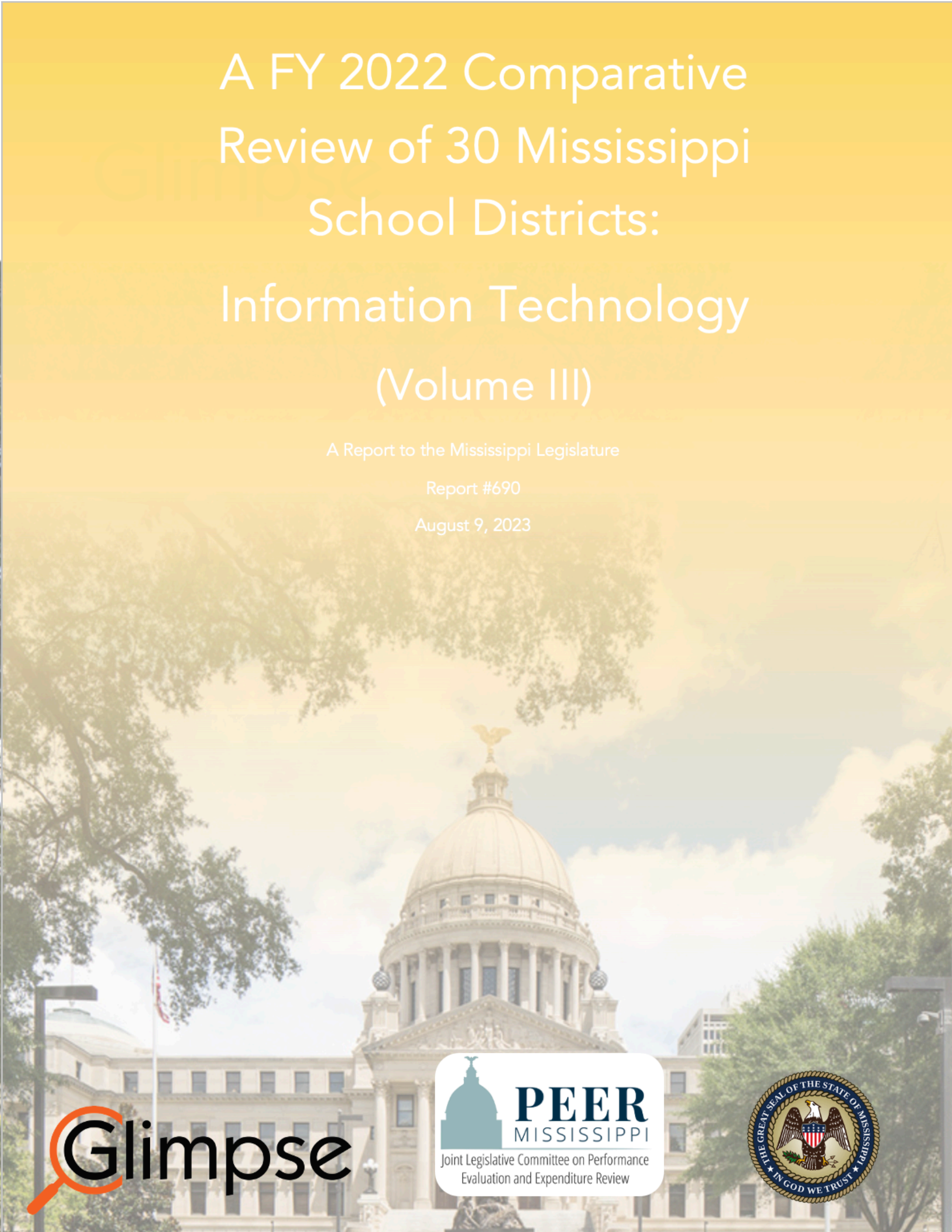
A FY 2022 Comparative Review of 30 Mississippi School Districts: Information Technology (Volume III)

A Report to the Mississippi Legislature

Report #690

August 9, 2023



Glimpse

PEER MISSISSIPPI
Joint Legislative Committee on Performance Evaluation and Expenditure Review

PEER Committee

Jerry Turner, **Chair**
Charles Younger, **Vice-Chair**
Sollie Norwood, **Secretary**

Senators:
Kevin Blackwell
Lydia Chassaniol
Dean Kirby
Chad McMahan
John Polk

Representatives:
Richard Bennett
Cedric Burnett
Becky Currie
Carolyn Crawford
Timmy Ladner
Percy Watson

Executive Director:
James F. (Ted) Booth

About PEER:

The Mississippi Legislature created the Joint Legislative Committee on Performance Evaluation and Expenditure Review (PEER Committee) by statute in 1973. A joint committee, the PEER Committee is composed of seven members of the House of Representatives appointed by the Speaker of the House and seven members of the Senate appointed by the Lieutenant Governor. Appointments are made for four-year terms, with one Senator and one Representative appointed from each of the U.S. Congressional Districts and three at-large members appointed from each house. Committee officers are elected by the membership, with officers alternating annually between the two houses. All Committee actions by statute require a majority vote of four Representatives and four Senators voting in the affirmative.

