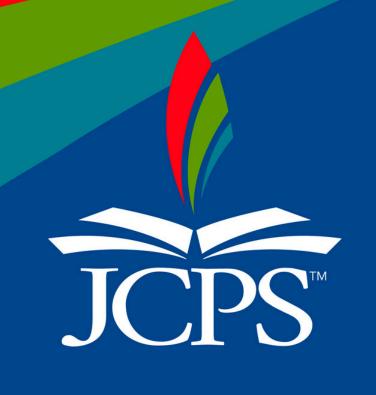
Technology Division

Revenue Advisory Task Force Presentation

November 17, 2025 Eric Satterly, CIO



Technology Division - not just "IT"

Our mission is to challenge and engage every learner by providing the technological foundation for effective teaching and meaningful experiences, ensuring equitable access and fostering a caring, supportive, and safe digital learning environment for all.

We envision a future where our technology division is recognized as a national leader in K-12 innovation, seamlessly empowering future-ready graduates who are prepared, inspired, and equipped to contribute as thoughtful citizens in a diverse world. We will achieve this by cultivating a culture of excellence, creativity, and collaboration that makes us the destination for technology professionals.

Our purpose is to serve as a strategic partner to the district, practicing mindful stewardship and building relationships with students, staff, and families. We are committed to fostering equity by providing what each individual needs to thrive, ensuring technology supports personalized approaches to learning and cultivates a sense of belonging and respect for all.

TRANSFORMATION





- Personalized learning for each student
- Instill Digital Citizenship in our kids

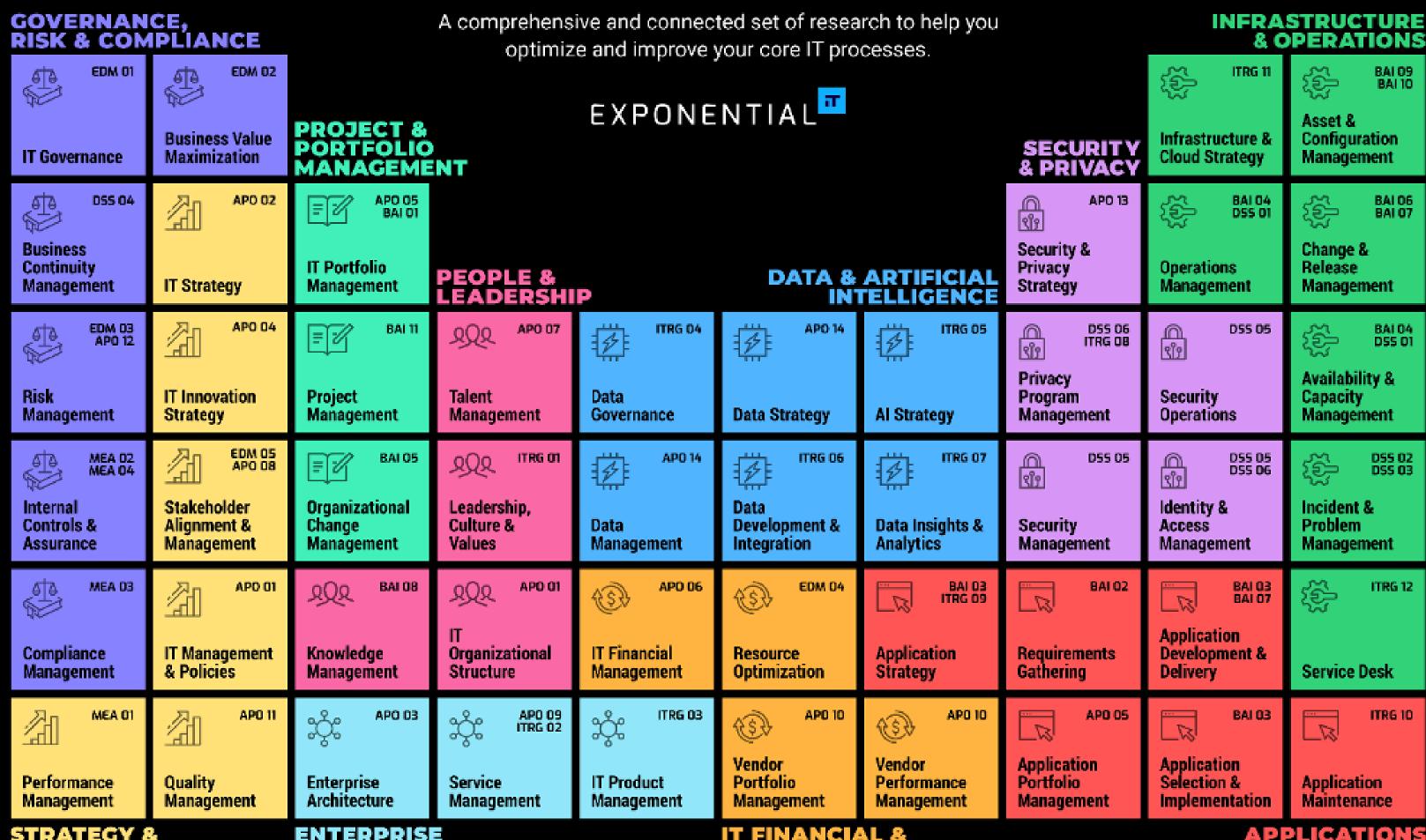
Provide equitable access to technology for ALL our kids

- Equip students with technology through a device they can rely on
- Connect our schools with a reliable network
- Create and sustain spaces in our schools for intellectual growth and exploration

