacBooks, 2015, 2018	1039	Second Life Mac	\$113,318
2023 - May	iPads, 5th and 6th gen	714	Total Technology	\$59,454
2023 - December	MacBooks - exiting 12th grade (2018 B stock and lower)	341	Mac Of All Trades	\$75,007
2023 - December	iPads - rotation 1st grade, 5th grade, 8th grade (6th & 7th gen) & iPads, 6th gen various and 7th gen C&D stock	1041	Diamond Assets	\$96,400
2024 - February	MacBooks - batch 2 for year (remaining 2018 stock for sale and randoms)	275	Mac Of All Trades	\$59,966
2024 - March	iPads - 6th gen and 7th gen	724	Second Life Mac	\$67,500

## Device Insurance & Repairs

**The district phased out the device insurance program after the 2021-2022 school year.** Devices acquired as of that year were purchased with 3 years of AppleCare warranty service, which covers most types of damage. This option had the advantage of being a more predictable cost which could be included in the initial device purchase cost. It also helped to ensure more stability in the total number of well-functioning devices we would have on-hand over time. Since insurance was a voluntary fee, the extent to which families purchased it from year to year would vary. It also made sense from an equity standpoint to eliminate this type of fee.

The chart below shows annual insurance fee collections and expenditures.

Since we still have a number of devices that were purchased before we started adding the AppleCare warranty, we have had to continue to send devices out to 3rd party vendors for repair. The chart shows how the balance of all prior insurance fee collections is being drawn down over time; our current expectation is that it will be entirely expended by the end of the 2024-2025 school year or not long after. This will coincide with the majority of devices being covered under AppleCare, so while we still have some repair expenses to maintain stock (many of our devices have a 4 or 5 year life-cycle) it will be covered by our regular budget allocation.

*Insurance Pool Collections and Expenditures; data as of April 2024*

Year	iPad Fee	Mac Fee	Revenue	Expenses	Year Balance	% Used	Running Balance
15-16	\$25	\$75	\$76,432	\$19,125	\$57,307	25%	\$57,307
16-17	\$25	\$75	\$110,858	\$79,694	\$31,164	72%	\$88,471
17-18	\$25	\$75	\$126,317	\$37,154	\$89,163	29%	\$177,634
18-19	\$20	\$60	\$98,060	\$38,542	\$59,518	39%	\$237,152
19-20	\$20	\$60	\$98,660	\$17,766	\$80,894	18%	\$318,046
20-21	\$20	\$50	\$93,100	\$75,769	\$17,331	81%	\$335,377
21-22	\$20	\$50	\$99,575	\$123,164	-\$23,589	124%	\$311,788
22-23	0	0	\$0	\$139,531	n/a	n/a	\$172,257
23-24	0	0	\$0	\$71,111	n/a	n/a	\$101,146
24-25	0	0	0				
Total			\$703,002	\$601,856			

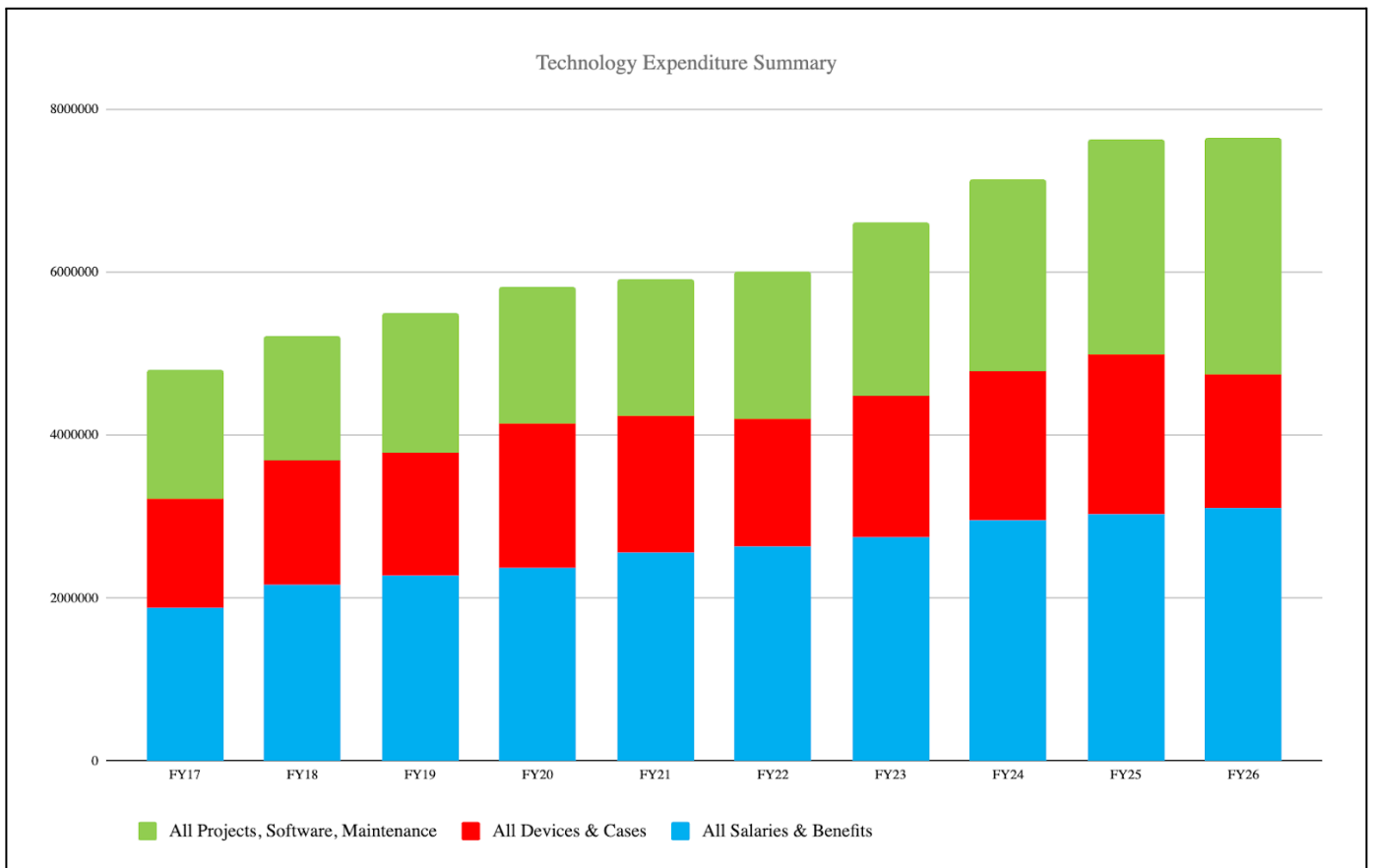
# Expenditures

Expenditures are grouped into three categories; we will dive into each of the categories in a section of this report. The categories are:

- Staffing (Salaries and Benefits)
- Devices (Devices and Cases)
- Services, Supplies, Software & Capital Expenses

The next few charts provide some specific data on expenditures, both in the broad sense and more specifically by revenue source and projections over time.