Mississippi's constitution gives the Legislature broad power to conduct examinations and investigations. PEER is authorized by law to review any public entity, including contractors supported in whole or in part by public funds, and to address any issues that may require legislative action. PEER has statutory access to all state and local records and has subpoena power to compel testimony or the production of documents.

PEER provides a variety of services to the Legislature, including program evaluations, economy and efficiency reviews, financial audits, limited scope evaluations, fiscal notes, and other governmental research and assistance. The Committee identifies inefficiency or ineffectiveness or a failure to accomplish legislative objectives, and makes recommendations for redefinition, redirection, redistribution and/or restructuring of Mississippi government. As directed by and subject to the prior approval of the PEER Committee, the Committee's professional staff executes audit and evaluation projects obtaining information and developing options for consideration by the Committee. The PEER Committee releases reports to the Legislature, Governor, Lieutenant Governor, the agency examined, and the general public.

The Committee assigns top priority to written requests from individual legislators and legislative committees. The Committee also considers PEER staff proposals and written requests from state officials and others.

Joint Legislative Committee on Performance Evaluation and Expenditure Review
PEER Committee

P.O. Box 1204 | Jackson, Mississippi 39215-1204

Representatives
Jerry Turner
Chair
Richard Bennett
Cedric Burnett
Carolyn Crawford
Becky Currie
Timmy Ladner
Percy Watson

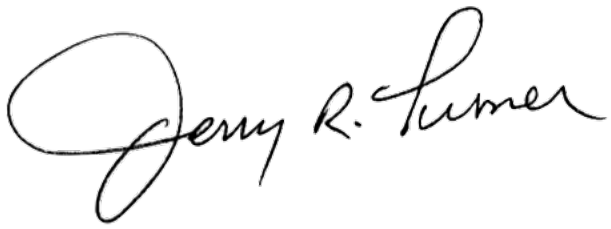
Senators
Charles Younger
Vice Chair
Sollie Norwood
Secretary
Kevin Blackwell
Lydia Chassaniol
Dean Kirby
Chad McMahan
John Polk

Executive Director
James F. (Ted) Booth

August 9, 2023

Honorable Tate Reeves, Governor
Honorable Delbert Hosemann, Lieutenant Governor
Honorable Philip Gunn, Speaker of the House
Members of the Mississippi State Legislature

On August 9, 2023, the PEER Committee authorized release of the report titled ***A FY 2022 Comparative Review of 30 Mississippi School Districts***.



Representative Jerry Turner, Chair

This report does not recommend increased funding or additional staff.

Phone: (601) 359-1226 | Fax: (601) 359-1420 | www.peer.ms.gov
Woolfolk Building | 501 North West St, Suite 301-A | Jackson, MS 39201

This page left intentionally blank.

Table of Contents

Letter of Transmittal i

List of Exhibits iv

Report Highlights v

Restrictions 1

Executive Summary 2

Benchmarking 8

Key Performance Indicators 12

Appendix A: District Detailed Commendations, Observations & Potential Opportunities 24
Appendix B: District Data Tables 42

List of Exhibits

Exhibit 1: District Metrics for School Year 2021-2022 5
Exhibit 2: District Recommendations for Improvement 6
Exhibit 3: Technology Benchmarks 9
Figure 3.1: End User Device Model 9
Figure 3.2: Type of IT Department 9
Figure 3.3: Average Spending per Student 9
Figure 3.4: Traditional and Educational Technology Support Functions 10
Figure 3.5: Plans to Upgrade Internet Connection 10
Figure 3.6: Software for IT Orders and Requests 10
Figure 3.7: Location of Data Backups 11
Figure 3.8: Disaster Recovery Plan 11
Figure 3.9: Technology Plan 11
Figure 3.10: Households with Wi-Fi/broadband Capabilities 11
Exhibit 4: IT Spending as Percent of District Budget 14
Exhibit 5: IT Spending per Student 15
Exhibit 6: Average Age of Devices 16
Exhibit 7: Devices per Staff Member 17
Exhibit 8: Devices per Student 18
Exhibit 9: Network-bandwidth per Student 19
Exhibit 10: Network Days Usage Exceeded 75% of Capacity 20
Exhibit 11: Advanced Presentation Devices per Teacher 21
Exhibit 12: Devices per IT Staff 22
Exhibit 13: Percentage of Households with Wi-Fi/broadband Capabilities 23