INFO~TECH

IT Management & Governance Framework



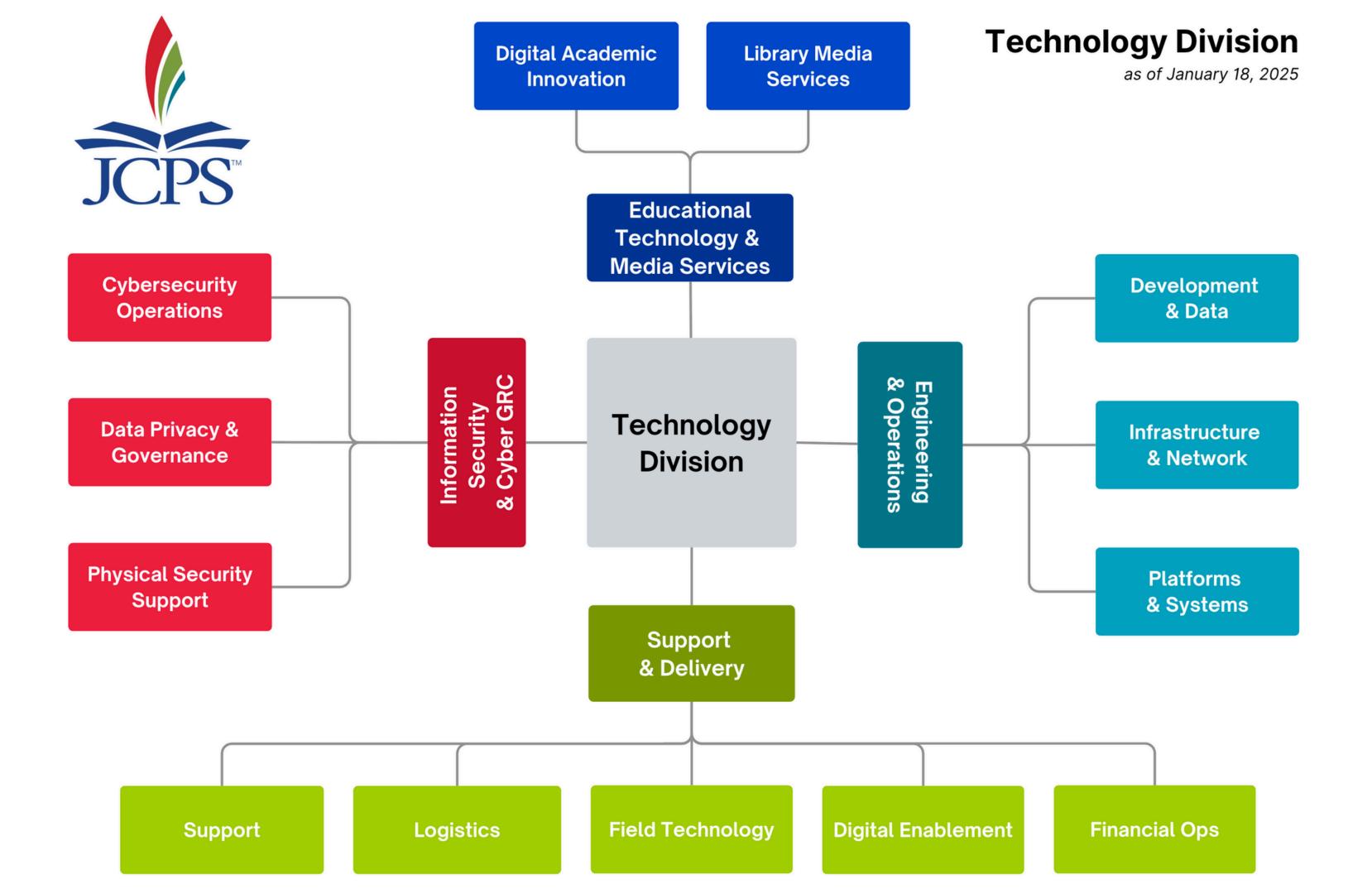


STRATEGY &

ENTERPRISE

IT FINANCIAL &

APPLICATIONS



JCPS Technology Division Footprint

12,600 Phones, 16,000 Extensions

600 Aiphones

2,500 Copiers/Printers, 500,000 Avg Daily Prints

5,400+ Security Camera Views

600 Card Readers

6,400 Audio Enhancement Controllers & Amps

18,500 Audio Enhancement Classroom Speakers

4,000+ SMART Panels

3,000+ ClearTouch Panels

100 Gbps Internet Connection

170 Connected Buildings

100 Miles of JCPS Owned Fiber Cable (64 bldgs)

2,000 Network Switches

11,000 Wireless Access Points

100,000 Managed Switch Ports

100,000 Student Accounts

20,000 Staff & Vendor Accounts

125,000 Chromebooks

10,000 Windows Devices

10,000 iPads

100+ Custom Apps - Developed & Supported

1,000+ Developed & Supported Reports

500 Production Databases

625 Monitored Batteries Across Locations

1,700 Terabytes of Managed Storage

450 Virtual Servers

100 Physical Servers with 900 Cores

Student Information System - Infinite Campus

ERP - Tyler Technologies Munis

Learning Mgmt System - Google Classroom

JCPS Technology Division Footprint

Library Support

15,764 Books processed

852 boxes shipped to school libraries

Learning and Development

160 School-Based Technology Plans

7,200 hours of PD credited in 24-25

24 Asynchronous PDs available

26 Live PD Webinars

843 JCPS-Specific Digital Learning Videos

26 VILS Program Schools

7 VILS Labs (National Leader)

733 Canva-Certified Educators (National Leader,

likely World Leader)

240 Adobe-Certified Educators

105 STLP-Participating Schools

40 JCPS-Specific Digital Citizenship Lessons

Student & Staff Experiences

KDF RoboRumble

KDE STLP Championships

LSA Librarian Summer Academy

Leaders Event for EdTech and LMS

District Archives

20,631 Archival Boxes

115 Reference Requests per Year (avg)

792 File Requests by JCPS Departments (avg)

1,179 Boxes Accessed per Year (avg)

1,109 Boxes Shredded per Year (avg)

383 Historical Yearbooks Accessed 24-25

30 Archival Visitors per Year

Items Indexed per year

- 34,059 Student Records
- 2,179 Personnel Files
- 12,000 Meeting Minutes



Technology Division Spending Expenses from Technology Division Cost Centers



Supplemental Funding for Technology provided by the Federal Government from 2020 - 2024

Emergency Connectivity Fund (ECF)

\$17,974,018

Elementary and Secondary School Emergency Relief Fund (ESSER)

\$49,317,327

Chromebooks

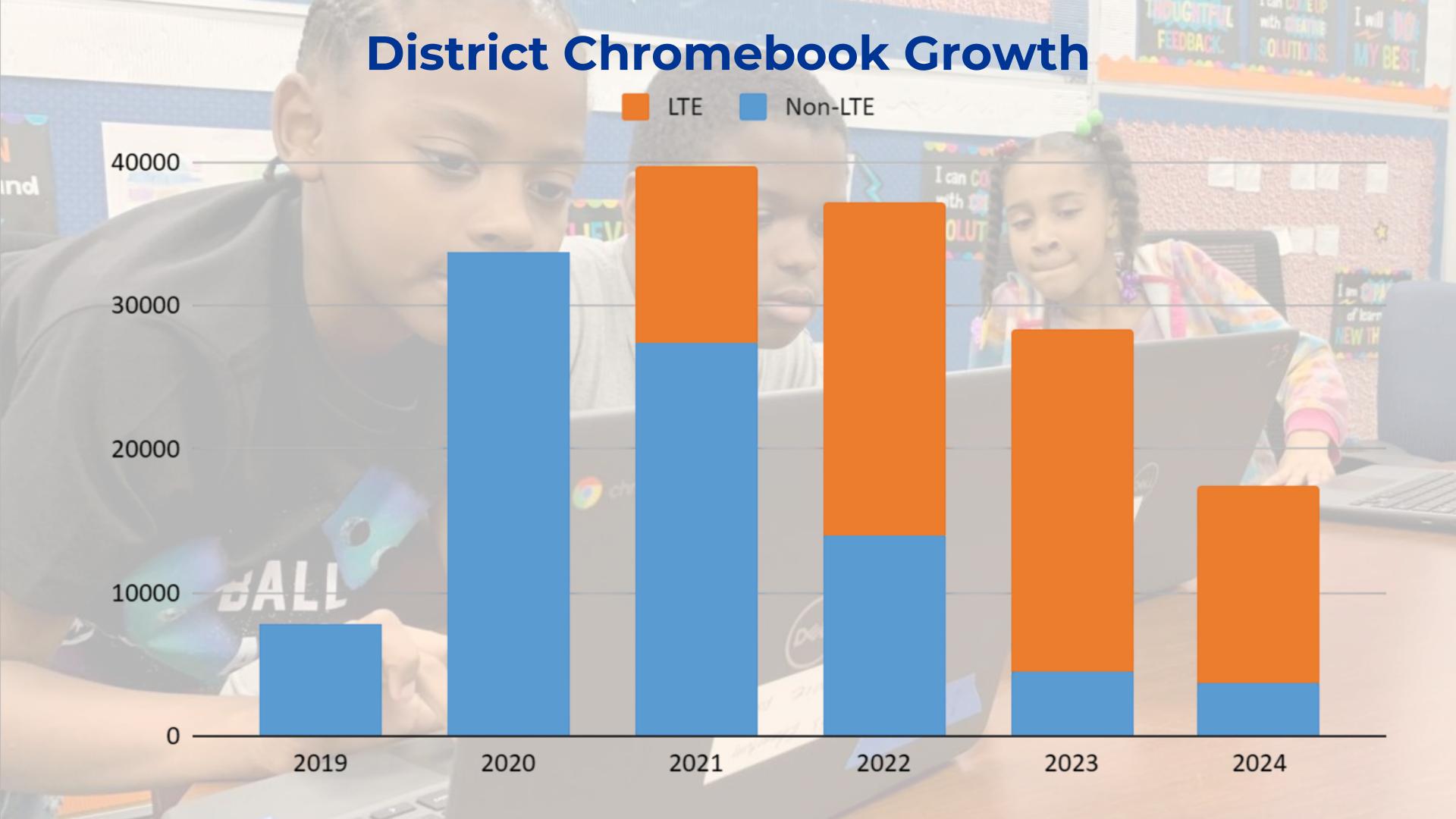
Classroom Panels (7,000)