Chart showing overall expenditures (combined General and Levy budgets)



Pie chart showing comparison of staff/devices/everything else. This represents 2023-2024 data.

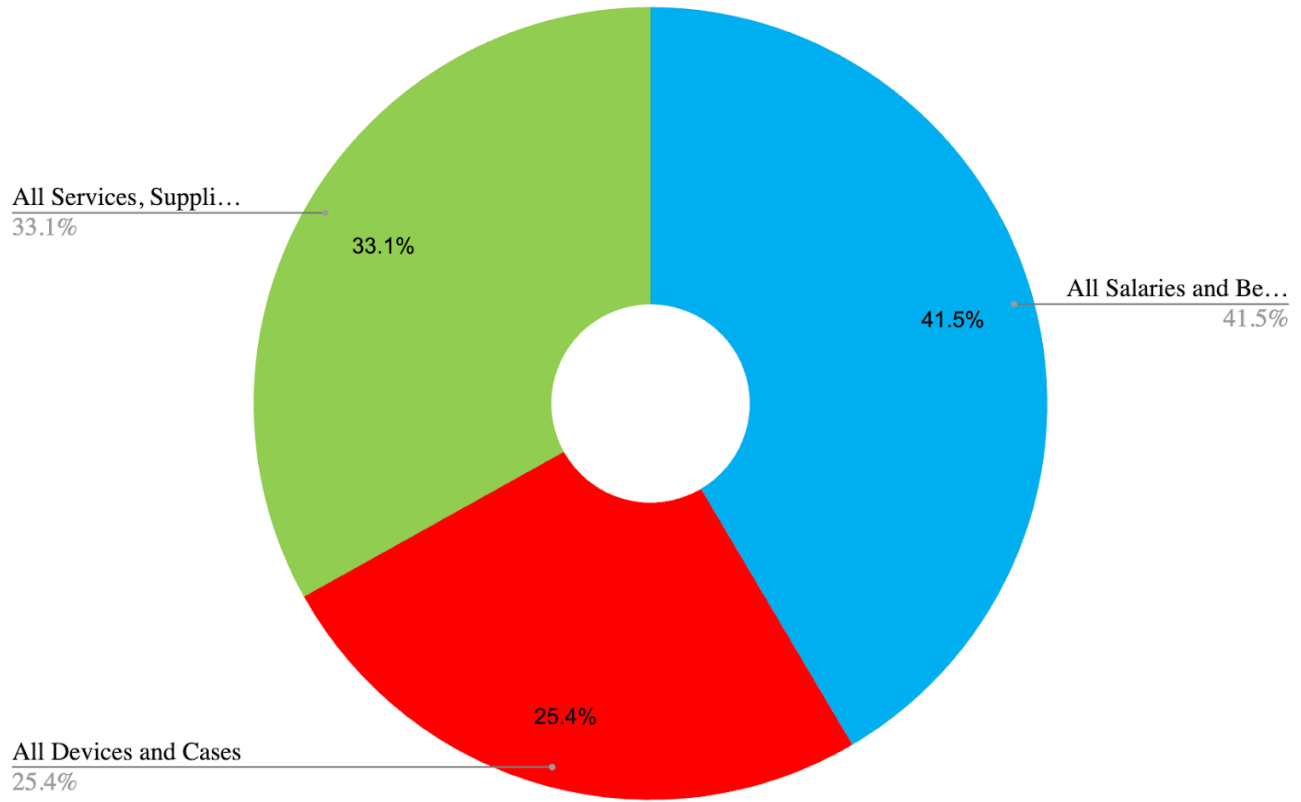


Chart showing how expenditures are broken out by category depending on revenue source - FY17-FY21

