



**MBBT Solutions**  
**Proposal for**  
**PCR-3 Technology Auditing Services**

August 30, 2024



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# Platte County

TRADITION. PRIDE. VISION.

*Platte County R-3 School District*

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## IMPORTANT DATES:

- **RFP Issue Date:** Tuesday, August 13, 2024
- **Questions Due:** Friday, August 23, 2024 at 1:30pm (CST)
- **Proposal Due Date:** Friday, August 30, 2024 at 1:30pm (CST)
- **Selection and Award:** Tuesday, September 3, 2024
- **Project Start Date:** Monday, September 23, 2024

## SUBMITTAL REQUIREMENTS and CONTACT INFORMATION:

All questions and inquiries concerning the content of this request for proposal shall be directed to Drew White, [white.drew@pcr3schools.org](mailto:white.drew@pcr3schools.org).

The proposal is to be signed only by an authorized representative of the bidder who has authority to enter into a contract with the District on behalf of the company submitting the proposal, such as a President, Vice President, or other corporate officer.

AUTHORIZED SIGNATURE

MBBT LLC

COMPANY NAME



# Platte County

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## APPENDIX A: Read Agreement

I have read and understand requirements of this proposal and agree to provide the required services in accordance with this proposal and all attachments, exhibits, etc.

Signature

MBBT LLC

Company Name

Melissa Tebbenkamp

Printed Name

403 NW 1251st Road

Address

660-221-6335

Telephone Number (including area code)

Holden, MO 64040

City, State, and Zip

tebbenkamp@mbbtllc.com

Email Address

Fax Number



# Platte County

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The Board of Education reserves the right to modify the Scope and Specifications as circumstances require, including but not limited to adding, changing, or deleting proposed locations, equipment and services. The Board of Education reserves the right to reject any or all bids and to waive any informality or technicality in bidding, if it be in their best interest to do so.

BID SUBMITTED BY:

MBBT LLC

(Company Name)

403 NW 1251st Road

(Address)

Holden, MO 64040

(City/State/Zip Code)

Melissa Tebbenkamp

(Printed Name of Person Submitting the Bid)

660-221-6335

(Phone #)

(Fax #)

## Company Information

MBBT Solutions was founded in 2016 to address the growing need for technology leadership and data governance services in public education. Initially, the company focused on providing custom solutions tailored to specific data governance needs. Over time, its offerings expanded to include comprehensive technology audits, cybersecurity assessments, and custom training solutions. Serving nonprofit organizations and schools across the country, MBBT established a national reputation as an education technology thought leader. Melissa has advised several national organizations including the US Department of Education, Federal Trade Commission, Future of Privacy Forum, Consortium for School Networking (CoSN), and Project Unicorn.

Recognizing that every school system is unique in its structure, priorities, financing, business management, instructional integration, and stakeholder expectations, MBBT is committed to delivering solutions that are customized to each client's specific needs.

Melissa Tebbenkamp, the owner and Chief Technology Leadership Consultant, leverages her extensive network of technology partners and education experts to help clients achieve their technology leadership, data governance, and cybersecurity goals. When product or service recommendations are necessary, we work closely with clients to identify clear needs and find the best solutions. MBBT does not resell products or earn commission from product sales but can assist districts in establishing partnerships with trusted solutions providers. This vendor-neutral approach, combined with a strong belief that every dollar saved on technology is a dollar that can be redirected to the classroom, ensures that MBBT offers a service experience that stands out in the industry.

## Key Personnel

### Summary of Key Personnel

Melissa Tebbenkamp will serve as the project manager and primary point of contact on this project. Melissa will lead the majority of the audit components and will provide the final report to the technology committee. Assisting Melissa with data collection, analysis, and stakeholder engagement will be Dawn Berhorst. An expert in education data systems, school business operations, and stakeholder engagement, Dawn leverages her MBA and extensive education leadership experience to provide valuable insights and actionable recommendations during the technology audit process. Throughout the audit process, trusted professionals in school technology leadership, security, intercom systems, special education, and special programs may join Melissa and Dawn to dig into specific program information. Finally, specialists from Yellow Dog Networks will join the MBBT team to lead the infrastructure and network evaluation and components of the cybersecurity assessment. Bios for key personnel are below.

### Melissa Tebbenkamp

Melissa Tebbenkamp, owner and chief leadership consultant for MBBT Solutions, is a highly qualified consultant in the fields of adult learning, data governance, cybersecurity, and enterprise technology leadership. Melissa has earned a national reputation for her expertise and has been asked to advise several national organizations including the US Department of Education, Federal Trade Commission, Future of Privacy Forum, Consortium for School Networking (CoSN), and Project Unicorn. She has contributed to several nationally recognized whitepapers and articles, and her innovative approach to data center management has been featured in international publications. As a certified teacher in Missouri with a Master's Degree in Education Technology,

she possesses a unique blend of skills that encompass a deep understanding of complex networks, educational philosophy, and leadership.

Before transitioning to full-time consulting, Melissa served as the Chief Information Officer (CIO) for the Raytown School District for over 16 years. During the majority of her tenure, she worked closely with Dr. Allan Markley, supporting both operational and instructional technology initiatives. Throughout this period, she developed significant expertise in vendor management, school finance, technology budgeting, instructional technology integration, and strategic planning.

Melissa was among the first fifty individuals in the U.S. to achieve the Certified Education Technology Leader (CETL) designation. Under her leadership, Raytown became one of the inaugural recipients of the Trusted Learning Environment (TLE) seal. She also led the Raytown technology team in establishing a national model for data center management, data privacy, and cybersecurity.

Towards the end of her tenure at Raytown, Melissa expanded her role to become the district's Certified Safety Specialist, where she oversaw all emergency response planning and MSIP6 L10 compliance. She continues this work as a Certified Cybersecurity Rubric Evaluator and member of the national K-12 Cybersecurity Rubric advisory committee. Her extensive experience in K-12 leadership, combined with her deep knowledge of networking and technology systems, enables her to bring a unique and effective approach to technology integration in the K-12 environment.

#### Dawn Berhorst

With over 25 years of experience in leadership, data management, and software implementation and support, Dawn brings extensive knowledge and expertise to the technology audit process. Her career has been distinguished by a strong emphasis on software implementation, training, and support. Leveraging her Master's in Business Administration, she followed an untraditional approach to K-12 education leadership. The skills acquired through her formal post-secondary education provided a unique approach to school business management. This, combined with the study of educational leadership and instructional pedagogy allowed Dawn to successfully lead K-12 data warehouse and curriculum and assessment systems projects.

Throughout her career, Dawn has led and co-led essential strategic initiatives at the district level and with the Department of Elementary and Secondary Education (DESE). She played a crucial role in aligning technology practices with educational goals. While at DESE, she was part of a three-person team tasked with evaluating, establishing, and communicating agency-wide Information Technology priorities. This involved facilitating discussions to identify the data and technology needs across various agency sections, setting end-user priorities across divisions, and communicating these priorities to Information Technology.

Before retiring from public education in 2024, Dawn served as the Chief of Operations for the Jefferson City School District where she oversaw critical departments, including Technology, Business, Human Resources, Facilities and Safety, Nutrition Services, and the Student Information, Planning, and Assessment Office. She worked closely with stakeholders to assess needs and collaborated with department leads in operational areas to set goals and key performance indicators to meet those needs.

In all her roles, effective communication with policymakers, school administrators, classroom teachers, parents, and local taxpayers was vital. Her responsibilities included soliciting stakeholder input, sharing progress, and ensuring transparency to build trust and collaboration among departments and community members. Dawn is committed to leveraging her extensive experience to assist districts in improving efficiencies and outcomes for students and staff.

## Infrastructure and Network Evaluation Team

### *Eric Helm*

Eric has been a member of the Yellow Dog Networks, Inc. team for over 16 years. Eric has led projects for a diverse range of public and government organizations, including K-12 education, the Department of Defense, and local government. His K-12 projects have covered over 45 locations and involved the management of more than 300 networked switches and 20,000 Ethernet ports. In the DoD sector, Eric's projects have exceeded 200 locations, 400 Ethernet switches, and 40,000 Ethernet ports.

Degrees and Certifications: BS Computer Information Systems; Cisco Certified Network Associate (CCNA); Cisco Certified Design Associate (CCDA); Extreme Networks Specialist (ENS); Juniper Networks Certified Internet Specialist - Enterprise Routing and Switching (JNCIS-ENT); Juniper Networks Certified Junos Associate (JNCIA-Junos); Palo Alto Networks Certified Network Security Engineer (PCNSE); Infoblox Automation Solutions Associate (IASA); VMware Certified Professional (VCP4)

### *Louis Scaringella*

Louis has been a member of the Yellow Dog Networks, Inc. team for over 10 years. Throughout his tenure, he has successfully led projects across various sectors, including K-12 education, post-secondary institutions, and manufacturing. Louis has managed K-12 projects that have spanned over 25 locations, including deploying more than 200 Ethernet switches, 15,000 Ethernet ports, and 1,600 access points (APs). In addition, Louis has led post-secondary projects that spanned 20+ locations, 100 Ethernet switches, and 7500 Ethernet ports.

Degrees and Certifications: BS Computer Network Informatics; Certified Wireless Network Administrator (CWNA); Certified Information Systems Security Professional (CISSP); Juniper Networks Certified Junos Associate (JNCIA-Junos); Fortinet NSE4 and 7

### *Rohit Birle*

Rohit has been a member of the Yellow Dog Networks, Inc. team for over 5 years. Rohit leads the wireless practice at YDN and has been the lead wireless network engineer on numerous K-12 projects. Rohit is responsible for the design, configuration, and implementation of both wired and wireless projects. This includes Network Access Control policies, MS-AD integration, and RADIUS implementation. Rohit has led wireless projects that exceed 1600 APs and redundant wireless controllers (on-prem and cloud-based).

Degrees and Certifications: MS Electrical Engineering; Certified Wireless Network Administrator (CWNA); Juniper JNCIA-Mist; Aruba Certified Mobility Professional (ACMP); Aruba Certified Mobility Associate (ACMA)





## APPENDIX B: Bidder Qualifications

### STATEMENT OF BIDDER'S QUALIFICATIONS

Each bidder for the work included in the specifications and bid documents shall submit with their bid the data requested in the following information. This data must be included in and made a part of each bid document and be contained in the sealed envelope. Failure to comply with this instruction may be regarded as justification for rejecting the contractor's bid.

Name of Bidder: MBBT LLC  
Business Address: 403 NW 1251<sup>st</sup> Road, Holden, MO 64040  
When Organized: 2016  
Date Incorporated: October 1, 2016  
Number of years engaged in conducting business under present firm name: 8

If you have operated business under a different name, please give name and location.

NA

Have you ever failed to complete any work awarded to your company? If so, where and why?