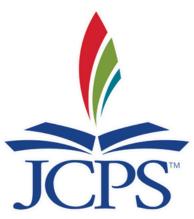
Cellular Connectivity (75,000 Chromebooks)

Student Engagement Software - PearDeck & Nearpod

JCPS Technology changed since 2019...

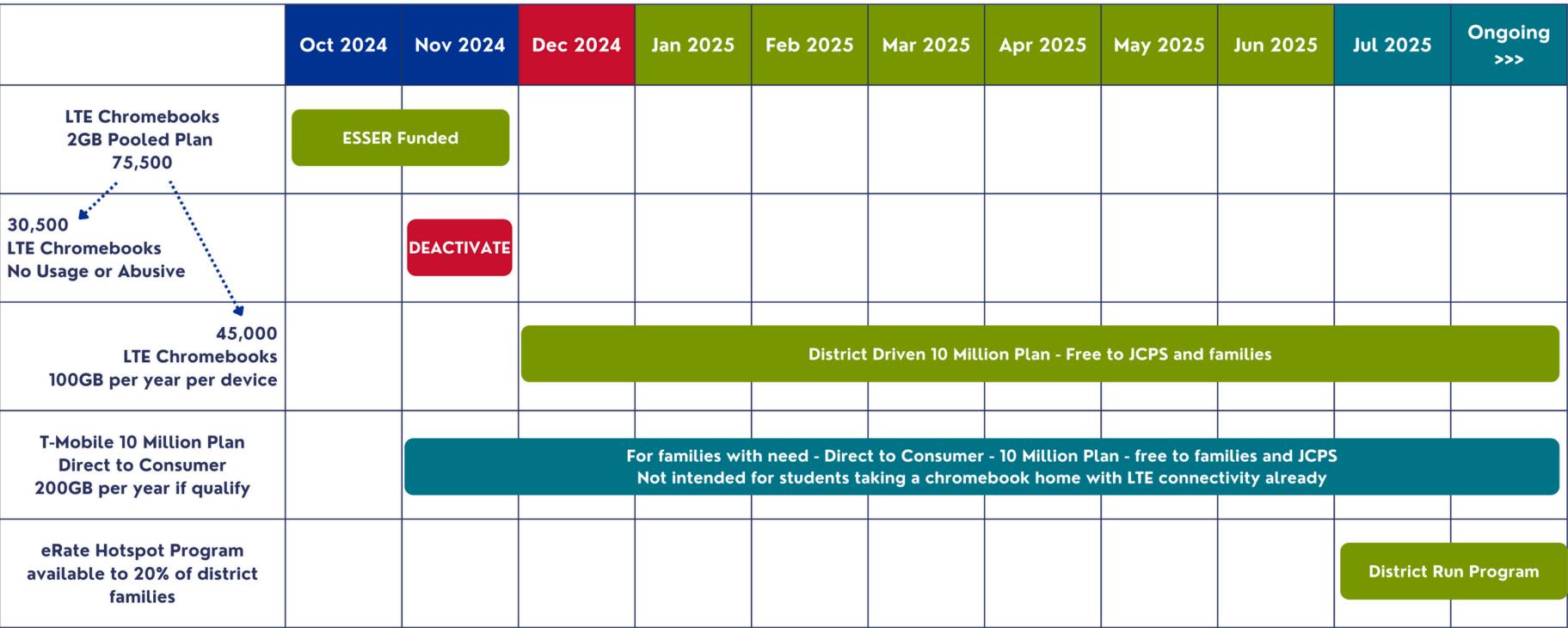
DEVICES - GROWTH FROM ABOUT 10,000 TO 200,000 FUTURE STATE - 1:1 STUDENT DEVICES LAUNCHED MASSIVE GROWTH IN SOFTWARE TITLES CYBERSECURITY CONCERNS CONTINUE TO INCREASE NETWORK GROWTH AND EQUIPMENT REFRESH AUDIO ENHANCEMENT - ANALOG TO DIGITAL (IP) MASSIVE INFUSION OF CLASSROOM TECH - SMARTBOARDS TELEPHONY - MOVED FROM ANALOG TO VOICE OVER IP PHYSICAL SECURITY - CAMERAS, AIPHONES, DOOR ACCESS





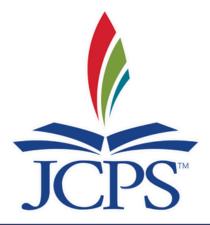
Cellular Internet Connectivity Plan 2024 - 2025

Addressing connectivity for JCPS students outside of school buildings



JCPS Program

Non-JCPS Program



Cellular Internet Connectivity Plan 2025 - 2026

Addressing connectivity for JCPS students outside of school buildings

	Jul 2025	Aug 2025	Sep 2025	Oct 2025	Nov 2025	Dec 2025	Jan 2026	Feb 2026	Mar 2026	Apr 2026	Ongoing >>>
LTE Chromebooks 2GB Pooled Plan 75,500 30,500 LTE Chromebooks No Usage or Abusive	ENDED										
	ENDED										
45,000 LTE Chromebooks 100GB per year per device T-Mobile 10 Million Plan Direct to Consumer 200GB per year if qualify	District Driven 10 Million Plan - Free to JCPS and families										
	For families with need - Direct to Consumer - 10 Million Plan - free to families and JCPS Not intended for students taking a chromebook home with LTE connectivity already										
eRate Hotspot Program available to 20% of district families	NO LONGER PURSUING*										

^{*} Due to loss of congressional support for this program, it is no longer affordable





I-Mobile



We know that sometimes getting online for homework, classes, and projects can be tough if you don't have good internet at home. We believe **every student** deserves a fast and reliable connection!

That's why we want to tell you about an amazing opportunity from our partners at **T-Mobile** with their **Project 10Million Program.**

What You Can Get:

If you are an eligible K-12 student, this program can give you a **FREE mobile hotspot** (like a personal Wi-Fi device) and **200GB of high-speed data every year for five years**—all at no cost to your family! That amount of data will support roughly 37 hours of video streaming, so traditional homework and assignments using less data, will be covered with ease!

Are You Eligible?

Because our school district is part of the Community Eligibility Program (CEP), many of you already qualify! Eligibility is often based on participation in meal programs, which is automatically covered for students in CEP schools.

Ready to Get Started?