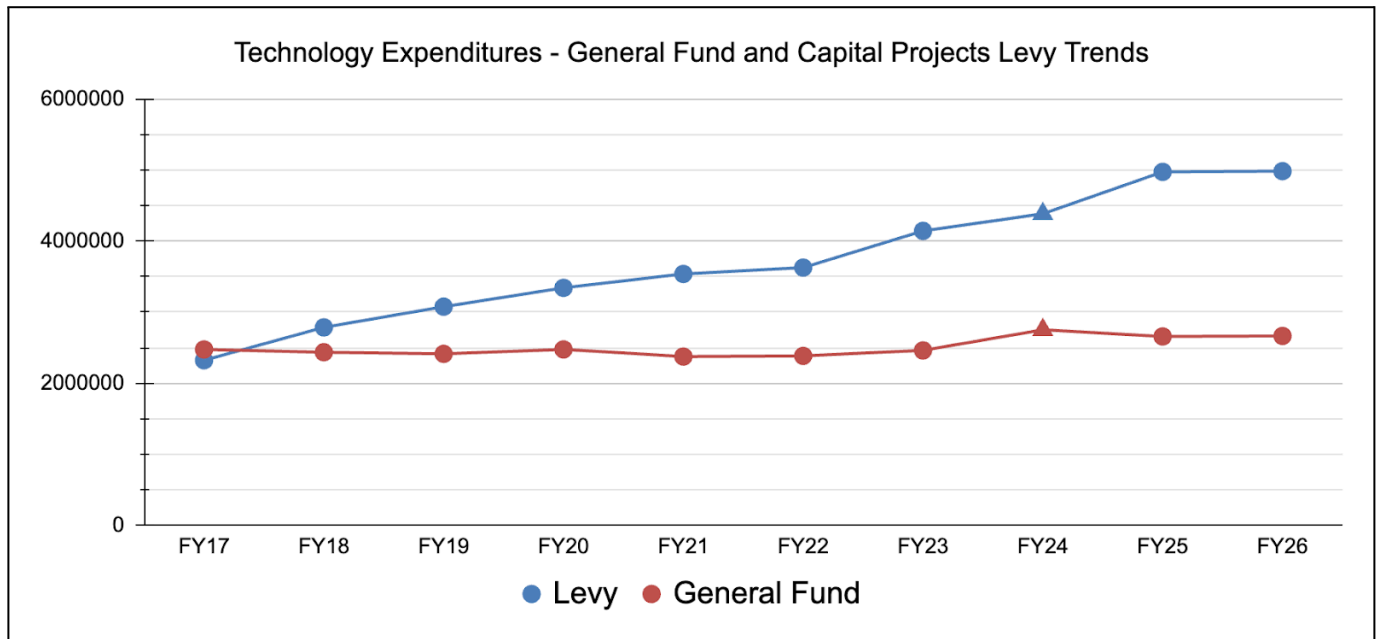
TECHNOLOGY TOTALS	FY17	FY18	FY19	FY20	FY21
General Fund Salaries & Benefits	\$ 1,255,905	\$ 1,215,476	\$ 1,330,024	\$ 1,417,581	\$ 1,375,554
General Fund Services, Supplies, Software & Capital Expenses	\$ 1,220,000	\$ 1,220,000	\$ 1,083,150	\$ 1,059,000	\$ 1,000,000
Levy Salaries and Benefits	\$ 628,940	\$ 938,323	\$ 938,538	\$ 953,987	\$ 1,176,986
Levy Devices and Cases	\$ 1,326,987	\$ 1,539,320	\$ 1,517,613	\$ 1,777,413	\$ 1,676,141
Levy Services, Supplies, Software & Capital Expenses	\$ 367,000	\$ 308,900	\$ 621,451	\$ 611,500	\$ 685,890
All Salaries and Benefits	\$ 1,884,845	\$ 2,153,799	\$ 2,268,562	\$ 2,371,568	\$ 2,552,540
All Devices and Cases	\$ 1,326,987	\$ 1,539,320	\$ 1,517,613	\$ 1,777,413	\$ 1,676,141
All Services, Supplies, Software & Capital Expenses	\$ 1,587,000	\$ 1,528,900	\$ 1,704,601	\$ 1,670,500	\$ 1,685,890
<b>TOTAL</b>	<b>\$ 4,798,832</b>	<b>\$ 5,222,018</b>	<b>\$ 5,490,776</b>	<b>\$ 5,819,481</b>	<b>\$ 5,914,571</b>



Chart showing how expenditures are broken out by category depending on revenue source - FY22-FY26

TECHNOLOGY TOTALS	FY22	FY23	FY24	FY25	FY26
General Fund Salaries & Benefits	\$ 1,385,109	\$ 1,462,248	\$ 1,672,236	\$ 1,701,275	\$ 1,735,300
General Fund Services, Supplies, Software & Capital Expenses	\$ 1,000,000	\$ 1,000,000	\$ 1,080,000	\$ 957,000	\$ 930,000
Levy Salaries and Benefits	\$ 1,245,133	\$ 1,285,162	\$ 1,290,227	\$ 1,320,584	\$ 1,360,202
Levy Devices and Cases	\$ 1,561,173	\$ 1,727,201	\$ 1,812,592	\$ 1,962,346	\$ 1,647,013
Levy Services, Supplies, Software & Capital Expenses	\$ 821,490	\$ 1,132,200	\$ 1,282,600	\$ 1,693,000	\$ 1,978,500
All Salaries and Benefits	\$ 2,630,242	\$ 2,747,410	\$ 2,962,463	\$ 3,021,859	\$ 3,095,502
All Devices and Cases	\$ 1,561,173	\$ 1,727,201	\$ 1,812,592	\$ 1,962,346	\$ 1,647,013
All Services, Supplies, Software & Capital Expenses	\$ 1,821,490	\$ 2,132,200	\$ 2,362,600	\$ 2,650,000	\$ 2,908,500
<b>TOTAL</b>	<b>\$ 6,012,904</b>	<b>\$ 6,606,811</b>	<b>\$ 7,137,654</b>	<b>\$ 7,634,205</b>	<b>\$ 7,651,016</b>

Chart showing trendline for expenditures based on revenue source



## Staffing

As the quantity of devices and overall dependence on technology throughout the district has increased, staff have been added to ensure that we have qualified personnel in place to support all of our users and systems. To put this in the context of the budget, current staffing listed below notes the funding source, which encompasses salaries and benefits.

Tier	Role	Name	Building/Office	Fund
1	Building Tech	Trask Trojanek	Eagle Creek/Red Oak	General
1	Building Tech	Joseph Rodela	Sun Path	Levy
1	Building Tech	Becky Gaul	Jackson/Sweeney	Levy
1	Building Tech	Ahmed Mohamud	East	General
1	Building Tech	Robin Jahangir	West	Levy
1	Building Tech	Ben Abbott	High School	General
1	Building Tech	Jessica Davis	High School	General
1	Building Tech	Pilar Rodriguez	High School	Levy
1	Building Tech (0.5)	Jen Reis	High School	General
1.5	Tech Support Coordinator	Abdi Iyow	District	General
1.5	Tech Support Coordinator	Dion Yorm	District	General
1.5	Tech Support Coordinator	Maria Hawes	District Office/TLC	General
1.5	Tech Support Coordinator	Scott Carpenter	District	General
2	Administrative Assistant	Holly Anderson	District Office	General
2	Tech Systems Support Specialist	Jonathan Benz	District Office	General
2	Tech Systems Support Specialist	Colin O'Brien	District Office	General
2	Tech Systems Support Specialist	Amanda Holm	District Office	General
3	Systems Admin - Apple	Josh Novotny	District Office	General
3	Systems Admin - Financial	Michele Carpenter	District Office	General
3	Systems Admin - Network	Quazi Jahangir	District Office	General
3	Systems Admin - Servers	Dave Ryan	District Office	General
3	Systems Admin - Student	Ty Willmsen	District Office	General
3	Theater Manager	Bob Cole	High School	Levy
4	Supervisor of Instructional Tech	Chris Lee	District Office	General

4	Director of Instructional Tech	Bryan Drozd	District Office	Levy
BLC	Blended Learning Coordinator	Kara Osmundson	District Office	Levy
BLC	Blended Learning Coordinator	Eric Hills	District Office	Levy
-	Central Duplicating Lead	Ashley Lehman	District Office	General
-	Central Duplicating Assistant	Rena Lehman	District Office	General
TOSA	LTE Coach	Hailey Nelson	District Office	Levy
TOSA	LTE Coach	Monica Miller	District Office	Levy
TOSA	LTE Coach	Jill Wimberger	District Office	Levy
TOSA	LTE Coach	Luke Meredith	District Office	Levy
TOSA	LTE Coach Supervision (0.3)	Nika Summer	District Office	Levy
<b>Total</b>				<b>32</b>

TOSA=Teacher on Special Assignment. LTE=Learning, Teaching & Equity.