No

Have you ever defaulted on a contract? If so, where and why?

No



## Technology Leadership Consulting

**Industry success requires leaders to push for innovation while balancing risk mitigation. Leaders must understand the impact of decisions on the entire organizational ecosystem. MBBT LLC prides itself on the ability to provide solutions that empower organizations to achieve not only their technological potential, but also the goals of the entire organization. MBBT's three pillars of solutions are adaptable to all organizations including education, corporations, technology solutions providers, and healthcare.**

### **Data Governance**

Data Governance is more than just privacy and security. It is a culture that involves every stakeholder in the organization. Your IT team does a lot to secure systems and data, but without a culture that prioritizes the necessary framework, your organization remains at risk.

### **Technology Strategic Planning**

Technology planning created in silos leads to inefficiencies and risk. MBBT's technology strategic planning utilizes years of experience building infrastructure, processes and procedures designed to support exponential growth while minimizing budget impact.

### **Purposeful Leadership**

The organization's mission should be reflected in vendor - client partnerships. With 17 years of experience in leadership, purchasing and partnerships in K-12 education, MBBT guides organizations through best practices that maximize the potential of partnerships and increase the value of their team.

## Data Governance

- ◆ *Data privacy guidance*
- ◆ *Contract review*
- ◆ *Documentation of policies & procedures*
- ◆ *Data best practices*
- ◆ *Understanding applicable law*
- ◆ *Security best practices on a budget*
- ◆ *Creating a culture of data governance*
- ◆ *Professional Learning*

## Strategic Planning

- ◆ *Technology audit / review*
- ◆ *Budget projections*
- ◆ *Long range planning*
- ◆ *Spend analysis*
- ◆ *Infrastructure planning for innovation*
- ◆ *Professional Learning*
- ◆ *Training videos, guides, & interactive modules*

## Purposeful Leadership

- ◆ *Partnering with education*
- ◆ *Vendor - education relationships*
- ◆ *Purchasing practices*
- ◆ *Contracts that ensure compliance*
- ◆ *Establishing value added services to maximize strategic partnerships*
- ◆ *Best practices in adult learning*
  - ◆ *Client support & onboarding*
- ◆ *Team Development*



## School System Technology Consulting Services

A successful district technology program requires leaders to push for innovation while balancing risk mitigation. Leaders must understand the impact of decisions on the entire educational ecosystem. MBBT's three pillars empower organizations to achieve not only their technological potential, but also the goals of the entire organization.



### Data Governance

Data Governance is more than just privacy and security. It is the culture established by the people, processes and technology that work cohesively to prioritize and ensure that your data and systems are trusted. It is a culture that involves every stakeholder in your district. Your technology team does a lot to secure systems and data, but without a culture that prioritizes the necessary framework, your organization remains at risk.

MBBT provides data governance services designed to align the district with federal, state and local regulations as well as national best practices.

- Data privacy guidance
  - Vendor contract review
  - Creation and documentation of policies, procedures and internal process
  - Data management best practices
  - Understanding the implementation of applicable law
- Data and cyber security best practices on a budget
- Creating a culture of data governance including the development of professional learning for all stakeholders

### Technology Leadership Coaching

The district's mission and vision should be reflected in the leadership of district technology. With 17 years of experience in leadership, purchasing and partnerships in K-12 education, MBBT guides districts through best practices that maximize the potential of innovation, vendor partnerships as well as increase the value of their technology team. Leadership coaching may include guidance on instructional support and partnerships, technology forecasting, purchasing, vendor partnerships, professional growth, and team development.



# School System Technology Consulting Services

## District Technology Assessment

The District Technology Assessment provides a review of technology equipment, processes, procedures and policies to determine the current state of technology in the school district. This assessment is performed for the purpose of recommending steps for the district to align their technology program to best practices and district strategic goals. Several industry leaders in technology and K-12 education and their publicly available resources are utilized when determining alignment to known best practice.

Upon completion, the district will receive an Assessment Report that includes commendations, recommendations, actions taken during the evaluation period, curation of district documentation utilized, as well as resources suggestion to assist the district in the execution of the recommendations.

The scope of the assessment will be customized to meet the needs of the district. In general, the technology assessment provides a review of the following areas:

- Leadership and Vision
- Policies and Procedures
- Technology Staffing
- Infrastructure including network and data center equipment
- Business Management Practices including technology purchasing
- Data Governance including data privacy & cybersecurity practices

### Assessment Process:

MBBT utilizes custom questionnaires to gain a general understanding of the district technology landscape. The questionnaire is followed by individual and small group discussions with key district stakeholders that are designed to understand the current state of technology along with the district's vision of the ideal classroom. During this process, documentation is collected to assist with the development of recommendations that work to align the technology program with the district's vision and strategic goals. If desired, a three- or five-year technology roadmap may be developed. The roadmap will include budget forecasting, equipment rotation and strategies for technology innovation.

## Technology Strategic Planning

Technology planning created in silos leads to inefficiencies and risk. Effective technology planning considers input of key stakeholders and plans for the strategic vision of the organization. MBBT's technology strategic planning utilizes years of experience building infrastructure, processes and procedures designed to support exponential growth while minimizing budget impact.

Strategic Planning services include:

- Technology program audit / review
- Budget projections
- Long range planning
- Spend analysis
- Infrastructure planning for innovation
- Professional Learning
  - Technical Staff
  - Systems and Resources
  - Training videos, training guides, interactive training modules

## APPENDIX C: References

List any school district, government entity or tax-based organizations you work for currently, or have worked for in the past three (3) years. Please include the name of the organization, point of contact, and contact information.

- Missouri School Board Association
  - Advisor: data governance and cybersecurity policy application, AI working group
  - Bob Klausmeyer, Director, K-12 Safety & Center for Education Safety: [klausmeyer@mosba.org](mailto:klausmeyer@mosba.org), (573) 208-7859
- Consortium for School Networking (CoSN)
  - vCIO: Ensure technology integration alignment with the organizational strategic plan, oversee the project management of implementations
  - Trainer: Data Governance, Cybersecurity & Technology Leadership
  - Robert Duke, COO: [rduke@cosn.org](mailto:rduke@cosn.org), (202) 470-2781
- Future of Privacy Forum (FPF)
  - Data privacy consultant and training facilitator
  - Jim Siegl, Senior Technologist for Youth & Education Privacy: [jsiegl@fpf.org](mailto:jsiegl@fpf.org), (240) 729-4016
- Adira
  - Contracted as data governance compliance consultant for public school career centers and universities. This work includes assessing current systems and processes required for GLBA compliance.
  - Gaitha Milligan, CEO: [gaitha.milligan@adiranow.com](mailto:gaitha.milligan@adiranow.com), (405) 818-7410
- Georgia State Dept of Ed
  - Sub-contract work to provide data governance and cybersecurity training services since Jan 2023. Further information can be provided upon request.
- Jefferson City School District
  - Policy and vendor contract guidance
  - Joe Martin, Director of Technology: [Joe.Martin@jcschools.us](mailto:Joe.Martin@jcschools.us), (573) 659-3140

Name, address and telephone number of at least three references who are familiar with the job performance of your company on similar size jobs:

### **Reference 1:**

Excelsior Springs School District, 300 W Broadway Ave, Excelsior Springs, MO 64024  
Technology Services Audit and Technology Leadership Coaching  
Dr. Travis Hux, former Superintendent, [travis.hux@strategosintl.com](mailto:travis.hux@strategosintl.com), (816) 708-9517

### **Reference 2:**

Garnder-Edgerton School District, 231 E. Madison Street, Gardner, KS 66030  
Technology Services Assessment, Budget Projections & Technology Plan  
Dr. Brian Huff, Superintendent, [huffb@usd231.com](mailto:huffb@usd231.com), (913) 856-2000



**Reference 3:**

Jefferson City Schools, 315 East Dunklin Street, Jefferson City, MO 65101  
MUSIC Insurance and MSIP6 Cybersecurity Planning Alignment  
Joe Martin, Director of Technology, [Joe.Martin@jcschools.us](mailto:Joe.Martin@jcschools.us), (573) 659-3140

**Reference 4:**

Branson School District, 400 Cedar Ridge Drive, Branson, MO 65616  
Cybersecurity Audit: Yellow Dog Networks  
Michelle Brenner, Director of IT, [brennerm@branson.k12.mo.us](mailto:brennerm@branson.k12.mo.us), (417) 334-6541

## Methodology

In line with the belief that each school system is unique, all solutions are customized to meet the specific needs of each district. No two audit services are alike. Stakeholder interviews and engagement, data analysis, and evaluation processes are developed collaboratively, with direct input from the district. This is especially true for Platte County School District as you are also engaged in district-wide strategic planning. Therefore, MBBT will strive to align the corresponding technology audit components with the ongoing strategic planning process.

Each assessment begins with a discovery session involving key stakeholders. Guided by responses to a background questionnaire, this session explores existing processes, systems, and data while identifying all relevant stakeholder groups. A gap analysis is then conducted to determine additional information needs and the most effective methods for data collection.

Stakeholder engagement may include one-on-one sessions, questionnaires, surveys, small focus groups, and larger focus groups with breakout discussion sessions. We will conduct a thorough review of the past three years of surveys and data collected from stakeholders, ensuring that new survey questions align with historical data wherever possible. As the district is conducting similar data collection as part of the district strategic planning process, we will take care to avoid duplicating data collection efforts. To avoid survey fatigue, district leadership will be consulted on all staff surveys.

Where feasible, quantitative data will be collected in CSV or XLS format for analysis. Qualitative data will be reviewed by experts with a deep understanding of the educational setting. This data will be coded to identify key themes and patterns for interpretation. Each data set will be analyzed according to the specific objectives defined for the assessment.

Key Performance Indicators (KPIs) will be developed based on the data available to the district. Recommendations may also include new data collection strategies to better measure the progress of strategic goals.

## Audit Process and Methodology

The following is an outline of the anticipated audit process and methodology.

### 1. Discovery

The audit will begin with a comprehensive discovery phase where we further define the scope and objectives of each audit component and the relevant stakeholders.

- The district will complete questionnaires developed specifically for each evaluation.
- Discovery sessions, typically in the form of one-on-one or small group sessions, will explore existing processes, systems, and data while identifying all relevant stakeholder groups.
- A review of previous applicable stakeholder survey questions/responses, data collections, and program reports will be conducted. Examples might include professional learning surveys, new teacher feedback, program evaluation, surveys regarding teacher perception of technology and/or technology tools, etc.
- A gap analysis will be performed to determine additional information needs and the most effective methods for data collection.
- A scope and audit plan will be finalized.



## 2. Risk Assessment

Once the scope is defined through the discovery phase, a risk assessment is conducted to prioritize the areas of focus.