Parents or guardians can apply directly online. Click the link below to check eligibility and sign up today:

Verizon Innovative Learning

2018-2022 - 1:1 Cohort 5 (iPads): Five middle schools:

- o The Academy @ Shawnee Middle School
- Frederick Law Olmsted Academy North
- Lassiter Middle School
- Newburg Middle School
- W.E.B. DuBois Academy

2020-2024 - 1:1 Cohort 7 (iPads): Six middle schools:

- Carrithers Middle
- Grace James Academy
- Conway Middle School
- Farnsley Middle School
- Robert Frost Sixth Grade Academy
- Stuart Academy Middle School

2021-2023 - VILS Connect: Thirteen schools in a hotspot program:

- The Academy @ Shawnee High School (high school)
- Butler Traditional High School
- Fairdale High School
- Iroquois High School
- Jeffersontown High School
- Liberty High School
- Louisville Central High School
- Newcomer Academy
- Olmsted Academy South
- Seneca High School
- Valley High School
- Waggener High School
- Western Middle School

2022-2026 - 1:1 Cohort 9 (CBs): Two middle schools:

- Highland Middle School
- Ramsey Middle School

7 VILS Labs: As of late 2025, JCPS had constructed and launched seven VILS Labs across our middle schools in partnership with Heart of America. This number of Labs leads the nation!

The VIL program has provided devices, connectivity, and extensive professional development to address the digital divide and foster digital inclusion. Verizon and its partners have invested approximately **\$50 Million** in JCPS.

KETS Funding, Reporting, and Program Participation

Published: 6/4/2025 2:52 PM

Education Technology Funding

Funding for education technology is made available to districts from federal (<u>E-Rate</u>) and state sources (KETS Offers of Assistance). Schools may reference the KETS Master Plan as a guide to develop and maintain a district technology plan and budget, using state and federal technology funds.

Projected Costs for KY K-12 Technology Needs

(Line Item Worksheet)

Federal Funding

The schools and Libraries Universal Service Support Mechanism, more commonly known as <u>E-Rate</u>, is a federal initiative that provides discounts on telecommunications, internet access, and eligible internal connection technologies to elementary and secondary schools and public libraries nationwide. For information about E-Rate in Kentucky Libraries, <u>click here.</u>

The E-Rate discount program was authorized by Congress as part of the Telecommunications Act of 1996 and signed into law by President Clinton in February 1996. All public elementary and secondary schools, as well as most K-12 private and parochial schools, are eligible for discounts under the E-Rate program. Day care centers and after-school programs held off campus are not eligible for E-Rate support.

The discounts on services or products range between 20% and 90%, depending on the level of need among the students in each school or school district. The level of need is measured using the levels of eligibility (not participation) for the national school lunch program, which provides free and reduced price lunches to low-income students.

The Kentucky Education Technology System (KETS) program has established a collection of E-Rate eligible contracts for procurement of networking equipment and services. Kentucky public school districts are required to use these contracts to acquire these equipment and services regardless of their intention to seek E-Rate support. To determine whether or not particular equipment or services are eligible for E-Rate support, see the Eligible Services List.

State Funding

KDE provides a yearly funding stream, referred to as the KETS Offers of Assistance, based on Adjusted Average Daily Attendance (AADA) as reported on the Superintendent's Annual Attendance Report (SAAR). Districts must match or escrow funds for up to three years. KRS 157.665 and KRS 157.655 establishes that in order to be eligible, districts are required to develop a plan for the expenditures of KETS funds, report on the use of these funds, and participate in the Kentucky Digital Readiness Survey on an annual basis. Information on required reporting can be found below.



Education Technology Reporting

Eligibility to participate in the KETS Program requires the completion of the following reporting activities by the school districts on an annual basis.

District Technology Plans

Local school districts complete and submit an updated education technology plan on a yearly basis in April as part of the annual District Funding Assurance whereby local school districts are to assess all education technology services needed to support education, as defined by the KETS Master Plan for Education Technology and the online District Technology Planning tool enables districts to create a comprehensive technology plan that is aligned with the KETS 2024-2030 Master Plan. Areas of Emphasis & Future Ready Framework.

The submission process for District Technology Planning is communicated annually to the districts through the KETS Regional Field Staff. District Technology leaders should work with their internal planning team to identify and document measurable strategies meant to improve the environment or to accelerate growth in an area where some degree of success is already taking place. The final District Technology Plan document is saved into a PDF format and submitted via a Google Form.

A sample of the District Technology Plan Template which covers contributing planning factors such as the planning team, previous plan evaluation, new plan preview and Student Voice is provided as a reference in PDF form here. The actual template link and submission link for the current school year are provided to districts through the KETS Regional Field Staff when the annual planning process is set to begin.

Kentucky Digital Readiness Reports

The Kentucky Digital Readiness Reports provide a snapshot of technology infrastructures throughout Kentucky schools and districts. Information represents data gathered from schools and districts throughout Kentucky as of June 30th each year. This data can be used to inform the tech planning process. Kentucky Digital Readiness data is available here.

Technology Activity Reports

Technology Activity Reports (TAR) is a report completed by school districts which reflects the costs expended on an annual basis by the school district for each <u>master plan budget</u> line item. The TAR must be submitted to OET by September 15 for the prior school year. Instructions on how to complete and submit the TAR from the financial management system are provided <u>here</u>.