## Technology Staff Roles and Responsibilities

The staffing of the technology department has attempted to keep pace with the deployment of technology and the expectations for how it will be used. Two key areas identified for use of levy funding were training and tech support staffing; the growth of the department and staff focus has been consistent with that directive.

### Building Tech/Tier 1 (Paraeducator)

These are our front-line tech support personnel, each assigned to a specific building. They have the most direct contact with staff and students and handle a wide array of issues each day.

### Tech Support Coordinators/Tier 1.5 (Unaffiliated)

This position was implemented in 2022. It essentially splits off a portion of Tier 1 support into a more project-based and agile Tech Support Coordinator group. In addition to providing more focused roles, it should also give us more flexibility in promoting and hiring staff.

### Tech Systems Coordinator & Administrative Assistant/Tier 2 (Unaffiliated)

This position focuses on identifying common issues amongst buildings, noting problems to be escalated to Tier 3, and working with vendors for support or repair tasks. They are also very involved with onboarding of new staff and training of Tier 1 technology staff. This group also includes our administrative assistant due to the nature of their work and how closely they need to collaborate with our Tier 2 technology staff.

## System Admins & Database Support/Tier 3 (Unaffiliated)

Staff in this group handle the more system-specific tasks, such as maintaining staff and student databases, network functionality, global management of devices, and resolution of issues that are escalated beyond Tiers 1 & 2.

## Tech Support Supervisor and Director/Tier 4 (Unaffiliated)

Decisions affecting the department or district are made at this level. Staff in this group are also responsible for maintaining the budget and coordinating the efforts and direction of the department.

## Blended Learning Coordinators & Instructional Coaches (Teacher)

As of the 2021-2022 school year, the previous position of Digital Learning Coach was phased out due to the impact of budget cuts and overall streamlining and refocusing of duties amongst a group of Teachers on Special Assignment (sometimes referred to by the acronym TOSA).

Related Tech Tools article: [Technology Help Resources](#)

## Central Duplicating

As of early 2019, Central Duplicating was moved from Finance Department oversight over to the Technology department. Staff are not budgeted from the technology fund, so they are included in the personnel budgetary data in this report. Technology funds have been used for some long overdue upgrades to equipment, but are not a substantial amount in the overall budget. The Central Duplicating staff do a great job of supporting our district with production of materials and provide a cost effective service.

Related Tech Tools article: [Central Duplicating](#)  
See Also: [Printing & Copiers](#)

# Devices

This section focuses on student and staff devices to be found throughout the district. It should be noted that one of the goals of the Capital Projects Levy was to provide much greater access for students to technology. As of this year, the student device goals that were outlined in encouraging a “yes” vote for the Levy have been met.

## Supported Devices/Operating Systems

We try to standardize wherever possible in order to increase reliability and make our systems easier to maintain. However, meeting a variety of needs from both a curriculum perspective and a business process point of view means that we have to support a wide variety of hardware and software. The chart below provides an overview of the most common hardware and operating systems in use throughout the district.

Operating System	Notes
<b>MacBooks</b> <i>Apple macOS</i>	MacBooks use the Apple macOS operating system. Updates and software are distributed using the JAMF management software.
<b>PCs</b> <i>Microsoft Windows</i>	Virtually all PCs have been migrated to Windows 10, with Windows 11 migrations planned for the next year or so. Updates and software are distributed using a management tool called ConfigManager.
<b>Chromebooks</b> <i>ChromeOS</i>	Chromebooks use ChromeOS. Updates are centrally managed to a large extent, but can be forced or delayed on machines by the user.
<b>iPads</b> <i>Apple iPadOS</i>	iPads use the iPadOS operating system. Updates and software are distributed using the JAMF management software.
<b>Android Tablets</b> <i>Android OS</i>	We have a small batch of tablets running the Android operating system; this is similar to what one would find on an Android phone.

## Device Distribution/Inventory Counts (FY16-FY24)

Computers are just one category of many pieces of hardware in use throughout the district. Later sections of this report will speak to “everything else”. As the district has aggressively pursued a 1:1 program and increases in device availability and mobility over the past several years, it makes sense to start with those totals. The chart below provides snapshot totals for each major category of device over

the past 9 years. As of 2020, we had full deployment for iPads and MacBooks. As one would expect, the number of PCs dropped and has now stabilized. The heaviest use of PCs among students involves the Project Lead The Way (PLTW) curriculum, which is still primarily (although not entirely) dependent on the PC platform. Chromebooks exist almost exclusively in carts and are handy for situations such as assessment and keyboard intensive assignments. The quantity of Chromebooks has also peaked, though, and has dropped to a level we expect to remain stable over the next few years.

Device Totals	PC	iPad	MacBook	Chromebook	District Total
FY16	2673	3375	1593	933	8574
FY19	1114	5831	3547	1129	11621
FY22	700	6340	4780	1165	12985
FY24	696	6531	4489	342	12058

## Device Replacement Cycle

Establishing a clear and specific replacement cycle for devices helps in accomplishing several goals:

- Ensure that devices can handle the latest software requirements.
- Reduce expenditures on maintaining older devices.
- Allow the district to recoup some costs by selling off surplus devices while they still have value.

All of our Apple devices are currently being acquired through lease agreements with a buyout option at the end of the lease. In many cases, devices are repurposed beyond their replacement cycle. If there is not another use for a device, we will declare it [surplus](#) and sell it to the highest bidder. The flexibility of being able to use devices beyond the lease agreement and the ability to recoup value for devices through resale are why we do a buyout to take ownership of the devices.

Device Group	Replacement Cycle
K-1 iPads (1:1 as of FY21)	5-6 years
2-5 iPads (1:1 as of FY20)	4 years
6-8 1:1 iPads	3 years

<b>9-12 1:1 MacBooks</b>	4 years
<b>Staff MacBooks</b>	5-6 years
<b>Staff iPads</b>	5 years
<b>PLTW Labs (PCs)</b>	4-7 years
<b>Office Staff PCs</b>	4-7 years
<b>Chromebooks</b>	4-5 years

Annual purchasing cycles for student devices consistently include 2<sup>nd</sup> grade and 6<sup>th</sup> grade iPads along with 9<sup>th</sup> grade MacBooks. Kindergarten and 1<sup>st</sup> grade devices are their own cycle generally occurring at a 5-year interval. We monitor Project Lead the Way labs to determine if we can upgrade devices to meet the program specifications or if it is time to replace them entirely.