- Review the organization's technology assets to identify those that are critical to business operations.
- Evaluating potential vulnerabilities in the IT infrastructure, including software, hardware, networks, and data security.
- Estimating the potential impact of identified vulnerabilities and the likelihood of their occurrence.
- Prioritizing risks based on their potential impact and likelihood to guide the allocation of audit resources.

## 3. Fieldwork and Data Collection

During the fieldwork phase, MBBT personnel will gather evidence to assess each audit area.

- Interviews will be conducted with key personnel and walkthroughs of critical processes to understand how technology controls are implemented and operated.
- Walkthroughs of schools and classroom observations will be conducted.
- Surveys of identified stakeholders will be conducted.
- Examination of policies, procedures, system configurations, inventories, budget reports, and internal documentation.
- Evaluation of IT systems through various assessment tools.
- Selecting samples of inventory, data, transactions, logs, or activities to validate the effectiveness of inventories and controls and identify any anomalies or exceptions.

## 4. Analysis and Evaluation

After data collection, the team will analyze the data to provide findings and recommendations for the selected areas.

- Control Evaluation: Comparing the collected evidence against the audit criteria to evaluate the design and operating effectiveness of controls.
- Gap Analysis: Identifying any gaps or weaknesses in the technology controls and assessing their potential impact on the organization.
- Root Cause Analysis: Investigating the root causes of identified issues to understand underlying problems and prevent future occurrences.

## 5. Reporting

The audit results are documented in a comprehensive report, which includes:

- An executive summary for district leadership and school board.
- A detailed description of the audit findings, including strengths, identified risks, and areas for growth.
- Recommendations for addressing identified prioritized areas and improving the organization's technology systems and instructional integration.
- Suggested Key Performance Indicators (KPIs) to measure the success of prioritized recommendations.
- A presentation of key findings for the technology planning committee.
- Recommendations for continuous improvement to ensure that the district's technology evolves with the district's instructional programs.

## Sample Project Timeline

The timeline below allows the district ample time to gather the required documentation, identify stakeholders for additional data collection, and engage in discovery and focus group sessions without significant disruption to business operations or instructional time. Upon selection, the timeline and scope will be refined in collaboration with the district to ensure project success.

### Week of September 23, 2024

- Project kickoff meeting
  - Schedule regular progress meetings
- Initial questionnaires provided to the district

### October 2024

- Discovery with key stakeholders and scope refinement of all awarded audit components
  - Review district-provided documentation, data, and reports
- Risk Assessment and Gap Analysis of all awarded audit components
- Begin Cybersecurity and Data Governance Assessments
- Begin Infrastructure and Network Evaluation
- Continue regular progress meetings with designated key stakeholders

### November 2024

- Continue Gap Analysis of all awarded audit components
- Begin additional data collection, including identified stakeholder surveys for of all awarded audit components
- Continue Cybersecurity and Data Governance Assessments
- Continue Infrastructure and Network Evaluation
- Continue regular progress meetings with designated key stakeholders

### December 2024

- Review of additional data collected
- Draft of cybersecurity and data governance assessment results
  - District review and opportunity to provide additional documentation
- Continue regular progress meetings with designated key stakeholders
- Note: as the end of the first semester and holidays tend to impact availability within the instructional staff, MBBT will work to limit district instructional staff time commitments.

### January 2025

- Stakeholder focus groups as needed
- Refine cybersecurity and data governance assessment results
- Continue data collection and analysis
- Draft of completed audit components for review
  - District review and opportunity to provide feedback and additional documentation
- Continue regular progress meetings with designated key stakeholders

## February 2025

- Complete outstanding audit tasks
- Draft of completed audit components for review
  - District review and opportunity to provide feedback and additional documentation
- Continue regular progress meetings with designated key stakeholders

## March / April 2025

- Final draft of audit recommendations and report
  - District review and opportunity to provide feedback and additional documentation
- Final Report and Presentation to the technology planning committee

## Pricing Cost of Services

This section includes a summary of the Scope of Services for each audit component, along with a completed pricing table. Given the modular nature of the audit components, some overlap in services may occur. Significant duplication of effort exists between the Current Technology Landscape Assessment and the Infrastructure and Network Evaluation. To address this, a separate table is provided, offering audit packages that account for any redundancy. Change orders and additional scope will be billed at a rate of \$260 per hour.

### Scope of Services

#### 1. Current Technology Landscape Assessment

- a. Evaluate existing technology infrastructure, hardware, software, and network capabilities
  - i. On-site network engineers will work with the PCR-3 staff to gather network device (switches, routers, firewall, and wireless controllers) configurations to determine industry standard compliance with regard to administrative access, SNMP parameters, VLAN configuration, wireless security access, and routing logic. Additionally, network engineers will gather a sampling of network traces to determine data flow and protocols utilized on the network.
  - ii. Evaluation of on-premise server hardware and operating systems.
  - iii. An evaluation of core operational software will be conducted to determine current technology alignment and potential needs.
- b. Assess classroom technology integration, including devices, interactive whiteboards, and other educational technology tools
  - i. Review of instructional goals, inventories, utilization data, and stakeholder feedback to determine current classroom technology alignment and potential needs
- c. Review special program technology needs (e.g., PLTW, broadcasting, Innovation teams)
  - i. Review of program goals and curriculum provided along with stakeholder feedback to determine current technology alignment and potential needs
- d. **Optional** addition of network security measures and data protection strategies to complete cybersecurity assessment.
  - i. Review district data governance compliance including current policies, procedures, and practices, alongside a comparison with national best practices.
  - ii. Review network security measures and data protection strategies (see 3.c for detailed scope)

#### 2. Device Management and Refresh Planning

- a. Assess current device inventory for both staff and students
  - i. A review of current classroom equipment using the district-provided standard technology inventory, classroom counts, student enrollment, and instructional staff counts will be conducted with a comparison of district equipment against industry standards.
- b. Evaluate the existing device refresh cycle and recommend improvements
- c. Analyze total cost of ownership (TCO) for various device options

- i. Utilizing district-provided information regarding device damages, repairs, and cost of repair parts, an estimated total cost of ownership will be determined.
- d. Provide recommendations for a 4-year device refresh plan

### 3. Infrastructure and Network Evaluation

- a. Assess current network infrastructure, including wired and wireless networks
  - i. On-site network engineers will work with the PCR-3 staff to gather network device (switches, routers, firewall, and wireless controllers) configurations to determine industry standard compliance with regard to administrative access, SNMP parameters, VLAN configuration, wireless security access, and routing logic. Additionally, network engineers will gather a sampling of network traces to determine data flow and protocols utilized on the network.
- b. Evaluate bandwidth capacity and internet connectivity
  - i. Onsite engineers will evaluate the following:
    - 1. Intra-building main closet to secondary closet bandwidth capacity
    - 2. Inter-building main closet to main closet bandwidth capacity
    - 3. PCR-3 DEMARC to Internet provider(s) bandwidth and capacity
- c. Review network security measures and data protection strategies
  - i. The following security measures will be evaluated to ensure alignment with MSIP6, common cybersecurity insurance requirements, and industry best practices:
    - 1. Usage of Multifactor Authentication (MFA) for:
      - a. Remote access to the district's network
      - b. Email and cloud application usage
      - c. Privileged accounts
    - 2. Backup solution and process
    - 3. Cyber incident disaster recovery and incidence response plans
    - 4. Installed endpoint security solution
    - 5. Software patching policy and plan
    - 6. Hardware and software asset inventory solution
    - 7. User awareness training program
    - 8. Email filtering and security
    - 9. Review privileged account usage
  - ii. Review district data governance compliance including current policies, procedures, and practices, alongside a comparison with national best practices.
- d. The requested cybersecurity and data governance assessment are scoped in items 3.a and 3.c.
- e. **Optional** assessment of the district's Google Workspace environment based on the CIS framework.
  - i. This assessment will also provide detailed remediation steps for non or partially-compliant items.

### 4. Learning Management System (LMS) and Educational Software Review

- a. Evaluate the current LMS and its effectiveness
  - i. Review of district-provided LMS utilization data and gather additional stakeholder feedback to assess the effectiveness of the current LMS.

- b. Assess educational software licenses and usage
  - i. Using district-provided system utilization data, core instructional systems will be evaluated. If needed, assistance in gathering utilization data will be provided.
  - ii. Analysis of system utilization, cost, and licensing structure will be conducted.
  - iii. **Optional** review of existing contracts to ensure data governance and FERPA compliance. This review will be billed at the rate of \$260 per hour. Most contracts take 1 – 1.5 hours per review and markup. Additional time will be required if MBBT is engaged in vendor communications.
- c. Identify potential new software or platform needs based on curriculum requirements
  - i. Review of core program goals and curriculum provided along with stakeholder feedback to determine current software alignment and potential needs

## 5. Professional Development and Training Assessment

- a. Review current technology-related professional development offerings
- b. Assess the effectiveness of existing training programs
  - i. Review of previous applicable stakeholder survey questions/responses, data collections, and program reports. Examples might include professional learning surveys, new teacher feedback, program evaluation, surveys regarding teacher perception of technology and/or technology tools, etc.
  - ii. A gap analysis will be performed to determine additional information needs and the most effective methods for data collection.
  - iii. Additional stakeholder feedback will be gathered through survey questions and focus groups.
- c. Recommend improvements for ongoing coaching and support mechanisms

## 6. Technical Support and Maintenance Evaluation

- a. Analyze current IT support structure and staffing levels
  - i. Utilizing student enrollment, staff FTE, special programs, and inventory data, staffing levels and structure will be compared to area districts and recommended best practices.
- b. Assess help desk operations and service delivery
  - i. Help desk operations and service delivery will be assessed using available call log data, work order ticket trends, ticket response data, and stakeholder feedback.
- c. Evaluate existing maintenance and repair processes for devices
  - i. The current technology hardware repair and maintenance process for student and staff devices will be evaluated and compared to the district's desired service level agreement.

## 7. Budgeting and Resource Allocation

- a. Review current technology budget and spending patterns
  - i. Technology spending will be assessed utilizing district-provided budget information. The level of line-item detail will determine the level of detail and accuracy in the final analysis and projections.
- b. Assess technology procurement practices

- i. Technology procurement practices will be assessed against district policies and procedures and industry best practices. Recommendations for improvement will be provided as needed.
- c. Recommend sustainable funding mechanisms for ongoing technology initiatives
  - i. An evaluation of available federal funding, including eRate and Title funds, will be conducted. Additional common grant and funding mechanisms will also be explored. Recommendations will be provided for ongoing sustainability.
  - ii. A framework for an ongoing 5-year technology spending forecast will be provided including templates for zero-based technology budgeting.

## 8. Special Education Technology Needs

- a. Evaluate technology provisions for Special Education students and identify any technology enhancements that may support the learning of students with special needs.
  - i. An analysis of provided special education software and hardware inventories, non-identifiable information regarding student IEP goals and accommodations, and overall program goals will be reviewed to identify gaps and areas for enhancement.