KETS provides about \$1,800,000 annually to fund technology

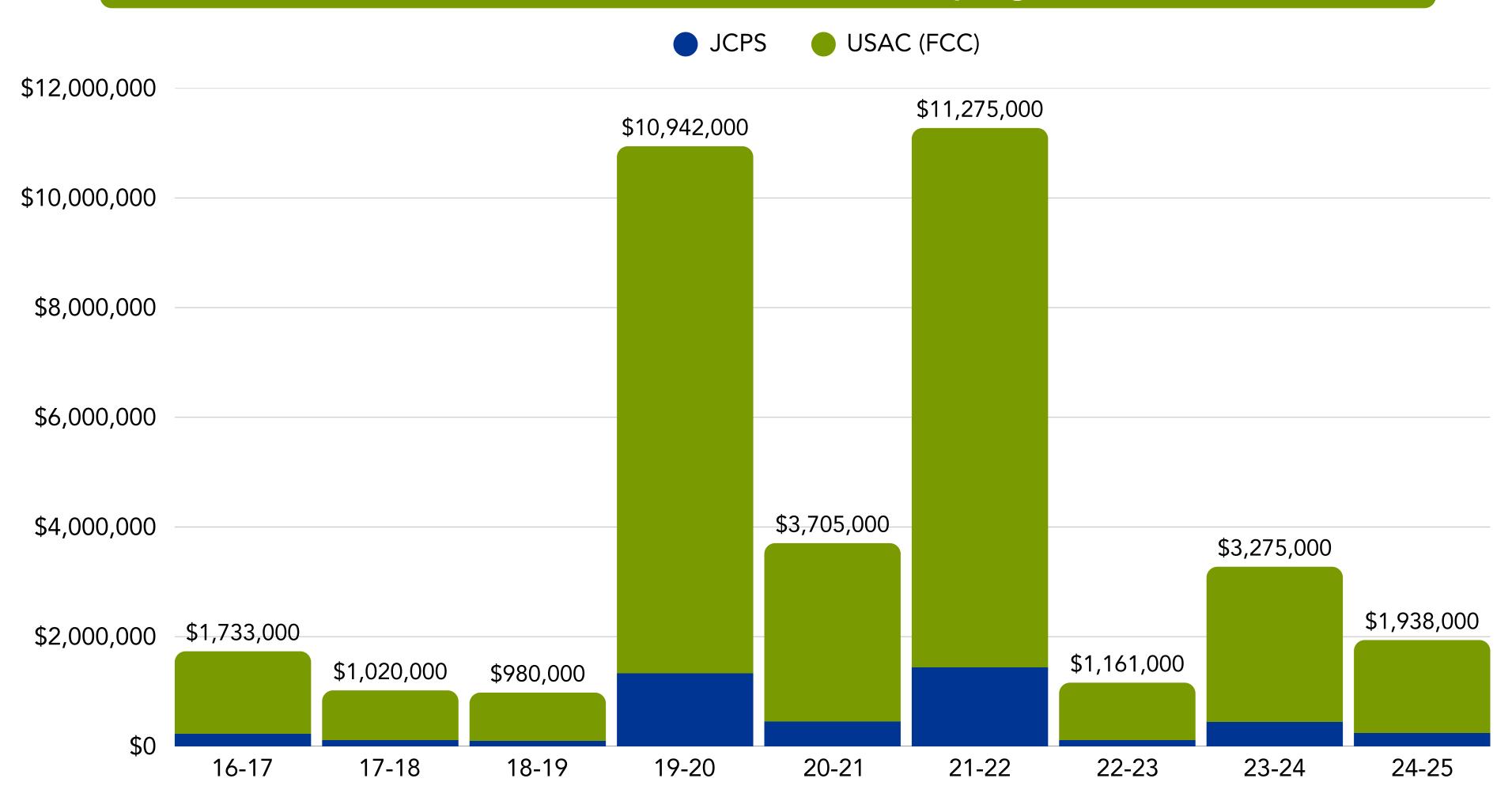
E-Rate



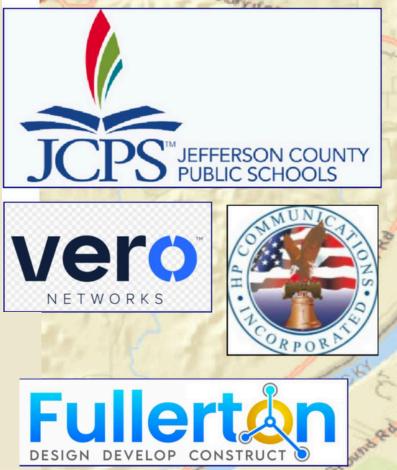


Universal Service Administrative Co.

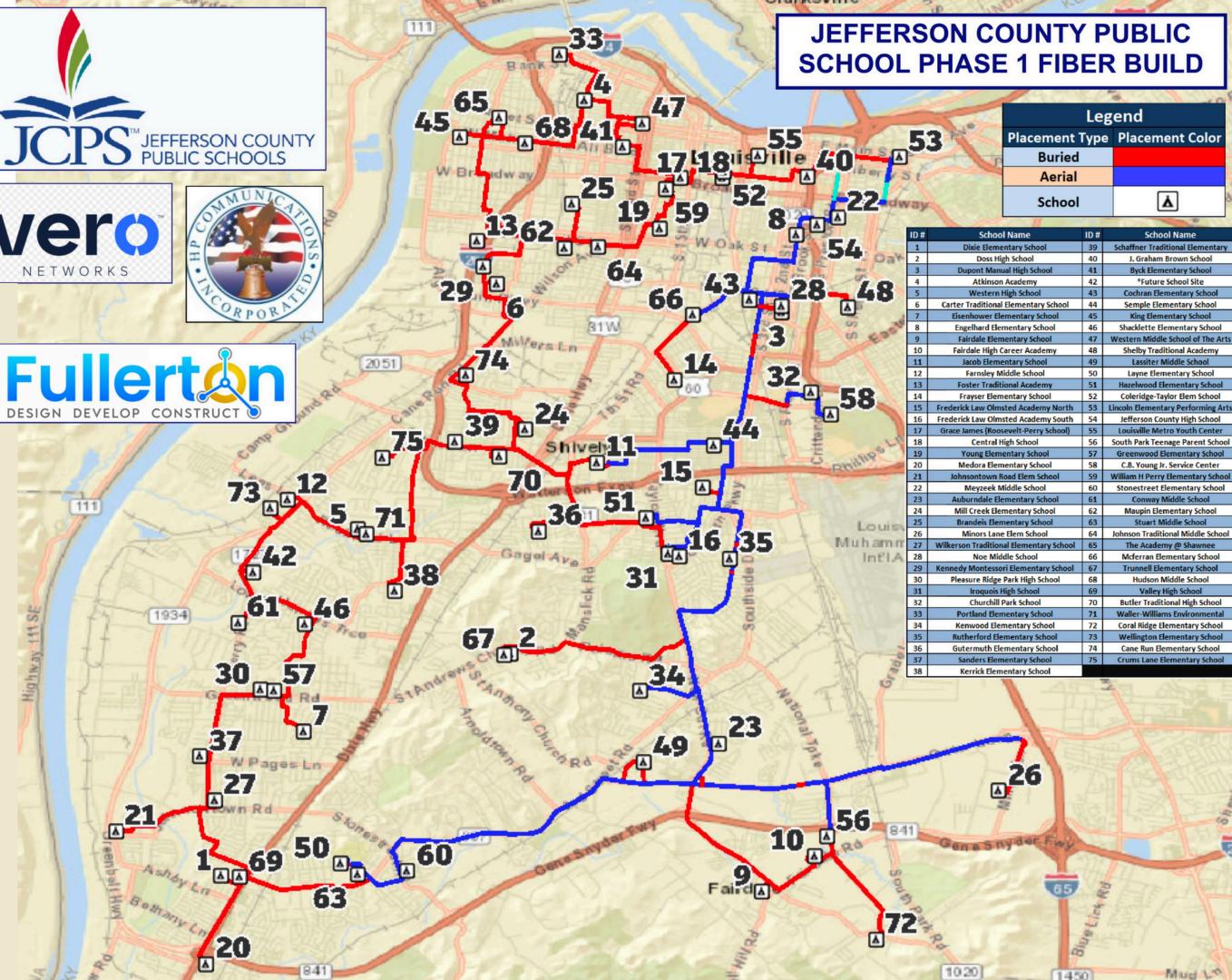
JCPS has received over \$30,000,000 from the E-rate program over the last decade