# Services, Supplies, Software & Capital Expenses

This section focuses on our systems related to technology infrastructure (capital expenses) and our most widely utilized software. Services and supplies are not covered much here; they are not a huge portion of the budget but include more of the mundane aspects of technology such as bulbs for projectors, outsourcing for repair, annual service contracts, and so forth.

## Infrastructure - Security, Life Safety and Building Operations

We cooperate with Buildings & Grounds on maintaining and improving our security-related systems and providing a more unified and interconnected design for those systems. The district's current systems include:

- Keycard door entry (S2)
  - Includes emergency door lockdown capabilities.
- Raptor hardware and software for various individual and site safety measures, including:
  - Visitor background check and badge
  - Volunteer application and background checks
  - Safety drill scheduling and management
  - Emergency alerts
- Internal and external surveillance cameras (Exacq (legacy)/Avigilon (current))
  - Notes on district-wide [camera](#) system overhaul can be found near the end of this report in the Projects section.
- Bell/clock systems (various vendors)
- Entrance camera and intercoms (Aiphone)
- Building intercoms (various vendors)
- Phone system (Mitel – some integration with building systems)
- Walkie Talkies (Motorola) - All devices updated and consistent throughout the district. Currently exploring additional updates for high school devices to address dead spots and signal strength issues.
- [Cell phone signal repeaters](#) at the High School to address coverage (and safety) concerns.

Ultimately, our goal is to have systems in place that are simple to use, consistent between buildings, and which function just as reliably in day to day use as in an emergency situation.



## Phone System

We upgraded our phone system (a Shoretel system from 2006) in summer of 2019. The newer Mitel system is essentially the next generation of our previous system, but offers enough new functionality and improvements to make it worthwhile. It also allows us to leverage existing hardware and configuration, which will help ease the migration process.

The 2019 upgrade was effectively the least costly option and bought us some time; we are expecting that a more comprehensive refresh of the system will take place no later than 2027.

## Infrastructure – Network

Each year we have more devices on the network and increase our reliance on local and cloud-hosted services. We are continuously monitoring how the network functions and taking time to identify current and potential bottlenecks or trouble spots. This section details various components of our infrastructure and how each plays a role in maintaining a well-functioning network and systems.

### Internet

We purchase access to the Internet through Metronet as a member of the Scott County Network Consortium (consisting of Shakopee, New Prague, Prior Lake, Jordan). A portion of the cost for the Internet is offset via E-rate and Telecom Equity funding. Our current Internet contract runs through summer 2025.

### Internet (Content) Filter

We are currently using Linewize filtering. Parents can view student data using the Qustodio app.

### Firewall

A firewall is the first line of defense. It is the traffic cop, looking at every piece of data flowing in and out of our network and sending it to the proper destination. Primary and redundant firewalls were updated in 2022. The capacity of a firewall must be properly matched up to the peak potential traffic on the network; our most recent hardware updates handle the traffic effectively.

### Core and Building Routers

The core and building routers are the primary network equipment that carries traffic between buildings. These are generally bought in pairs to minimize the possibility of a building completely losing communication. These were all replaced in 2020 and 2021.

## Wireless Controller

The wireless controller manages every wireless access point in the district. It is the “big brain” of the system. This is also a device we buy in pairs since if it goes down, all wireless devices (in other words, most of what our staff and students use) lose network access. This was most recently replaced in summer 2023.

## Network Switches

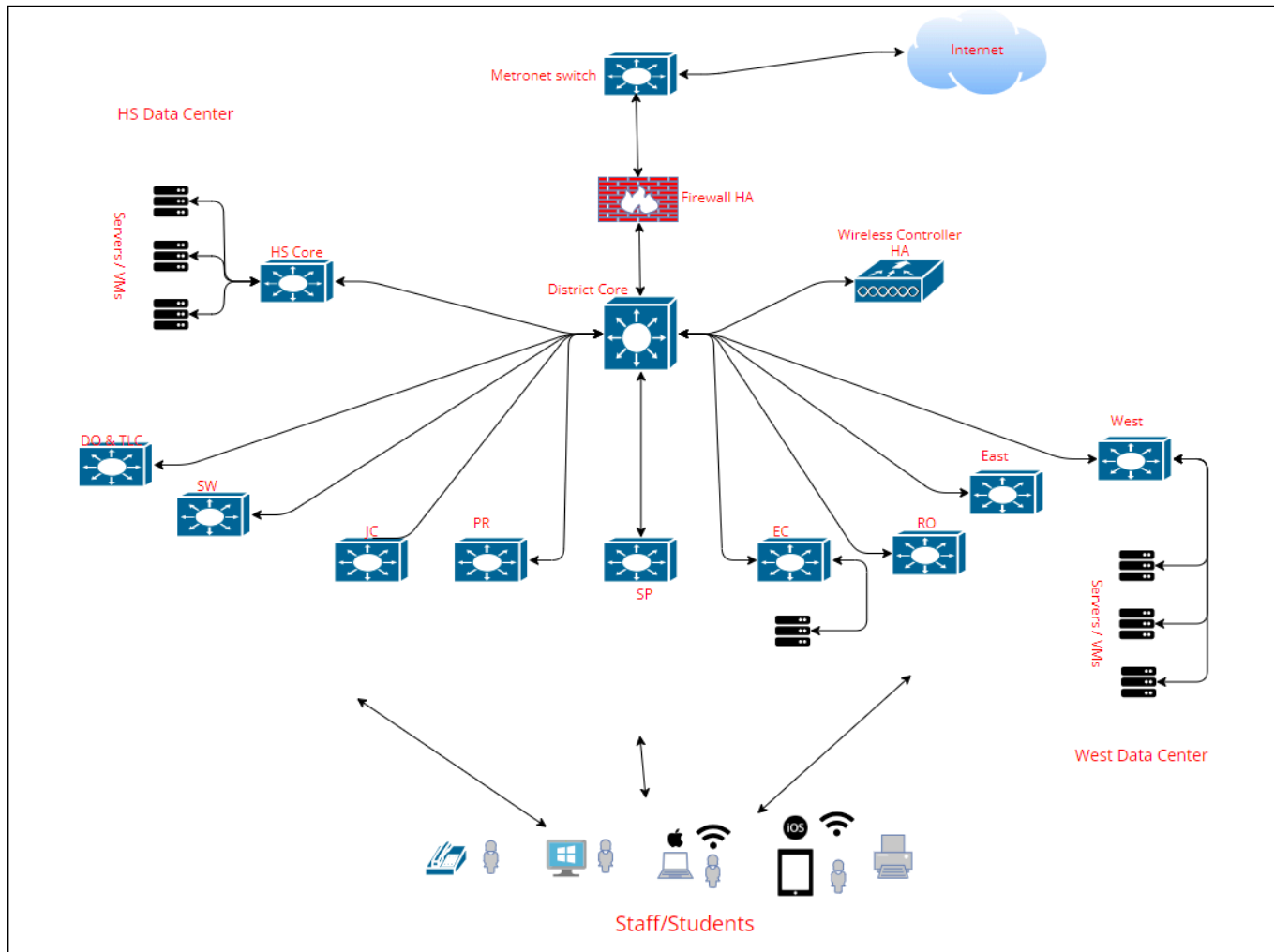
All of that network cable has to plug in somewhere. Traffic in a building is routed primarily through network switches. Most of our network devices are about 4-5 years old. We do not have any immediate critical needs in this area but will monitor performance of the network and develop a replacement plan to ensure optimal operation. The addition of more security cameras has required tapping into network switch capacity and adding cabling. We started a full replacement cycle in 2022-2023 and expect it to take 4-5 years to get through the entire district.