## 9. Safety and Security Technology Needs

- a. Conduct an audit of current video surveillance software and hardware used for the purpose of safety and security.
  - i. A review of the current security video system will be conducted. This review will include an analysis of overall system reliability, utilization, and capabilities compared to industry standards. This review will not include an assessment of individual cameras or building hardware.
- b. Conduct an audit of current building access controls and intercoms throughout all District facilities.
  - i. A review of the current access control and intercom systems will be conducted. This review will include an analysis of overall system reliability, utilization, and capabilities compared to industry standards. This review will not include an assessment of individual cameras or building hardware.

## 10. Stakeholder Input and Communication

- a. Conduct surveys or interviews with key stakeholders (administrators, teachers, students, parents) to gather input on technology needs and priorities.
  - i. A review of the previous three years of applicable stakeholder survey questions/responses, data collections, and program reports will be conducted.
  - ii. A gap analysis will be performed to determine additional information needs and the most effective methods for data collection.
  - iii. Stakeholder interviews and engagement will be developed collaboratively with direct input from the district. Stakeholder engagement may include one-on-one sessions, questionnaires, surveys, small focus groups, and larger focus groups with breakout discussion sessions.
  - iv. As the district is conducting similar data collection as part of the district strategic planning process, we will take care to avoid duplicating data collection efforts.

## APPENDIX D: Deliverable / Ability to Provide Service / Bid Amount

Deliverable	Ability to Provide Service (yes/no)	Bid Amount
<p><b><u>1. Current Technology Landscape Assessment</u></b></p> <ul style="list-style-type: none"> <li>Evaluate existing technology infrastructure, hardware, software, and network capabilities</li> <li>Assess classroom technology integration, including devices, interactive whiteboards, and other educational technology tools</li> <li>Review special program technology needs (e.g., PLTW, broadcasting, Innovation teams)</li> </ul>	<p>Yes</p> <p><i>Optional service for cybersecurity assessment:</i></p>	<p>\$21,000</p> <p>\$5,500</p>
<p><b><u>2. Device Management and Refresh Planning</u></b></p> <ul style="list-style-type: none"> <li>Assess current device inventory for both staff and students</li> <li>Evaluate the existing device refresh cycle and recommend improvements</li> <li>Analyze total cost of ownership (TCO) for various device options</li> <li>Provide recommendations for a 4-year device refresh plan</li> </ul>	<p>Yes</p>	<p>\$5,000</p>
<p><b><u>3. Infrastructure and Network Evaluation</u></b></p> <ul style="list-style-type: none"> <li>Assess current network infrastructure, including wired and wireless networks</li> <li>Evaluate bandwidth capacity and internet connectivity</li> <li>Review network security measures and data protection strategies</li> </ul>	<p>Yes</p> <p><i>Optional service for Google Workspace Assessment</i></p>	<p>\$17,500</p> <p>\$5,000</p>
<p><b><u>4. Learning Management System (LMS) and Educational Software Review</u></b></p> <ul style="list-style-type: none"> <li>Evaluate the current LMS and its effectiveness</li> <li>Assess educational software licenses and usage</li> <li>Identify potential new software or platform needs based on curriculum requirements</li> </ul>	<p>Yes</p> <p><i>Optional review of existing vendor contract language</i></p>	<p>\$8,500</p> <p>\$260 / hour</p>
<p><b><u>5. Professional Development and Training Assessment</u></b></p> <ul style="list-style-type: none"> <li>Review current technology-related professional development offerings</li> <li>Assess the effectiveness of existing training programs</li> <li>Recommend improvements for ongoing coaching and support mechanisms</li> </ul>	<p>Yes</p>	<p>\$5,000</p>
<p><b><u>6. Technical Support and Maintenance Evaluation</u></b></p> <ul style="list-style-type: none"> <li>Analyze current IT support structure and staffing levels</li> <li>Assess help desk operations and service delivery</li> <li>Evaluate existing maintenance and repair processes for devices</li> </ul>	<p>Yes</p>	<p>\$6,000</p>



<b>7. Budgeting and Resource Allocation</b> <ul style="list-style-type: none"> <li>Review current technology budget and spending patterns</li> <li>Assess technology procurement practices</li> <li>Recommend sustainable funding mechanisms for ongoing technology initiatives</li> </ul>	Yes	\$9,000
<b>8. Special Education Technology Needs</b> <ul style="list-style-type: none"> <li>Evaluate technology provisions for Special Education students and identify any technology enhancements that may support the learning of students with special needs</li> </ul>	Yes	\$6,000
<b>9. Safety and Security Technology Needs</b> <ul style="list-style-type: none"> <li>Conduct an audit of current video surveillance software and hardware used for the purpose of safety and security</li> <li>Conduct an audit of current building access controls and intercoms throughout all District facilities.</li> </ul>	Yes	\$6,000
<b>10. Stakeholder Input and Communication</b> <ul style="list-style-type: none"> <li>Conduct surveys or interviews with key stakeholders (administrators, teachers, students, parents) to gather input on technology needs and priorities</li> </ul>	Yes	\$7,500

\* No additional fees or costs are anticipated. There will be no costs for firm travel as the team members are local experts. Change orders and additional scope will be billed at a rate of \$260 per hour.

## Audit Package Options

Deliverables	Cost	Discount	Package Cost
<b>Package 1: Technology Landscape &amp; Risk Assessment</b>			
<b>1. Current Technology Landscape Assessment</b>  <b>3. Infrastructure and Network Evaluation</b> * Includes cybersecurity and data government assessment	\$38,500	\$6,500	\$32,000
<b>Package 2: Technology Operations &amp; Instructional Impact</b>			
Audit of deliverables 1-3 and 5-10 * Includes all requested services except the LMS & Educational System Software Review (4) as the response to RFP questions indicated that an instructional software review was not desired. The LMS and Educational Software review can be added to this package at the rate provided in the pricing table.	\$83,000	\$16,500	\$66,500
<b>Package 3: Al-la-carte</b>			
Select any two audit deliverables (1-10) and save \$500 each	-	\$1,000 minimum	-



## Sample Reports

[Sample School District #1 Technology Planning Summary Report](#)

[Sample School District #2 Technology Department Assessment](#)

[Organization Strategic Plan Technology Alignment](#)



Sample School District #1  
Technology Consulting Services  
Technology Planning  
Summary Report

MBBT, LLC  
[date]

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## Executive Summary

The [School District] engaged Melissa Tebbenkamp, MBBT LLC, to assist the district in creating a technology strategic plan including an equipment roadmap and predictable long-range budget. Initial work on the technology strategic plan began on \_\_\_\_\_ with the development of short-term tasks and long-term goals of strategic plan work. Work on the strategic plan continued through \_\_\_\_\_.

Strategic plan development included the determination of the ideal classroom technology, an assessment of the current state of technology, gap analysis, and evaluation of technology purchases. In addition, a cybersecurity risk assessment was conducted. As part of the evaluation, a review of technology equipment, processes, procedures, and policies was used to determine the current state of technology in the school district. This assessment is performed for the purpose of recommending steps for the district to align its technology program to best practices, including establishing an ideal classroom for each grade/content area and the utilization of eRate funds.

[District specific Information]

### Ideal Classroom Technology

Utilizing teacher and instructional leadership focus groups, the district defined the ideal classroom environment, a key driver to long-range planning. Tebbenkamp assisted the district in conducting meetings with district leadership and teacher focus groups to establish the ideal classroom and necessary technology for each grade range. This ideal classroom included audio-visual equipment, student devices and teacher tools. Once the technology needs were determined, a pilot program was designed with the goal of piloting classroom equipment and tools in [school year] and a full rollout for [school year].

### Technology Gap Analysis

The current state of technology, including technology utilized in the classroom and business environment, was assessed. Tebbenkamp worked with technology staff and district leadership to define the current state of technology and establish technology's role in the district's long-range strategic plan. The assessment determined [summary of findings].

Upon completing the initial assessment, the district determined that the immediate need was a predictable short-term budget and purchasing roadmap. These two documents will guide the district in long-range technology planning, so a formal strategic plan document will not be presented.

### Technology Budget and Roadmap

[Evaluation specific information redacted]. The district determined that a shorter-term budget would be created to establish a roadmap for immediate and short-term considerations.

### Cybersecurity Risk Assessment

A Cybersecurity Risk Assessment was completed between [date] and [date]. The evaluation leveraged the Cybersecurity Framework for Education, utilizing the Cybersecurity Rubric (CR) self-assessment that Melissa Tebbenkamp, a Certified Cybersecurity Rubric Evaluator, then validated.

Upon conclusion of the cybersecurity risk assessment, it was determined that the district’s overall cybersecurity posture was at the [ x ] level, with several categories at the [x] level. [summary of district-specific findings and cybersecurity recommendations].



## Ideal Classroom Technology

The impact on instruction and student success should be at the core of every technology decision. It is critical to establish the technology tools and resources teachers and students need prior to establishing a plan for technology infrastructure purchases. The technology team cannot build the appropriate infrastructure or properly support an environment that is not defined. Therefore, the first step to creating a technology roadmap is to define the ideal classroom environment.

Utilizing teacher and instructional leadership focus groups, Tebbenkamp assisted the district in conducting meetings with district leadership and teacher focus groups to establish the ideal classroom and necessary technology for each grade range. This ideal classroom included audio-visual equipment, student devices, and teacher tools.

The recommendations from the focus group included the following:

- [summary of findings on teacher devices]
- [summary of findings on student devices]
- [summary of findings on classroom management and engagement tools]
- [summary of findings on classroom equipment]
- A technology adoption process for hardware and software to ensure that teachers are aware of and have access to district-adopted resources.
- Professional development on technology tools and resources.
- A scaffolded curriculum for all students K-12 that ensures an age-appropriate progression of student technology skills development.

Once the technology needs were determined, a pilot program was designed with the goal of piloting classroom equipment and tools in the [school year] and a full rollout for the [school year].

See [Appendix A](#) for further details of the focus groups' recommendations.

### Technology Gap Analysis

An assessment of the current state of technology, including technology utilized in the classroom and business environment was conducted. Tebbenkamp worked with technology staff and district leadership in an effort to define the current state of technology and establish technology's role in the district's long-range strategic plan. The assessment determined that [district-specific findings].

Upon conclusion of the initial assessment, a predictable short-term budget was developed ([Appendix B](#)).

### Technology Budget and Roadmap

[Evaluation specific information redacted]. The district determined that a shorter-term budget would be created to establish a roadmap for immediate and short-term considerations.