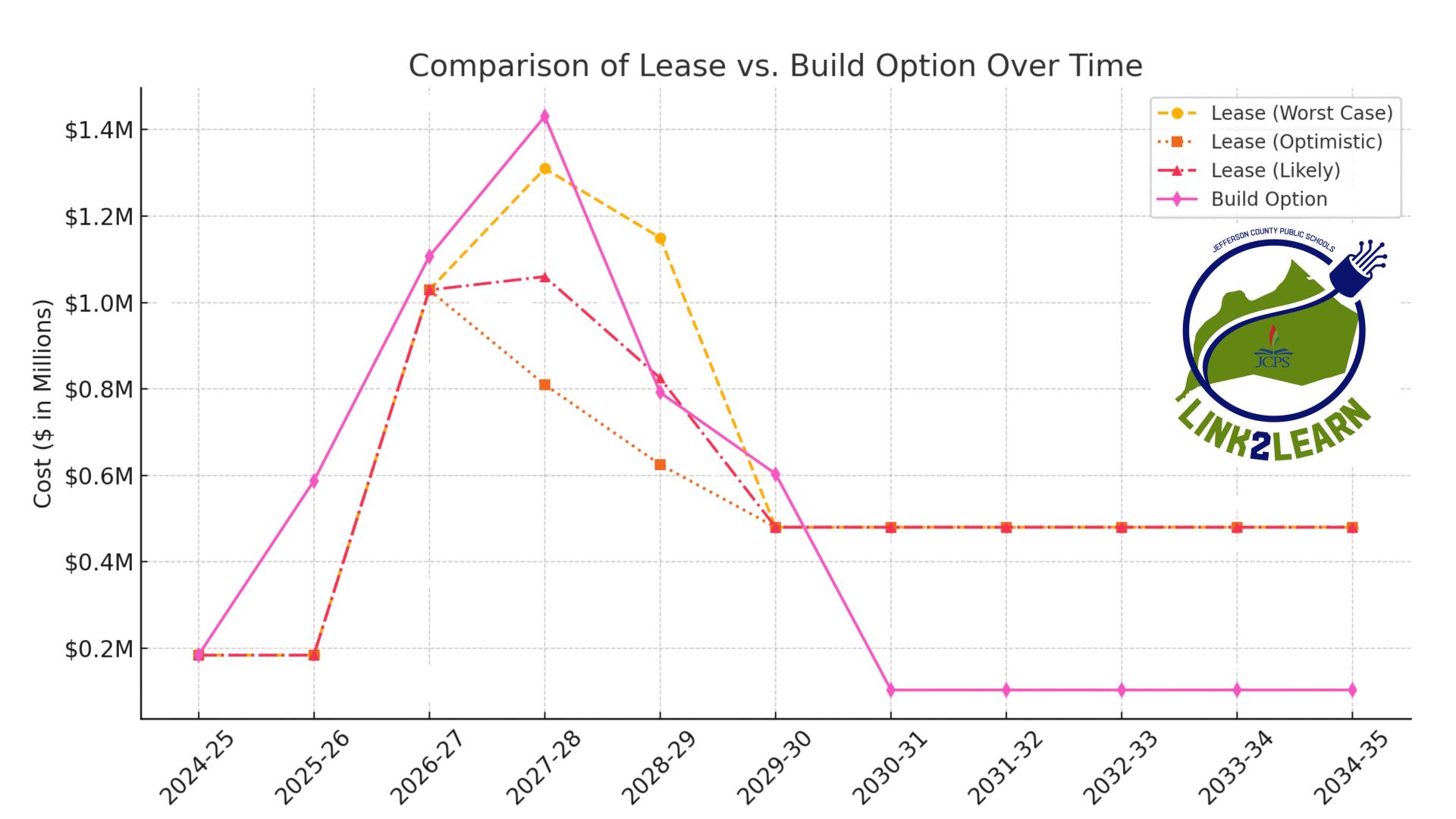






Over the last 5 years 803 schools districts been funded for WAN builds





Five-Year Summary - Through June 30, 2030

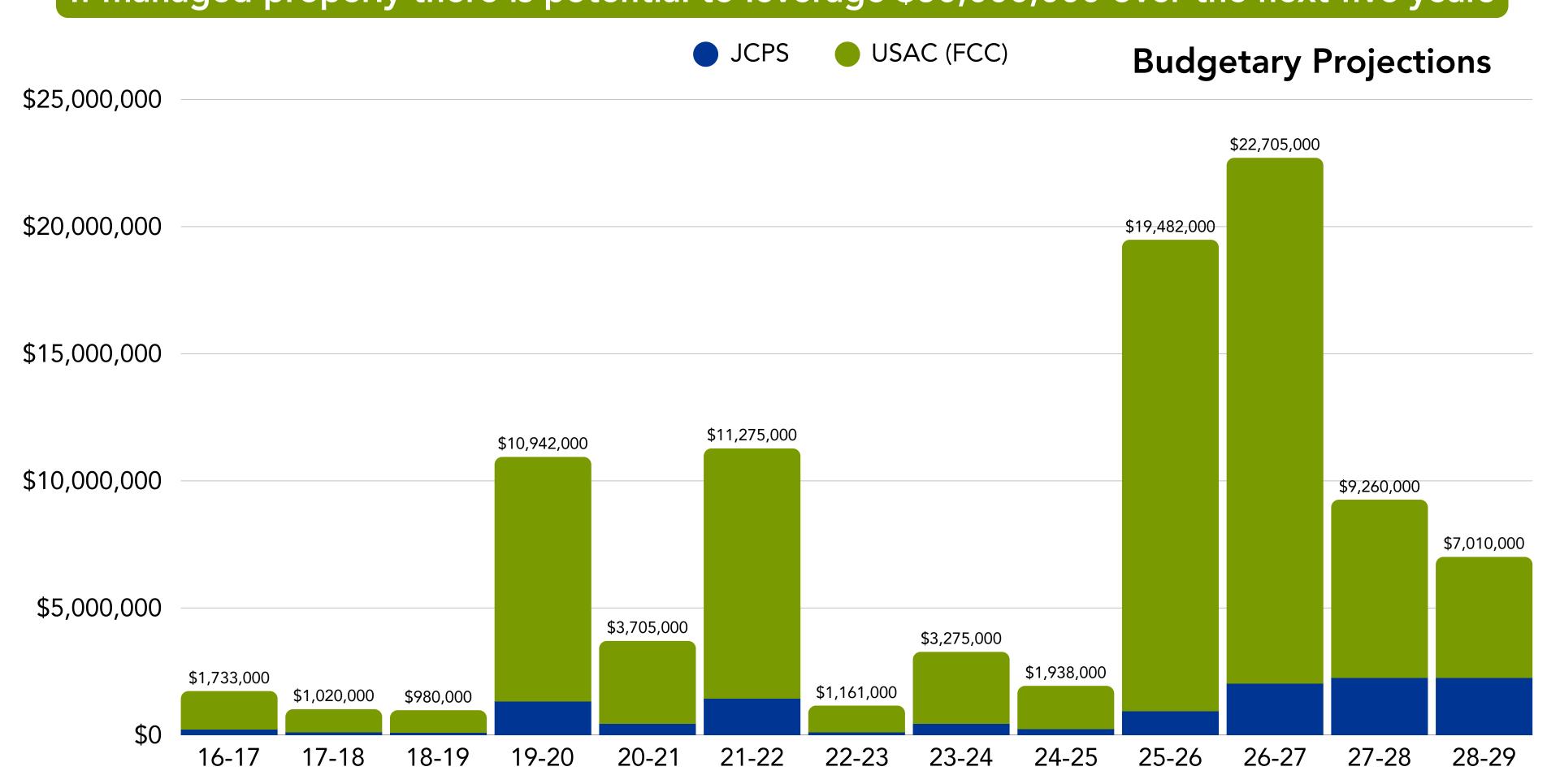
Leased Option Contract may only be extended through 6/30/2040, no residual value					Build Option Useful life through at least 6/30/2055, capital asset with residual value					
Leased Lines \$12,020,400			1 Mixed ~80%		Owned Lines	\$3,600,000	, 1	Already discounted		
					Owned Maint	\$2,950,000	, 1	90%		
					Router refresh	\$4,500,000	1	90%		
Router refresh	\$4,500,000		2	85%						
Switch refresh	\$3,800,000		2	85%	Switch refresh	\$3,800,000	2	85%		
AP refresh	\$7,800,000		2	85%	AP refresh	\$7,800,000	2	85%		
UPS refresh	\$2,000,000		2	85%	UPS refresh	\$2,000,000	2	85%		
Maintenance	\$2,750,000		2	85%	Maintenance	\$2,000,000	2	85%		
Total toward C2	\$20,850,000	l .			Total toward C2	\$15,600,000)			
Available C2 Budget	\$18,683,120.16)			Available C2 Budge					
C2 Balance	-\$2,166,879.84	OVER Budg	jet		C2 Balance	\$3,083,120.16	j			
JCPS Cost				\$7,373,428	JCPS Cost			\$6,685,000		
Unfunded Items(RGnets-MIBS,DF Rehabs,eligible cyber projects)					Amount freed up fo	\$3,083,120.16				