## Wireless Access Points

Our system of wireless access points is on a continuous refresh cycle. At the moment there are about 821 wireless access points in use. The access points are centrally managed through the wireless controller. We generally try to budget for a 20% turn-over of access points each year in order to avoid a backlog that would put too much strain on the budget.

Related Tech Tools article: [District Internet](#)

## Visual reference of our network design and components



## Infrastructure – Servers & Storage

### Virtual Servers

We are continuously upgrading servers and moving as many as possible to virtual environments. This allows more uptime, lower cost, and easier upgrades. We still need physical hardware to run virtual servers, but we can aggregate those virtual servers onto fewer physical systems, lowering overall long-term costs. A recent project involved upgrading the server hardware and creating a redundant system for ensuring server uptime and availability.

### Network Storage

In order to maintain virtual servers and shared network storage & databases we have had to increase our available capacity. This is an on-going project related not only to storage and servers but also disaster recovery. In addition, we use the Backupify cloud-based back-up service for items stored to Google personal and share drives.

## Infrastructure - Services & Account Integrity

### E-mail Archiver

We maintain about 3 years of email archives via specific systems for our shakopee.k12.mn.us emails and for shakopeeschools.org emails.

### Phishing Training

The district uses a service called InfosecIQ to help train staff on how to recognize and avoid attempts at e-mail phishing. “Phishing” is a technique for disguising the sender or intent of an e-mail in order to trick users into clicking a potentially malicious link or in some way providing information to a third party. It can also be used to deliver damaging malware or ransomware to devices. Since there is no way to completely block these devious e-mails, our strategy now is to try to provide practice to staff in recognizing the warning signs and avoiding being “phished”.

Our results for phishing practice campaigns show us stuck at about a 5% failure rate for correctly identifying a phishing email, meaning that the message has been acted upon in some way (replying to it, clicking on a link, downloading an attachment, and so forth are examples of “acting upon” the message). A 95% success rate doesn’t sound terrible until you realize that 5% equals more than 50 staff and that many opportunities for a malicious message to result in a compromised account or worse. That is not an acceptable level of risk and we are continually training and reinforcing the messaging on this topic to try to reduce our risk.

Related Tech Tools article: [Phishing](#)

### Account Management & Automation

In 2022 we did an overhaul of our account management solution, moving from RapidIdentity to Classlink. This was done to provide additional flexibility in how we managed account data (including students over from Infinite Campus, staff from Skyward, and additional manually created accounts) and to more effectively handle class rosters and access to software and online services.

# Multimedia/Audio-Visual Hardware

A typical classroom has some form of digital projection and audio support. The E-5 buildings are more likely to have a Smart brand interactive whiteboard with a short or long throw digital projector, Middle School buildings generally just have a short or long throw projector, and the High School and Tokata tend to have digital projectors or large screen TVs.

Since Apple devices are the dominant platform in the district, we also have an Apple TV device connected to almost every display; currently we support over 700 Apple TV devices. Note that this includes classrooms, conference spaces, and hallway or other common area displays.

In the spring of 2019, an Audio-Visual Committee met to review our options and determine next steps for replacing or upgrading classroom audio-visual solutions. The goal of the committee was to identify our most critical needs and any barriers to upgrading audio-visual equipment.

We ran a pilot program to try out various display options, such as interactive LCD panels, as well as full classroom audio-visual systems. The pilot was successful in that it helped illustrate the potential and pitfalls of various options and to clarify our expectations and goals for the audio-visual systems.

## Audio-Visual: On-going Challenges

- Aging audio-visual equipment.
  - Smartboards are largely at the end of their support cycle (see chart below to get a sense of how prevalent that problem is for the district).
  - Many of our Hitachi brand digital projectors are over 10 years old and failing.
- Curriculum that only exists in Smart Notebook files.
- Inconsistency between buildings in systems and capacity, which is a support and an equity issue.

*Interactive whiteboards currently deployed - counts need to be audited and revised; there are fewer currently in use.*

<b>Model</b>	<b>Count</b>	<b><a href="#">End of Support</a></b>
Smart M600 DViT	4	11/30/2022
Smart SB660	4	9/1/2018
Smart SB680	243	10/31/2019
Smart SB685	2	10/31/2019
Smart SBM680	18	11/30/2022
Smart SBX880	1	tbd
Smart SD680	27	7/1/2017

Hitachi Starboard	2	discontinued
Total	301	

## Audio-Visual: Addressing the Challenges

We have a 1:1 device deployment. Every K-8 student has an iPad, which essentially puts an interactive touchscreen in every student’s hands. Combined with device management tools such as Apple Classroom, content delivery tools such as Lumio (the web-based successor to Smart Notebook) and Seesaw, learning management systems such as Canvas, and a variety of other formative assessment and engagement tools such as Kahoot, GimKit, and others, there is little incentive to continue installing interactive whiteboards in the classroom. We also acknowledge that there may be exceptions or specific use cases for an interactive whiteboard (certain special education curricula, for instance, may be better served by an interactive whiteboard).