## Staff and Student Devices

[District-specific summary of staff and student device inventory, rotation, and equipment]

## Technology Infrastructure

Upon review of the district’s technology infrastructure, it was determined that [district-specific information]. The table below details the primary infrastructure systems. This table includes the purchased maintenance agreements on each item, along with the manufacturer’s end of support. Once a device reaches the end of support, the manufacturer will no longer provide updates, security patches, or maintenance for those devices. Typically, devices at the end of support have been in use for at least seven to ten years.

[table information omitted]

Device	Maintenance	Maintenance End	End of Support	QTY	Purpose
					Building Switches
					Voice/Phones
					Fiber Connectivity
					Copper Connectivity
					Wireless Access Points
					Wireless Network Controller
					Servers

## Business Management

A review of the district’s technology purchases and business processes was conducted. It was discovered [district-specific findings]

During the review of eRate purchases, it was discovered that [district-specific information]. eRate funds are part of a federal program managed by USAC that provides discounts on the purchase of eligible services and equipment. The district’s discount is based on their free and reduced lunch rate. eRate runs on a five-year cycle, with the current cycle ending on June 30, 2026.

The district currently has [\$0] available in eRate funds for FY25 & FY26. The district is at a [%] discount rate, resulting in a total eRate expense budget of [\$0]. Therefore, the district must secure \$0 in funds by June 30, 2026, to fully capitalize on the eRate program. Moving forward, the district should ensure proper budget allocations to fully utilize the available eRate funds in each 5-year cycle. The current 5-year allocation to [district] is [\$0]. However, this may fluctuate based on ADA and USAC funding per pupil.

Tebbenkamp assisted the district with the identification of eRate-eligible equipment and the eRate request process. Through the competitive bidding process and Tebbenkamp’s recommendations, the district [district-specific findings].

The eRate program has strict deadlines for requests for bids, award of bids, and purchasing. The district should continue to plan accordingly to ensure program compliance and maximum funding.



## Technology Budget

A five-year technology budget was created using information from the technology department leadership, ideal classroom focus groups, infrastructure assessment, cybersecurity assessment, and known device rotation needs. This information is presented in [Appendix B](#).



## Cybersecurity Risk Assessment

A Cybersecurity Rubric Evaluation was completed between [date] and [date]. The evaluation leveraged the Cybersecurity Framework for Education, utilizing the Cybersecurity Rubric (CR) self-assessment that was then validated by Melissa Tebbenkamp, a Certified Cybersecurity Rubric Evaluator.

The Cybersecurity Rubric rates each practice area on a scale of 1 to 5, with 1 being the least mature, or Initial Level, and 5 being the most advanced, or Optimized Level. Upon conclusion of the CR evaluation, it was determined that [district-specific findings and recommendations].

Below is a summary of the Cybersecurity Risk Assessment findings and primary recommendations. Please see the full report for further details on each finding, along with additional recommendations.

### Commendations

Throughout the evaluation process, technology and district leadership prioritized the work, took time to understand current risks, and engaged in thoughtful conversations regarding strategic next steps to improve practices. Self-assessments and identifying areas of improvement can be difficult, but the district team took on this challenge openly and with the goal of improvement.

### Opportunities for Improvement

The evaluation team determined that the best approach for improving the district's cybersecurity posture was to focus on five primary core strategies that would provide the most immediate and significant improvement. Once significant progress is achieved, the district should begin addressing the secondary strategies.

#### Primary Strategies

[Detail of the prioritized areas]

- Omitted for district protection and security reasons

#### Recommendations

##### Immediate Considerations

[Summary of considerations for the next 3-6 months]

Omitted for district protection and security reasons

##### Short-Term Considerations

[Summary of considerations for the next 18 months]

Omitted for district protection and security reasons

##### Long-Range Considerations

[Summary of considerations for the next 18 months to 5 years]

- Omitted for district protection and security reasons

## APPENDIX A – Ideal Classroom Focus Group Summary

All grade levels:	Admin	Teacher
Specific recommendations from the focus group that apply to all classrooms	x	
	x	x
	x	x
	x	x
	x	
	x	x
	x	x
		x
Secondary Schools	Admin	Teacher
Specific recommendations from the focus group that apply to secondary classrooms	x	x
	x	x
		x
		x
		x
Elementary Schools	Admin	Teacher
Specific recommendations from the focus group that apply to elementary classrooms	x	
		x
		x
		x
		x
		x

1. Items highlighted in tan should be considered in the technology pilot and budget process
2. Items highlighted in purple should be considered by instructional leadership
3. Items in green are possible utilizing existing district resources
4. Items in blue should be considered and adopted when possible

### Notes and Considerations:

- District specific findings

## APPENDIX B – Technology Budget Projections

Description	FY24 (previous)	FY25 (current)	FY26	FY27	FY28	FY29	FY30	Renewal Date
<b>Services</b>								
Server Consulting	\$ -	\$ 20,000.00	\$ 10,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	
Technology Consulting	\$ -	\$ 12,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	
Network Security Monitor	\$ 20,400.00	\$ 15,300.00	\$ 20,400.00	\$ 20,400.00	\$ 20,400.00	\$ 20,400.00	\$ 20,400.00	
Microsoft Licensing	\$ 33,500.00	\$ 33,500.00	\$ 33,500.00	\$ 33,500.00	\$ 33,500.00	\$ 33,500.00	\$ 33,500.00	
Server Virtualization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
eRate Consulting	\$ -							
<b>Services Total</b>	<b>\$53,900</b>	<b>\$ 80,800</b>	<b>\$ 83,900</b>	<b>\$ 78,900</b>	<b>\$ 78,900</b>	<b>\$ 78,900</b>	<b>\$ 78,900</b>	
<b>Supplies &amp; Subscriptions</b>								
<b>General Supplies</b>								
Student Devices	\$ 300,000	\$ 260,000	\$ 260,000	\$ 390,000	\$ 390,000	\$ 390,000	\$ 390,000	
Security Video Cameras Repairs	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	
Server Supplies	\$ -	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	
Special Project	\$ -	\$ 15,035	\$ -	\$ -	\$ -	\$ -	\$ -	
Break/Fix Supplies	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	
Consumables	\$ -	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	
Projectors	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30,000	\$ 30,000	
<b>Licenses / Subscriptions</b>								
Licenses / Subscriptions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Software	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	
Adobe Creative Cloud	\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,500	
Helpdesk Software	\$ 4,300	\$ 4,300	\$ 4,300	\$ 4,300	\$ 4,300	\$ 4,300	\$ 4,300	
Data Backup	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Management Software	\$ 4,670	\$ 4,670	\$ 4,670	\$ 4,670	\$ 4,670	\$ 4,670	\$ 4,670	
Internet filter	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	
Software	\$ 15,220	\$ 15,220	\$ 15,220	\$ 15,220	\$ -	\$ -	\$ -	FY26
Server Virtualization	\$ 17,000	\$ 17,000	\$ 17,000	\$ 17,000	\$ 17,000	\$ 17,000	\$ 17,000	
Software	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	
Software	\$ 11,700	\$ 11,700	\$ 11,700	\$ 11,700	\$ 11,700	\$ 11,700	\$ 11,700	
Software	\$ 27,500	\$ 27,500	\$ 27,500	\$ 27,500	\$ 27,500	\$ 27,500	\$ 27,500	
Software	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	
Software	\$ 8,580	\$ 8,580	\$ 8,580	\$ 8,580	\$ 8,580	\$ 8,580	\$ 8,580	
Software	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	
<b>Supplies &amp; Subscriptions Total</b>	<b>\$ 485,970</b>	<b>\$ 541,005</b>	<b>\$ 525,970</b>	<b>\$ 655,970</b>	<b>\$ 640,750</b>	<b>\$ 670,750</b>	<b>\$ 670,750</b>	
<b>Equipment</b>								
Equipment	\$ -	\$ -	\$ 180,000	\$ -	\$ -	\$ -	\$ -	FY30
Equipment	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ -	FY31
Network Equipment	\$ -	\$ -	\$ 450,000	\$ -	\$ -	\$ -	\$ -	FY31
Battery Back-up	\$ -	\$ 64,918	\$ -	\$ -	\$ -	\$ -	\$ 25,000	FY29 & FY30
Servers	\$ -	\$ -	\$ 70,000	\$ -	\$ -	\$ -	\$ -	FY31

Description	FY24 (previous)	FY25 (current)	FY26	FY27	FY28	FY29	FY30	Renewal Date
Server Storage (SAN)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	FY31
Equipment	\$ -	\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -	FY31
Computers over \$1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Interactive Displays	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	FY30
<b>Equipment Total</b>	<b>\$ -</b>	<b>\$ 64,918</b>	<b>\$ 795,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 25,000</b>	
<b>Technology Budget Total</b>	<b>\$ 539,870</b>	<b>\$ 686,723</b>	<b>\$ 1,404,870</b>	<b>\$ 734,870</b>	<b>\$ 719,650</b>	<b>\$ 749,650</b>	<b>\$ 774,650</b>	
<b>Bond*</b>								
Bond xxxx	\$ -	\$ -	\$ 160,000	\$ -	\$ -	\$ -	\$ -	FY30
Bond xxxx	\$ -	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -	FY32
<b>Bond Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 660,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>Total including Bond</b>	<b>\$ 539,870</b>	<b>\$ 686,723</b>	<b>\$2,064,870</b>	<b>\$ 734,870</b>	<b>\$ 719,650</b>	<b>\$ 749,650</b>	<b>\$ 774,650</b>	

## Budget Assumptions and Rationale

### Services

- District-specific findings
- The budget amounts for [xxx] were adjusted to more accurately reflect projected expenses.
  - It is strongly recommended that the district continue to budget for [xxx]
- District-specific findings
- District-specific findings
- District-specific findings

### Supplies & Subscriptions

- The budget amount for student devices was adjusted according to the anticipated purchase quantity.
- It is recommended that the district increase [xxx] budget beginning in FY00 to account for the purchase of [xx] and change in rotation.
- The district should consider rotating a portion of projectors each year to create a predictable, normalized budget. This suggested change is reflected in FY00
- District-specific findings. It is recommended that this line item be further evaluated for accuracy.
- District-specific findings
- Some budget amounts for software/licenses provided did not include annual price increases. The district should ensure that this is accurate per established contracts. It is best practice to budget for an annual price increase based on historical trends unless the price is guaranteed in a contract.

### Equipment & Bond

- Budget line items were added for [xxx]
- District-specific findings on equipment rotation



Sample School District #2  
Technology Department Assessment

**Conducted by:**

**IMBBT, LLC**

**[Date]**

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## Assessment Goals

District engaged MBBT, LLC to perform a Technology Department Assessment to include a review of technology equipment, processes, procedures and policies to determine the current state of technology in the school district. This assessment is performed for the purpose of recommending steps for the district to align their technology program to best practices, including establishing an ideal classroom for each grade/content area and the utilization of eRate funds.