C2 Budgeted Items @ 15% cost share for eligible sites (capped at 201.57 per student for 5-year budget)

C1 Budgeted Items @ 10% cost share for eligible sites (not capped)

Note: mixed eligibility for non-instructional facilities cause realized discount rate variation

JCPS has received over \$30,000,000 from the E-rate program over the last decade If managed properly there is potential to leverage \$50,000,000 over the next five years



JCPS Cybersecurity What We're Facing - And, How We're Responding

Rising Threat Pressure (Q3)

- 1,277 threats detected majority targeting account takeover
- Credential attacks are the #1 cause of K-12 ransomware nationally
- Prevented high-severity alerts that would disrupt instruction & services
- Substantial increase in software vulnerabilities across all applications and departments

We Contain Risk (with Existing Resources)

- Strengthened identity protections using tools we already own
- 79% of alerts mitigated automatically, lowering labor costs
- Zero ransomware events avoiding outages, recovery costs, and legal exposure
- Maximizing Google/M365 security without additional licensing
- Direct collaboration with JCPS DOC to protect our students and teachers

79%

High-Auto Mitigation of Threats

51%

Credential-Based Threats

0

Ransomware Incidents

100% Learning time protected

Impact //alue to the District



The Schools and Libraries Cybersecurity Pilot Program will provide up to \$200 million to selected participants over a three-year term to purchase a wide variety of cybersecurity services and equipment.

Modeled after the FCC's Connected Care Pilot, the Pilot Program will evaluate the effectiveness of using Universal Service funding to support cybersecurity services and equipment to protect school and library broadband networks and data in order to determine whether to fund them on a permanent basis.

CHAIRWOMAN ROSENWORCEL ANNOUNCES PARTICIPANTS IN SCHOOLS AND LIBRARIES CYBERSECURITY PILOT PROGRAM

Three-Year Pilot Program Will Explore Use of Universal Service Funds to Improve School and Library Defenses Against Cyberattacks

WASHINGTON, January 16, 2025—The Federal Communications Commission today selected 707 participants for the FCC's Schools and Libraries Cybersecurity Pilot Program, including 645 schools and districts, 50 libraries, and 12 consortia. Participants in the three-year pilot program will receive support to defray the costs of eligible cybersecurity services and equipment and provide the Commission with data to better understand whether and how universal service funds could be used to improve school and library defenses against increasing cyberattacks. All 50 states, in addition to Puerto Rico and the District of Columbia, and several Tribal lands are reflected by the Pilot participants announced today.

707 Recipients for \$200,000,000 Average Award \$283,000

JCPS was awarded almost \$4,000,000

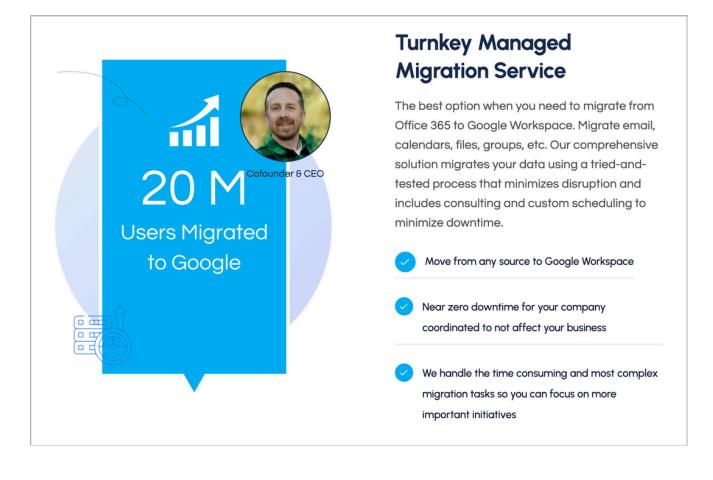
Technology Division Funding

Demonstrating Good Stewardship of Resources All Along

- Very intentional about finding and maximizing funding sources
 we do not solely rely on General Fund appropriations
- We focus on sustainability of initiatives through People, Process, and Technology leveraging people over platforms
- Shifted from COVID-responsive spending several years ago
- T-Mobile 10-Million Plan renegotiation \$6,000,000/yr savings
- \$4,000,000 Cybersecurity Pilot Grant for the next 3 years
- Microsoft licensing reductions will save nearly \$2,000,000/yr
- Google Workspace for Education price locked for 3 years

Cost avoidance is a big part of our value story

- Migration to Gmail is completely done by internal team
- Moving workloads from VMware to Hyper-V
- Repair Chromebooks in-house, about 8,000 per year







The POWER of OUR School District

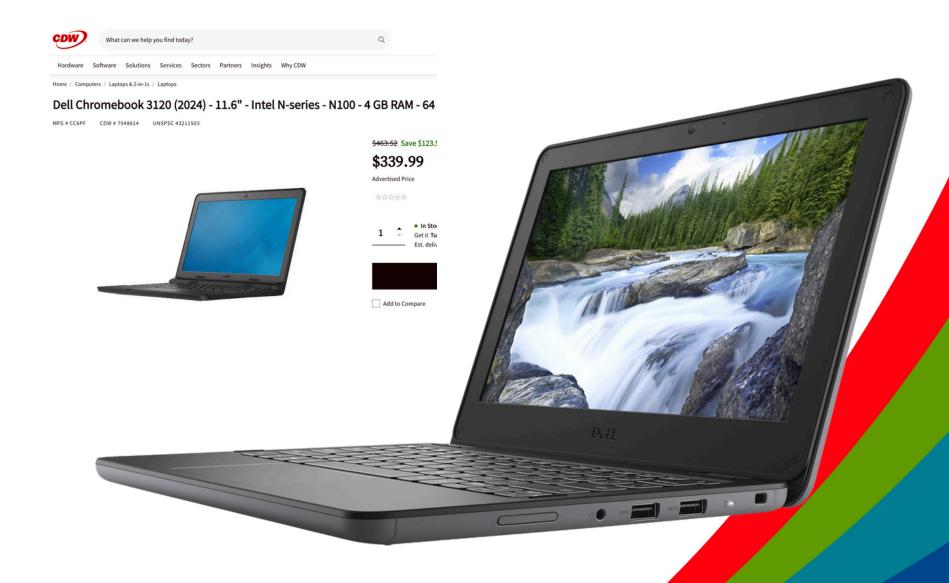
Chromebooks

For Students - Dell 3120

- 1 \$317.14 each
- 10,000 \$180.15 each

For Staff - Lenovo 2-in-1 Plus

- 1 \$682.99 each
- 1,500 \$552.00 each



Standardize on Chromebooks, device allocations, centralized receiving, and repairs.