Rather than replicate what we have had, we are focusing our energies and funding on solutions that are effective for our current and anticipated environment. New installations are largely composed of updating digital projection and adding display management and switching systems (specifically, [FrontRow ezRoom](#) systems) that also allow for an easy upgrade path to add voice amplification where needed.

The overhaul of systems started with East, West, and Sweeney over the past two years. Those buildings were in some sense chosen for us due to planned construction projects that made them the logical places to start. It will take another two summers to finish those buildings; along the way we will start mapping out the next wave of installations based on greatest immediate need. The audio-visual refresh will get a good start through the remainder of the current technology levy, but will be suspended unless a new levy passes or a different funding stream can be identified.

## Printing & Copiers

Our current printer and copier inventory is comprised of approximately 144 active printers, 20 backup printers in storage, and 31 multi-function (copy/print/scan) devices. In early 2022 we consolidated all of our print services to a single vendor. This was done to simplify management and also for a modest overall reduction in costs. We are monitoring our usage to identify areas to reduce our deployment of printers and continually encourage using the less costly options for printing. For reference, the chart below provides the per-print costs for each classification of print device. Those fractions of a penny do start to add up and even with all of our digital resources we still do plenty of printing each year.

Per Page Costs by Type of Device	Black Toner	Color Toner
Desktop printer (HP)	.0079	.065
Multi-function (Konica MFP) devices	.005	.045
Central duplicating production copiers (Konica)	.004	.04

Related Documentation: [Printing Data Dashboard](#)

## Software – District Level

The district spends a significant amount each year at the district level on software and web-based applications. Some of types of software and examples include:

- Managing student data (ex: Infinite Campus)
- Content creation tools (ex: Adobe Cloud, Corel; some paid, and many free for education such as Canva)
- Curriculum materials & management (ex: Amplify Science, Imagine Math, Follett/Destiny)
- Content Management Systems (delivery of curriculum, for example, Canvas)
- Network management and security (ex: various Cisco and Solarwinds products)
- Home-school communications and efficiency (ex: Smore, Finalsight, Seesaw)
- Device management and auditing (ex: JAMF, Microsoft, Google Admin, Papercut)
- Account management (ex: Classlink)
- Human Resources (ex: Skyward, Frontline, Droplet)

Whenever possible, we look for more cost-effective, user friendly, or efficient options. A more exhaustive list of student use software can be found on the [Software Data Dashboard](#) via our website.

## Software With Parent Connections

### Canvas Learning Management System

The primary function of Canvas is to allow teachers to create an on-line environment for delivering instruction, distributing and collecting assignments, and providing formative and summative assessment. It is also being used for some professional development, particularly training of new staff but expanding into other on-going training as well.

- Grade Levels Using Canvas: 6-12, with some usage being piloted in upper elementary.
- Parent Connection: Parents can set up logins and observer accounts that allow them to see current grades, assignments, and class announcements.

## Infinite Campus

Our system of record, which handles all of our state reporting, enrollment, attendance, student records, and so on. Additionally, when student records are created, changed or exited, it serves as the starting point for our system of automating the transfer of those account changes to systems such as Google (such as all of our @shakopeeschools.org accounts), Microsoft (management of logins, @shakopee.k12.mn.us accounts, and Office licensing), and Classlink (syncing of account data to systems such as Seesaw).

- Grade Levels Using Infinite Campus: All
- [Parent Connection](#): Parents can set up a portal account to view student records, update contact information, check lunch balances, submit attendance, pay fees, and communicate with staff.
  - Parent account set-up was automated in Spring of 2024 to help ensure speedy and comprehensive account creation.
  - Majority of parent portal content is available in Spanish, Somali, Russian, and Vietnamese languages.

## Seesaw

We use Seesaw as a platform for sharing student work and communicating with parents. We chose to use Seesaw when we realized that many elementary staff were either using it already or were using a variety of other tools to enhance home-school communication. Being on a common platform simplifies that process while also ensuring that we can properly manage and protect student data.

- Grade Levels Using Seesaw: EC-5
- Parent Connection: Parents are provided a code to create an account and connect to their child's classroom.

## [Conference Software](#)

### Communication Tools

In addition to the systems mentioned above that have a more academic focus, we also have various tools that facilitate both home-school communication and our broader presence and messaging to the community. Those include:

- Blackboard/Finalsite website: Anything housed at the <https://www.shakopee.k12.mn.us/> address.
- Blackboard/Finalsite Messenger Connect: System for sending out mass email, phone calls, and text messages.




- Messenger functionality in Infinite Campus: Targeted messaging for school or classroom specific communications as well as day to day items like fee notices, lunch balances, attendance, and so on.
- Smore newsletters: An easy to use system for generating newsletters that includes an option for machine translation of the content.
- Tech Tools site (Helpjuice): Anything housed at the <https://techtools.shakopeeschools.org/> address; this site is focused on technology articles and Blended Learning Coordinator communications.

Collectively, these tools give us a range of options for crafting a message, ensuring the accessibility of the content, and delivering across multiple platforms.

## Department Initiatives & Updates

### Projects (new and updates from previous report)

In addition to various initiatives discussed throughout this document, here are a few other projects that are in various stages of research or completion.

*Projects marked with a  are complete or currently functional.*

#### Updates to projects mentioned in previous reports

##### High School Cell Phone Coverage & Event Spaces Network Upgrades

To address concerns about wireless coverage and cell phone functionality at the high school, we made the following improvements over the past two years:

- Added wireless access points to the field house and competition gym.
- Installed a cell-phone signal repeater system with coverage in the main entrance and lobby/commons space (east side of building) and the athletics entrance (west side of building).

##### Conference Software

We moved all conference scheduling to the Meet the Teacher platform. This consolidated multiple systems into one, provides the ability to set up hybrid (in person or virtual) conference events, and is generally a more user friendly experience for families. We will continue to monitor the functionality and uses for this software but are satisfied for now.

##### Account, Rostering, and Security Updates

We have implemented several changes for authentication and application access management since Spring 2022:

###### Single Sign-On (SSO)

We will be implementing ClassLink for SSO. ClassLink will provide a portal which is a single point with which to access all district sites, apps, and resources. You will sign in once to the ClassLink portal and then be able to access Google, Canvas, and nearly every other digital resource without authenticating again. This will be available across every platform - Mac, iPad, PC, and Chromebook. ClassLink also has student-friendly sign in options such as badges (QR codes) using a device's camera.