It is important to note that the District has experienced change in the executive team. Observations regarding the technology program may not be due to the actions of the current leadership, and therefore should not reflect negatively on the team. Instead, these findings are designed to assist the new leadership team in improving the technology program.

Several industry leaders in technology and K-12 education and their publicly available resources were referenced when determining alignment to known best practice. These include the [CoSN Digital Leap Matrix](#), [Framework of Essential Skills of the K-12 CTO](#) and [Network & Systems Design](#) resources.

This report presents **fifty-five (55)** commendations and recommendations, along with **fourteen (14)** actions taken, and is intended to be a starting point for additional planning. It is suggested that cross-functional collaborative teams be established to review and create an action plan to address areas that may benefit from improvement.

As the assessment was conducted, some immediate action items were identified and executed by the district; these are reflected in the Actions Taken section of each focus area. During the review of the technology program, a variety of documentation was requested, and a list of these documents can be found in [Appendix C](#). Resources are identified in each section in support of recommended actions.

This report is divided into the following focus areas:

- ***Leadership and Vision***
- ***Policies and Procedures***
- ***Technology Staffing***
- ***Infrastructure***
- ***Business Management***
- ***Data Governance***

## Leadership and Vision

*A highly effective technology program requires the district to have an executive team that works together to develop a shared vision. This vision should include an instructional plan that is supported and enhanced by technology. The team should explore adopting innovative practices that identify the steps needed to transform their vision into a long-rang plan with appropriately aligned resources. The goals of the instructional team should drive the goals of the technology program.*

It is important to reiterate that observations regarding the technology program may not be due to the actions of the current leadership, and therefore should not reflect negatively on the team. Instead, these findings are designed to assist the new leadership team in improving the technology program.

## Commendations

- <Omitted>
- <Omitted>
- <Omitted>
- The district has identified a need to improve technology systems and has conducted three separate technology evaluations since 2018
  - <Omitted>
  - <Omitted>
  - < Omitted>

## Actions Taken

- Established a classroom standard for future technology to include 1 to 1 devices for students and updated laptops for teachers. This standard will now be included in a five-year budget projection.
- The Technology Department began to create a centralized list of known applications and equipment.
- MBBT, LLC worked with the technology director to establish processes for technology long-rang planning, including device replacement cycles.
- MBBT, LLC reviewed the Technical Environment Audit and the Network and Cybersecurity Assessments with the district to determine outstanding action items.

## Recommendations

- [District-specific findings]
- [District-specific findings]
- [District-specific findings]
- Sample Findings Below:
- The district should include the Director of Technology in all conversations regarding operational and instructional technology needs to ensure that the technology long-range plan accounts for the leadership's vision.

- The Director of Technology position should be a strategic level position and have the authority to make decisions that affect and support operations, instruction, and business departments. Consider placement on or frequent meetings with the executive team to assure that IT security risks are appropriately communicated, strategic planning includes recommendations of how technology can be leveraged to address key district goals, as well as alignment of IT priorities and initiatives to assure successful implementations.
- The Director of Technology should be directly involved in:
  - Strategic planning of district initiatives to meet district goals and mitigate risk.
  - Approving and aligning major programs and projects that will require technology systems and software support and communication of these initiatives with IT staff and key stakeholders.
  - Articulating budget justifications and how technology can enhance and transform the vision, mission, goals and objectives of the district.
  - Providing oversight and planning to improve efficiencies and effectiveness of enterprise systems.
  - Vetting and approving technology equipment, applications, and services which departments and schools might consider purchasing.
  - Enforcing technology policy throughout the district
  - Ensuring the IT security risks are appropriately communicated and prioritized
  - Ensuring district security incident response is developed, communicated, and regularly tested.
- The role of IT must be clearly defined with a focus on leading the district’s instructional technology vision
  - Once the role of IT is defined, socialized, and approved, the IT department should create a Vision and Mission statement. This will help reinforce the newly defined role internally and externally.
  - The IT department should establish Key Performance Indicators (KPI’s) and Service Level Agreements (SLA’s) around the newly defined roles and responsibilities. Creating KPI’s and SLA’s will allow the district to measure the performance of the IT department and provide accountability to stakeholders for the newly defined expectations. Key Performance Indicators directed at the K-12 community are available through the [Council of Great City Schools](#). More information on K-12 KPIs can be found in [Appendix F](#).
- The district should review the technology functions performed by other departments and determine if consolidating those services into IT is plausible. The review would start from the premise that consolidation is the priority unless there is documented evidence to consider maintaining the separation.
  - Some of the things to consider should be:
    - Is there a Return on Investment (ROI) for the consolidation?
    - What are the challenges apart from cost, having separate IT related services?
    - How can communication, planning, and services be improved between departments and IT?
- The district should continue to build toward full alignment between Technology and Academic Services. This is critical for the ongoing success of remote learning.
- The district should create a technology plan that leverages technology to meet or exceed district goals.

## Resources

The executive leadership team can make or break any or all educational technology initiatives. It is important for this team to have a repertoire of resources at hand to assist in making decisions based on research and best practices.

- CoSN, through collaboration with superintendents, has created several resources to assess challenges and increase the team’s capacity to lead technology efforts.
  - The [Empowered Superintendents Toolkit](#) was created in partnership with AASA.
  - The [CTO Self-Assessment](#) and [Superintendent Self-Assessment](#) can be used to determine the district’s readiness to implement effective EdTech learning environments in the district.
- [The Future Ready Framework](#) provides structure for digital learning visioning, planning, and implementation focused on Personalized Student Learning (PSL).
- The [K-12 Blueprint](#) has been designed to help school leaders keep pace with current research and educational practices, the K-12 Blueprint offers toolkits to help support technology initiatives.
- CoSN’s [Protecting Privacy in Connected Learning toolkit](#) provides the guidance on key indicators that leaders need consider when creating and improving the district’s student data privacy program.

## Supporting Documentation

### Technical Environment Audit Action Steps

<Table Omitted>

### Network and Cybersecurity Assessment Action Items

<Table Omitted>

## Policies and Procedures

*A highly effective technology program requires the district to have established, enforceable policies and procedures for legal compliance, data security, student privacy, responsible use, and technology management. These policies and procedures should align with district goals and should ensure the district is addressing the digital equity gap in their community.*

## Commendations

- <Omitted>
- The district participates in MSBA Full Management policy program.

## Actions Taken

- Per the eRate program requirements, and the district’s adopted Board Policy EHB, “all minor students will be instructed on safety and security issues, including instruction on the dangers of sharing personal information about themselves or others . . . . Instruction will also address cyberbullying awareness and response and appropriate online behavior . . . .”
  - It was discovered that a K-12 curriculum on digital citizenship was not established. MBBT, LLC provided a scope and sequence, as well as detailed lesson plans from Common Sense Media, which when implemented with fidelity will meet this federal requirement.
- Review of all policies pertaining to data privacy and technology management. See the next section for a policy and procedures comparison between District and Raytown C-2 School District, who is considered a model of best practice for the state.

## Recommendations

- Ensure all adopted policies and administrative procedures are fully implemented and enforced.
- It is recommended that the district update policies to align with current MSBA recommendations and best practices as detailed on the next page under Supporting Documentation.

## Resources

- [Digital Equity Toolkit](#) assists districts in ensuring student from economically disadvantaged families have access to robust digital tools while at school and home.
- CoSN’s [Trusted Learning From the Ground Up: Fundamental Data Governance Policies and Procedures](#) provides school systems with the opportunity to inventory their existing data protection policies and identify any gaps. For convenience, this publicly available resource is also included in [Appendix D](#).

## Supporting Documentation

### Board Policy and Procedure Review

Policy/ Procedure	Policy/Procedure	Implementation / Revision Date	Notes
EHB	Technology Usage		
EHB-AP1	Technology Usage (Technology Safety)		
EHB-AP2	Technology Usage (Access to Blocked or Filtered Content)		
EHB-AP3	Technology Usage (Electronic & Social Networking Guidelines and Expectations)		
EHB-AF1	Technology Usage (Parent/Guardian Technology Agreement)		
EHB-AF2	Technology Usage (Student User Agreement)		
EHB-AF3	Technology Usage (Employee Technology Agreement)		
EHB-AF4	Technology Usage (External User Technology Agreement)		
EHB-AF5	Technology Usage (Technology Administrator Account Access Agreement)		
EHBA	Student Use of Personal Electronic Devices for Instructional Purposes		

Policy/ Procedure	Policy/Procedure	Implementation / Revision Date	Notes
EHBC	Data Governance and Security		
EHBC-AP1	Data Governance and Security (Incident and Data Breach Response Plan)		
EHBC-AP2	Data Governance and Security (Data Management)		
EHBC-AP3	Data Governance and Security (Account Management)		
EHBC-AP4	Data Governance and Security (Security Controls)		
EHBC-AP5	Data Governance and Security (Business Continuity and Data Recovery)		
EHBC-AF1	Data Governance and Security (Confidentiality and Security Agreement for Employees and Volunteers)		
GBCC	Staff Use of Communication Devices		
DGA	Authorized Signatures		
JO	Student Records		
JO-AP1	Student Records		
JO-AF1	Student Records		



## Technology Staffing

*A highly effective technology program includes cross-functional teams for decision-making, technology support, professional development, and other aspects of the district's technology program. District leaders must create and support these teams, while establishing clear lines of communication. These teams should frequently evaluate program components to ensure that obsolete functions are eliminated and staff resources are appropriately aligned with district goals.*

### Commendations

- <Omitted>
- <Omitted>

### Actions Taken

- A review of staff structure and oversight was conducted.
- A budgetary review was conducted that identified <summary of findings>.
  - <individual findings and budget impact>

### Recommendations

- <Omitted>
- <Omitted>
- <Omitted>
- The district may consider evaluating the current tiers of technology staff and compensation rate to ensure that they have a sustainable model that encourages retention and recruitment of quality candidates.
- The district should establish a process for training technology department staff that includes annual professional growth plans.
- Due to the amount of potential eRate funding remaining, it is recommended that <Omitted>
- The district should consider how they will efficiently repair student and staff devices <Omitted>

### Supporting Documentation

<Omitted>

## Infrastructure

*A highly effective technology program maintains a robust infrastructure that aligns to industry standards and is adequate to meet the needs of stakeholders. The technology program should establish standards for purchasing hardware and software as well as network design and maintenance that support security. Technology infrastructure planning should be forward facing to ensure it meets current and future instructional and operational needs. The network and server infrastructure should be maintained in a way to ensure a high reliability and uptime. The technology department should have the necessary tools and processes in place to effectively manage all software and devices.*

## Commendations

- Internet connectivity is sufficient in meeting the needs of the district.
- The district has utilized eRate funds to ensure a current rotation of <omitted>
- The district utilizes a best in breed solution for <omitted>
- The district maintains appropriate antivirus and malware detection