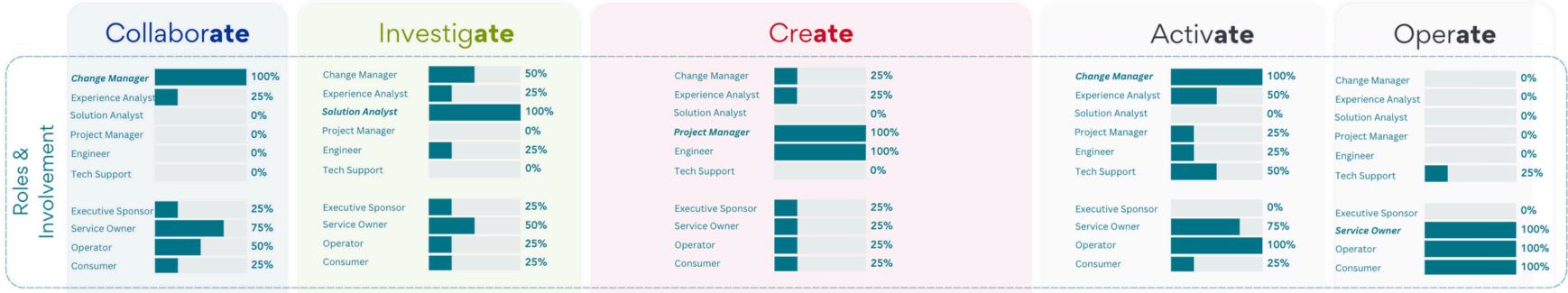
"Five Ates" Process for Transformation & Delivery



Transformation

Production •





 ∞ Endeavors 1

• Define the challenge / opportunity

State the Obvious

- Build consensus on the challenge
- · Clearly state the goal
- Detail the Whys
- Ensure alignment with District goals

Listen, Discuss, Brainstorm, Gather data (survey if needed)

Consider the Possibilities

- Identify stakeholders internal & external
- · Look for system duplication
- Talk with experts
- · Meet with vendors
- Research / Experiment
- Riskiest Assumption Test (RAT)
- . Equity review (REAP)

Generate ideas independently, Regroup to debate and develop proposal

Scope - Plan - Build

Solution candidate

Project Manager takes over in this stage

Move to the next stage if:

Solution candidate is created

· Technical viability is confirmed

Once resources are fully understood there is an opportunity to abort the project and move back to the Collaborate Stage

Manage vendors

Acquire and manage resources

- Funding
- Personnel
- Technology

Equip Everyone

- User Acceptance Testing (UAT) · Change management initiatives
- Negotiate and create SLAs
- Develop training materials
- · Train users and operators
- · Official handoff ceremonies
- Update service catalog

Deliver the Service

Operate the system in a production state with:

Accountability - understand the goals of the system and monitor operations to ensure alignment

Sustainability - Understand key dates and required funding to sustain the solution; ongoing education and training can exist here as well

Artifacts & Deliverables

One page statement of the problem/opportunity

There are NO solutions presented at this stage.

Moves to the next stage if:

• There is agreement on the problem statement

High-level proposal

No detailed scoping, just budgetary numbers for cost and effort.

Move to the next stage if:

- There is agreement on proposal
- Risk appetite is satisfied
- Technology CAB approves
- · Funding source is identified Executive sponsor is identified

Note that creation could also indicate deactivating a service or system

Operating documents

- · Runbook for operations
- Defined SLAs for support

Measures of Effectiveness

Normal work product

- Logs
- Records
- · Audit Trails Surveys
- Usage data

Roles are not necessarily mapped to specific job titles

Different team members fill roles based on the specific change or transformation Star next to a role indicates the person ultimately responsible for that particular ATE



DEACTIVATE Deprecated Service

Eric Satterly, CIO Jefferson County Public Schools eric.satterly@jefferson.kyschools.us

[64]



Generative AI in JCPS: A Commitment

to Responsible Innovation



Collaborative Approach

The JCPS approach to Gen AI was developed with expert guidance in a collaborative environment with voices from across district departments and schools.



Students and Teachers First

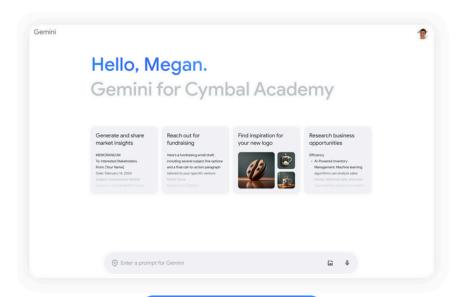
While multiple "Guiding Principles" were crafted, people remain at the center. These technology enhance and compliment first-class teaching and learning.



Safe and Secure Access

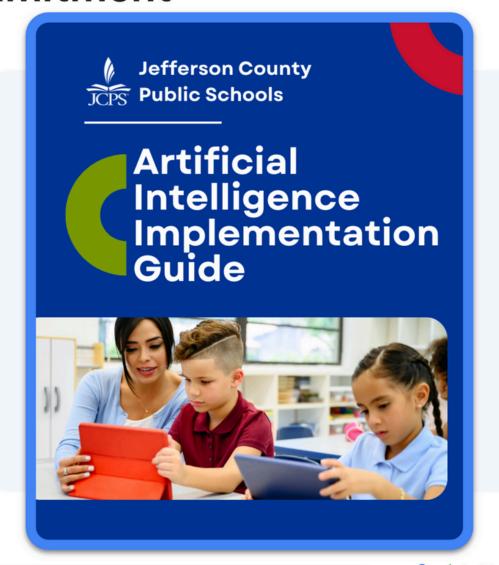
As Gen Al supports incredible innovation, JCPS understands the importance of data security. Our Gen Al directions are grounded in safe and secure data protection; with data not being reviewed or used to train models.



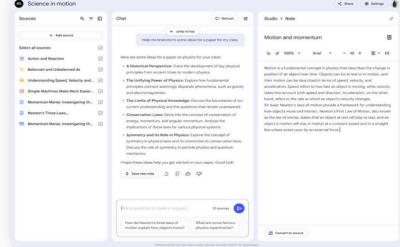


Gemini for Education

Plan lessons, differentiate learning materials, summarize content, and more at <u>gemini.google.com</u>





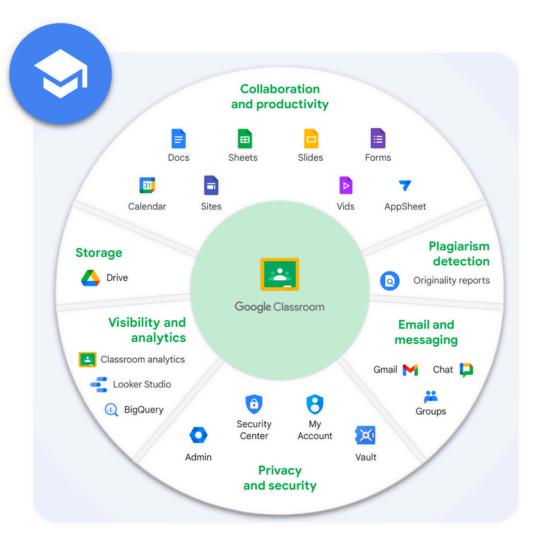


<u>NotebookLM</u>

Understand anything with AI that's grounded in your sources at <u>notebooklm.google.com</u>

Building a Foundation, While Focusing on the Horizon

- Students have been successfully moved to Gmail for Education
- We are actively working on our plan to move all JCPS Staff to Gmail for Education
- We hope to be there by the beginning of 2026



Core Services with enterprise-grade data protection: data isn't reviewed or used to train Al models

Opportunities

- Scalable student differentiation is within our reach we should accelerate GenAl plans and maximize our Google partnership
- Leverage the size of the District purchasing for technology
- True risk assessment for the District in terms of software
- Application Rationalization we must be data informed and driven
- Reduce integrations and extra systems, use core systems
- Al applications and efficiencies across functional areas
- Budget planning for next several years of E-Rate opportunities
- Transition work from vendors to JCPS employees, we see a 40% savings on field work when done in-house