### Rostering

ClassLink includes a rostering solution which is very useful when aligning student class schedules to match up with curriculum resources. As we move through adoptions of curriculum materials (such as Amplify science, Imagine Math, and others still to come), this helps ensure that digital materials are quickly assigned to the appropriate students.

### MFA (Multi-Factor Authentication)

MFA is a security process that uses multiple factors to confirm you are who you say you are. The first factor is your regular username and password. The second factor can be something like:

- Smart phone authenticator app
- Biometric such as fingerprint, voice or facial recognition
- Hardware token

MFA is an extremely important security layer to protect against an account being compromised.

## Security Cameras

The district's security camera infrastructure had not had any significant updates since 2017. We are about halfway through the first phase of a major overhaul.

### Phase one work (2022-2026)

- Replace servers in each building and migrate from Exacq to Avigilon software
- Replace analog cameras (which comprise about a third of all cameras)
- Add cameras as needed, in consultation with building admin
- Replace and add network cabling for cameras

### Phase two work (2026-2027)

- Replace Oncam brand and any non-functioning digital/IP cameras (about a third of all cameras)

### Phase three work (2027-?)

- Review system status to determine a consistent refresh cycle for cameras and hardware.

The table below shows buildings completed so far (District Office, Tokata, Eagle Creek, Jackson, West) in progress (East, Red Oak), in the planning stages (High School), and on deck to be done (Sun Path, Sweeney, Pearson). The budget for this project is derived from surplus device sales (generating \$997,501 in revenue to date). The running total column shows what we have expended or are projecting for costs, while the balance column adjusts based on how much surplus sale revenue is available for the project.

**Surveillance Camera Overhaul Project**  
**Totals as of April 2024**

Surplus Sale Revenues allocated for project so far:

\$997,501

Site	Cameras	Servers	Wiring	Subtotal	Running		Completion
					Total	Balance	
<b>DO/TLC</b>	\$53,658	\$7,979	\$7,015	\$68,652	\$68,652	\$928,849	March 2023
<b>Eagle Creek</b>	\$50,094	\$7,979	\$10,000	\$68,073	\$136,725	\$860,776	April 2023
<b>Jackson</b>	\$61,119	\$8,388	\$17,124	\$86,631	\$223,356	\$774,145	July 2023
<b>West</b>	\$121,239	\$7,918	\$32,340	\$161,497	\$384,853	\$612,648	March 2024
<b>East</b>	\$104,639	\$7,918	\$27,489	\$140,046	\$524,899	\$472,602	projected April 2024
<b>Red Oak</b>	\$72,000	\$7,918	\$4,970	\$84,888	\$609,787	\$387,714	projected May 2024
<b>High School Analog</b>	\$191,000	\$20,000	\$35,000	\$246,000	\$855,787	\$141,714	projected October 2024
<b>Sun Path</b>	\$60,000	\$7,918	\$15,000	\$82,918	\$938,705	\$58,796	projected December 2024
<b>Sweeney</b>	\$60,000	\$8,000	\$15,000	\$83,000	\$1,021,705	-\$24,204	2025
<b>Pearson</b>	\$50,000	\$8,000	\$15,000	\$73,000	\$1,094,705	-\$97,204	2025
<b>HS Digital Refresh</b>	\$130,000	\$0	\$20,000	\$150,000	\$1,244,705	-\$247,204	2026
<b>OnCam Refresh</b>	\$210,000	\$0	\$15,000	\$225,000	\$1,469,705	-\$472,204	2026
<b>Totals</b>	\$1,163,749	\$92,018	\$213,938	\$1,469,705			

## Software Review Process

We are using a formal review process for evaluating software and app subscriptions. The key goals for the process are as follows:

- Clarify when software choices are supplementing existing curriculum.
- Attempt to gain consensus on rationale for using specific software in order to avoid subscribing to multiple programs for the same service.
- Leverage volume pricing wherever possible.
- Review publisher terms of service and privacy policies and reject any options that do not adequately safeguard student data.
- Assess the training and support needs for software to be implemented effectively.
- Collect and appropriately act upon usage data.
- Identify tools that are primarily using AI components.

This process continues to evolve and we still have a sizable back-catalog of apps to review. It has been helpful as the district adopts more digital curriculum resources (such as Amplify Science and Imagine Math) to compile a complete picture of all the tools in use and how they complement each other.

## Infinite Campus On-Line Registration

In 2020 we launched the ability to complete new and continuing school enrollment information via the Infinite Campus On-Line Registration portal. This provides a more efficient option for parents and helps streamline and reduce some of the paperwork involved with enrollment, while also encouraging more families to use the portal and maintain accurate information in our system.

Status: Functionally complete. We are now revisiting communications and outreach for this functionality to improve participation. Added Early Childhood for 2022-2023 and continuing to tweak the system to improve the experience. Spanish translations were completed in 2021 (with some additional follow-up planned for written translations and other types of language support). Updates to the organization of the Welcome Center have also been instrumental in overall improvements in the enrollment process.

### New Projects or Projects in the Exploratory Phase

**Parent Accounts:** Exploring options for additional automation of creation and management of parent accounts (beyond what is currently implemented for Infinite Campus). Canvas is likely to be next in line, with additional systems to be explored.

**Translations:** The upcoming launch of an updated version of the district website (largely a Communications project with assists from technology and other stakeholders) will be one more piece in our options to offer translated materials. While human translations are typically more accurate in tone and intent, in a community as diverse as ours there will always be some extent to which we need to rely on a machine translation. We continually explore additional options to ensure all of our families can access information and interact with us in a way that meets their needs.

**Cybersecurity Preparedness:** More of an on-going project than a new one; it would somewhat defeat the purpose to detail everything we are doing to avoid cybersecurity incidents and to properly handle anything that may occur.

**Artificial Intelligence:** We are actively engaged as a district in establishing best practices for use of artificial intelligence tools and understanding how to use such tools effectively and to minimize the ways in which they can distract from learning. More to come on this topic. (And for what it's worth, this whole report is human generated, although 30+ pages into it I'm questioning why I didn't have AI write some of it.)

# Summary

This is an update to the 2021-2022 Tech Report. We will continue to produce revisions and updates, along with occasional addendums to highlight significant items not included this time around.

Thank you for reading this far. And thank you to all of the current and past tech department employees who have been instrumental in meeting goals, working on projects, developing and refining systems, writing and revising documentation, and doing every other large and little thing that have brought the department to where it is today.