## Actions Taken

- A review of the current technology infrastructure was performed.
  - <Omitted>
- A review of the previous five years of technology purchases was administered, including eRate, to determine the current state of technology infrastructure. In collaboration with the Director of Technology, a five-year budget projection was created that includes the proper rotation of technology infrastructure.
  - <Omitted>
- During the assessment, it was discovered that <omitted>

## Recommendations

- <Omitted>
- <Omitted>
- It is recommended that the district explore the use of a notification system for after-hours critical events. [Vocal Notify](#) offers email to call alerts at an affordable rate of \$7.50 per month or \$81 if paid annually.
- <Omitted>
- The district should carefully review the <omitted> assessments and determine which recommendations have already been implemented and which recommendations the district should implement. See the Leadership and Vision section above for a table of those findings.
- The technology department should adopt a Service Management Framework such as ITIL for all technology related functions and implement technology best practices processes and procedures. This would include an escalation process for tickets to ensure that the highest skilled support technicians are tasked with supporting the most demanding technology requests.
- For example, <omitted>
- <Evaluation of service request rates of closure & recommendations>

- The district should engage in the cybersecurity services offered free to educational entities through CISA and MS-ISAC. CISA will conduct weekly and monthly vulnerability scans, as well as assist the district in a phishing campaign to determine current level of risk.
- The district should establish a cybersecurity team to ensure that cybersecurity is maintained as a priority.
- <Omitted>
- <Omitted>
- The district should develop documented sets of published infrastructure standards that are enforceable including Internal Network, Devices, LAN, Primary Network, WAN, Security Cameras, Phones/VOIP, and wireless.
- During the review, it was reported <omitted>

## Resources

- Formerly known as Smart Education Networks by Design (SEND), the CoSN [Network Design](#) initiative provides schools and districts with resources to help them adapt to shifting and sustainable technologies that support the increasing demands of teaching and learning.
- The [CoSN Cybersecurity Toolkit](#) provides technology leaders resources they need to protect their networks and ensure information security.
- The [Cybersecurity Risk Assessment](#) was developed as a collaboration between CoSN's and Security Studio (S2), this assessment is free and vendor neutral. Unlike traditional industry risk assessments, it incorporates topics specific to the K12 environment such as educational technology and remote learning. Additionally, the tool itself is designed as an educational tool. Each question is paired with a user-friendly explanation to clearly explain the question being asked.
- Over the past two years, educational institutions have been hit by ransomware attacks at an increasingly higher rate. This trend is explored in Sophos's 2021 report [State of Ransomware in Education](#)

## Business Management

*A highly effective technology program actively manages the budget, financial operations, disaster recovery, and business continuity. The technology budget includes projections that assure long-term sustainability for technology initiatives and future network demands. eRate and other funding sources are understood and properly utilized. District leaders ensure effective, competitive purchasing practices are in place. The business continuity and disaster recovery plans are in place and regularly tested to ensure they are fully functioning when needed.*

## Actions Taken

- MBBT, LLC conducted a review of the previous five years of technology purchases, including eRate, to determine the current state of technology spend. In collaboration with the Director of Technology, a five-year budget projection was created that includes the proper rotation of technology equipment.
  - <Omitted>
  - Upon review of the district's eRate utilization, it was discovered that <Omitted>
  - Upon recommendation, the district sought out quotes for their \_\_\_ system, and reduced the district's annual cost for product licensing. The district was previously paying \$11,391.66 annually for \_\_\_; this cost was reduced to an annual rate of \$3,850.00, and provided an immediate savings of \$7,541.66 annually. This will result in a savings of \$37,708.30 over the five-year budget projection.
- <Omitted>

## Recommendations

- The district should consider restructuring the current \_\_\_\_\_ licensing agreement to \_\_\_\_\_, which will result in significant savings for next fiscal year. This model \_\_\_\_\_. The district currently pays \$26,345.55 annually for \_\_\_\_\_ licensing. Under the new agreement structure, the district should realize a significant reduction in their licensing costs, while receiving additional features.
- <Omitted>
- <Omitted>
- <Omitted>
- It is recommended that the district evaluate the ROI in offering an extended Chromebook warranty compared to the cost of the current practices to determine which option is more service oriented and cost effective over the longer term.
- <Omitted>
- The Technology Department should have visibility into repair costs including parts and labor to evaluate the total cost of ownership on models of devices.
- The district should implement a documented business continuity plan that is updated annually and practiced/tested by the appropriate departments or department partnerships. This is a business unit's responsibility to maintain core business function when the network is experiencing a technology outage (system, network, cyberattack). The continuity plan should include input from all departments and be reviewed by the Superintendent's cabinet.

## Resources

- Learn from two current superintendents and one superintendent consultant how they lead district efforts to align priorities, and balance choice, cost, and outcomes. Each shares their strategies and expertise on total cost of ownership, student outcomes and budget management, and the value of investment. Tools and resources to evaluate, rethink and strengthen technology decision-making will be shared. Watch the EdWeb webinar recording on [Technology Investments and planning](#)
- The modern technology leader should be having critical conversations both inside and outside of the organization in order to be effective in a dramatically evolving environment. See CoSN's resource on [Critical Conversations](#)

## Data Governance

*A highly effective district, in collaboration with their technology program leader, manages the data programs that are needed for operations and instruction. This includes efficient workflows and integrated data systems as well as processes and systems that protect student, staff and district confidential information.*

### Commendations

- The district has identified a need to ensure proper data governance practices. This is the first step in building a comprehensive data governance program.

### Actions Taken

- A review of all policies pertaining to data privacy and technology management was executed. See the Policies and Procedures section for a policy and procedures comparison between District and Raytown C-2 School District, who is considered a model of best practice for the state.

### Recommendations

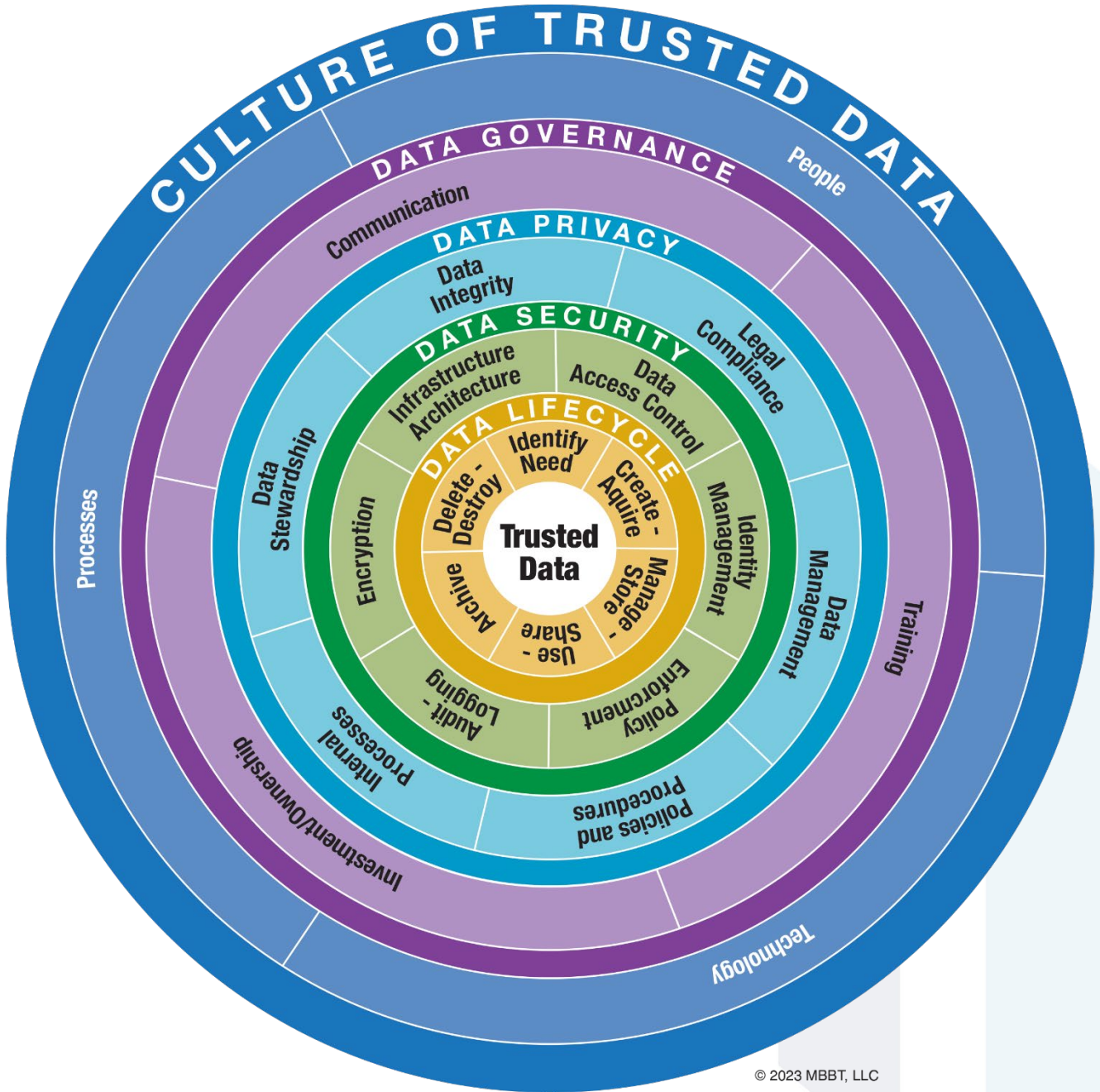
- Review all existing Board Policies and Administrative Procedures regarding data governance to ensure the district is complying with the adopted policies and procedures.
- Develop and implement a resource adoption process for all free and paid resources that include vetting all contracts for alignment with state, federal and district data governance requirements. This process should be reflected in Board Policy EHBC.
  - <Omitted>
- Interoperability is part of the foundation of a strong data governance program as it helps to ensure the fidelity of trusted data. When implemented with security best practices, interoperability allows for the exchange and utilization of data in a secure manner. CoSN is leading the effort to consolidate interoperability best practices into to a single universally accepted matrix. It is recommended that the district review the CoSN Interoperability Matrix and determine the district's current placement within the matrix. This information will help to guide the district's future technology and instructional planning.
- There are data cleanup efforts identified to ensure that appropriate account management and access is in place. It is recommended that the district prioritize this effort and support the work to ensure that all accounts have only the access needed to fulfill their job responsibilities and ensure compliance with FERPA's "legitimate educational interest" criteria.

### Resources

- Raytown School District has established a comprehensive [Data Governance Manual](#). This manual is a great reference to assist a district in establishing best practices in data governance.
- To assist districts in understanding all components necessary for a strong data governance program, MBBT, LLC created a Culture of Trusted Data Diagram. This diagram can be found in [Appendix A](#).

- CoSN has released several resources to assist districts on their journey to a mature interoperability program. This includes the [Interoperability Maturity Model](#) and the [Interoperability Maturity Model 7 Cost Calculator](#).
- Project Unicorn maintains a rubric for mapping student data: [Project Unicorn Rubric](#)
- CoSN's Protecting Privacy in Connected Learning initiative provides the guidance you need to create and improve your student data privacy program while building confidence and trust in your technology program across your community. You will find many resources on their initiative page [Student Data Privacy](#).
- The TLE Seal Program was developed by CoSN in collaboration with a diverse group of 28 school system leaders nationwide and with support from AASA, The School Superintendents Association, the Association of School Business Officials International (ASBO) and ASCD. More information about the seal, along with a district self-assessment, can be found on the [TLE Seal Program](#) page.


# APPENDIX A – Culture of Trusted Data Diagram





## APPENDIX B – Key Performance Indicators

Key Performance Indicators (KPIs) directed at the K-12 community are available through the [Council of Great City Schools](#). These KPIs have been carefully vetted by CTOs in the K12 community and are commonly used in many districts to measure and compare performance of network services and devices year over year. The technology metrics deployed are included below. Formulas for the key performance indicators are available [here](#).

- Devices
    - Average Age of Computers
    - Computers per Employee
    - Devices per Student
    - Advanced Presentation Devices per Teacher
  - IT Spend
    - Spending Percent of District Budget
    - Capital Investments Ratio to Operational Spending
    - Spending per Student
  - Network
    - Bandwidth per 1,000 Students (Mbps)
    - Days Usage Exceeds 75% of Capacity
    - WAN Availability
  - Support
    - Break/Fix Staffing Cost per Ticket
    - Help Desk Call Abandonment Rate
    - Help Desk Staffing Cost per Ticket
  - Systems Cost
    - Business Systems Cost per Employee
    - Instructional Systems Cost per Student
- 

## APPENDIX C – Documents Requested

- District Demographics
  - Site level data
  - Previous program evaluations
- Staffing
  - Technology department organizational chart
  - Job descriptions
- Technology Systems
  - Technology budgets
  - Procurement process
  - eRate purchase history
  - Inventory of technology hardware and software
- Policies
  - Technology Usage
    - Technology Safety
    - Access to Blocked or Filtered Content
    - Electronic & Social Networking Guidelines and Expectations
  - Student Use of Personal Electronic Devices for Instructional Purposes
  - Data Governance and Security
    - Incident and Data Breach Response Plan
    - Data Management
    - Account Management
    - Security Controls
    - Business Continuity and Data Recovery
  - Staff Use of Communication Devices
  - Authorized Signatures
  - Student Records
- Enterprise Systems Used by the District
  - Network diagrams
  - Logical network structure
  - Wi-Fi & broadband support
  - Server structure and data backup
  - Student Information System
  - Applications management
  - Identity management
  - Other major systems
  - Outsourced IT services
- Contracts for specific vendors and services

## APPENDIX D – Trusted Learning From the Ground Up

### Fundamental Data Governance Policies and Procedures



## Organization Strategic Plan Technology Alignment

### Introduction

Company XYZ (XYZ) has requested a plan for technology integration and enhancements over the next three years. Through my experience as a district CIO, I have discovered that a technology plan isolated from the organizational strategic plan has a lower probability of implementation and success. For this reason, I recommend that the organization's strategic plan purposefully integrates technology goals, action steps, and strategies. Technology should enable the organization's overall mission, vision, and goals and be strategically used to overcome barriers and accelerate innovation. However, suppose technology goals do not align with the overall goals and operations of the organization. In that case, you risk technology driving work in the wrong direction or the technology goals being set aside and not implemented.

XYZ's newly adopted strategic plan has several areas for technology goal alignment. Therefore, the strategic plan was used as a foundation for the technology plan process. A review of the strategic planning documents and staff meetings found that a large majority of XYZ's technology needs were included in discussions throughout the strategic planning process. However, many of these items did not make it into the strategic plan as action items. When XYZ begins the [YEAR] strategic plan, it is recommended that technology goals are discussed and integrated into the plan's measurable action steps.

[XXX] is integral to the three strategies and essential for achieving XYZ's mission. This work is integrated into all XYZ efforts through a culture of collaboration and teamwork, effective dialogue management, transparency, open communication, and skill-building to enhance interpersonal and working relationships. Therefore, it is intentional that the Technology Plan focuses on ensuring a positive experience for stakeholders.

The Technology Plan consists of five (5) goals that address areas prioritized by the strategic plan and XYZ staff.

1. **System 1.** Implement [system] that meets the needs of stakeholders.
2. **System 2.** Implement [system] that allows [organization specific goal]
3. **Staff Efficiency.** Implement systems and processes that improve staff efficiency.
4. **Data Analytics.** Implement processes and systems that allow staff to efficiently and accurately report historical and real-time data across the XYZ ecosystem.
5. **Stakeholder Experience.** Ensure stakeholders have easy-to-navigate access to XYZ resources and a positive experience when interacting with XYZ staff and systems.

## [YEAR] Strategic Plan Technology Components

### Technology Alignment in Strategic Planning Methodology

- **Discover Phase** identified key opportunities, including: [organization specific]
- **Define Phase** included [organization specific]

### Key Phrases from the Develop Phase

#### **Vision and Contradictions**

- [organization specific]

#### **Strategic Directions and Timeline**

- [organization specific]

#### **Implementation Steps**

The following specific actions were mentioned in the Implementation Steps but were not included in the sections above:

- [organization specific]

### Strategic Drivers

- Omitted to protect organization's identity

## XYZ [YEAR] Technology Plan

### Executive Summary

XYZ provides [organization specific]. XYZ is guided by three driving strategies:

1. [organization specific]
2. [organization specific]
3. [organization specific]

Technology should enable the organization's overall mission, vision, and goals and be strategically integrated to overcome barriers and accelerate innovation. Therefore, the [YEAR] Strategic Plan was used as a foundation to establish a plan for the technology integration and enhancements necessary to achieve XYZ's vision and strategic directions. Each technology goal is aligned with the components of the strategic plan and consists of action steps that assist XYZ in fulfilling its driving strategies and strategic directions.

[Organization specific] is integral to the three strategies and essential for achieving XYZ's mission. This work is integrated into all XYZ efforts through [organization specific]. Therefore, it is intentional that the Technology Plan focuses on ensuring [organization specific].

### Goals

1. **System 1.** Implement [system] that meets the needs of stakeholders.
2. **System 2.** Implement [system] that allows [organization-specific goal]
3. **Staff Efficiency.** Implement systems and processes that improve staff efficiency.
4. **Data Analytics.** Implement processes and systems that allow staff to efficiently and accurately report historical and real-time data across the XYZ ecosystem.
5. **Stakeholder Experience.** Ensure stakeholders have easy-to-navigate access to XYZ resources and a positive experience when interacting with XYZ staff and systems.

### Action Steps

#### Goal 1: System 1

**Goal:** Implement [system] that meets the needs of stakeholders.

#### **Aligned Strategic Plan components:**

- [organization specific]
- Strengthen in-house working with refined internal procedures, improved communication processes, and updated systems.
- Invest in regular, robust communication and targeted stakeholder engagement
- Develop onboarding processes and resources

### Action Steps

- [organization specific]

- [organization specific]
- [organization specific]
- [organization specific]

## **Goal 2: System 2**

**Goal:** Implement [system] that allows [organization-specific goal]

### **Aligned Strategic Plan components:**

- Strengthen in-house working with refined internal procedures, improved communication processes, and updated systems.
  - Leveraging technology to analyze performance data, streamlining efforts that enable data-driven decision-making
  - Implementing a cycle of continuous improvement of member experience through assessments of efficiency and making adjustments as appropriate
- [organization specific]
  - Invest in regular, robust communication and targeted stakeholder engagement

### **Action Steps**

- [organization specific]
- [organization specific]
- [organization specific]

## **Goal 3: Staff Efficiency**

**Goal:** Implement systems and processes that improve staff efficiency

### **Aligned Strategic Plan components:**

- Strengthen in-house working with refined internal procedures, improved communication processes, and updated systems. Including:
  - Enabling more opportunities for greater collaboration on XYZ programming
  - Leveraging technology to analyze performance data, streamlining efforts that enable data-driven decision-making
  - Implementing a cycle of continuous improvement of member experience through assessments of efficiency and making adjustments as appropriate
- [organization specific]
  - Invest in regular, robust communication and targeted stakeholder engagement

- Develop onboarding processes and resources

### **Action Steps**

Organizational specific information regarding approach to addressing the below action steps

#### Internal Communications

- Evaluate the integration and utilization of [organization specific]
- Continue the use of [organization specific]

#### Internal Resource Management

- [organization specific]

#### Project Management

- Evaluate a Project Management tool that will allow for consistent task and project management tracking across all teams
- Create internal processes and explore technology solutions to assist with managing tasks and key information

#### Staff Training

- Evaluate the utilization of existing tools to ensure applicable features are fully utilized
- Create training material for appropriate utilization of staff tools
  - Document internal processes for each tool
- Train all staff on applicable tools and internal processes (SOP) to ensure consistent utilization

#### Business Continuity & Incident Response

- Documentation and document management for standard operating procedures
- Evaluate internal incident response processes to include response to a cybersecurity threat.

### **Goal 4: Data Analytics**

**Goal:** Implement processes and systems that allow staff to efficiently and accurately report historical and real-time data across the XYZ ecosystem.

#### **Aligned Strategic Plan components:**

- [organization specific]
- Strengthen in-house working with refined internal procedures, improved communication processes, and updated systems. Including:
  - Leveraging technology to analyze performance data, streamlining efforts that enable data-driven decision-making
  - Implementing a cycle of continuous improvement of member experience through assessments of efficiency and making adjustments as appropriate



### Action Steps

- Conduct an evaluation of existing data systems, data sources, and critical historical data to determine the need for a data warehouse and data dashboards
- Establish tools and processes needed to analyze member content access
- Establish tools and processes to address the analysis of data across [organization specific]

### Goal 5: Stakeholder Experience

**Goal:** Ensure stakeholders have easy-to-navigate access to XYZ resources and a positive experience when interacting with XYZ staff and systems.

#### Aligned Strategic Plan components:

- [organization specific]
- [organization specific]
- Reevaluate XYZ's frameworks for [organization specific] systems

### Action Steps

- [organization specific]
- [organization specific]
- Evaluation of the ticketing system to ensure full utilization of applicable functions
- Evaluation of XYZ tech support to ensure support is meeting XYZ needs

### Evaluation

This technology plan will be evaluated and updated according to the strategic plan evaluation and review cycle. Action steps in this plan will be reported accordingly.