PEER MISSISSIPPI
Joint Legislative Committee on Performance Evaluation and Expenditure Review

A FY 2022 Comparative Review of 30 Mississippi School Districts: Information Technology

Report Highlights

August 9, 2023

CONCLUSION: A review of the information technology (IT) programs and expenditures for 30 Mississippi school districts in FY 2022 showed opportunities for districts to improve service levels and increase efficiency. Many school districts lack critical plans to manage technology and disaster recovery. Ten districts reported that 50% or less of their students' households have access to the internet. Additionally, all districts reported network bandwidth per student below that of regional and national peers. There have been both state and federal efforts to increase access to quality internet in Mississippi, but implementation of those efforts will take time. Data on technology devices in the districts demonstrate the need for annual device inventories and removal of obsolete and nonfunctioning devices. Six districts separate their IT support and educational technology support functions into two departments, which is more costly that operating a single department.

BACKGROUND

In FY 2023, PEER received funding to contract with Glimpse K12 (an education technology company headquartered in Huntsville, Alabama) to conduct a comparative review of 30 school districts. This report focuses on one of seven areas of review—information technology (Volume III). Other non-instructional reports include:

- Finance and Supply Chain (Volume I);
- Human Resources (Volume II);
- Nutrition (Volume IV);
- Operations (Volume V); and,
- Transportation (Volume VI).

KEY FINDINGS

- **Many of the school districts reviewed lack critical plans to manage technology and disaster recovery.**
  Only 57% of districts have a documented technology plan, and 43% of districts have a disaster recovery plan.
- **Three districts reviewed keep data backups onsite only, which is risky.**
  Offsite backup is critical to recovering vital records and data.
- **Of 24 districts that participated in a survey, 10 (42%) reported that 50% or less of their students' households have access to the Internet.**
  School districts play a critical role in providing students with essential resources for learning and technological proficiency.
- **All districts reported network bandwidth per student below that of regional and national peers.**
- **Of the 30 districts reviewed, nine had staff technology device ratios greater than two per staff member, while another five districts had student device ratios greater than two.**
  Outdated and non-functioning devices in a district's inventory can distort these ratios; therefore, districts must conduct annual device inventories and remove devices as needed.
- **Of the 30 districts reviewed, 14 (47%) had ratios of more than 1,000 student and employee devices per IT staff member.**
  This ratio assesses the efficiency of a district's technology support infrastructure and can aid in assessing staffing levels.
- **Most districts reviewed use a single department for IT support and educational technology support functions; however, six (20%) separate these functions into two departments, which is more costly.**
  Districts that separated functions spent $43.02 more per student.

The Legislature has made efforts to expand broadband in the state, including the creation of the Broadband Expansion and Accessibility of Mississippi (BEAM) office in 2022. The office, functioning under the Mississippi Department of Finance and Administration, is responsible for overseeing all broadband expansion efforts in the state and will administer broadband grants. According to BEAM's website, in May 2023, the U.S. Department of the Treasury approved BEAM's plan for $151.4 million through the Capital Projects Fund.

Additionally, Mississippi was recently allocated $1.2 billion from the federal Broadband Equity, Access, and Deployment (BEAD) program. Mississippi's BEAM office will allocate the funds through grants to increase access to quality internet.

Although steps have been taken recently by policymakers to improve broadband access, implementation of the systems will take time.

A Look at Internet Bandwidth

- For FY 2022, the median network-bandwidth per student was 2.55 for the 30 districts reviewed, while the regional peer average was 52 and the lower range for national peers was 194. These numbers clearly demonstrate the need for improved bandwidth in the districts.
- Five districts did not track network usage levels in FY 2022. Of the 25 districts that did track network usage levels, nine reported one day or less when they experience network capacity issues. Another nine primarily experienced capacity issues during annual testing, ranging from nine to 40 days per year. Seven districts reported exceeding 75% capacity for 77 days or more.
- Most districts are only maximizing device usage for testing and not for daily learning.
- Districts should balance investments in internet bandwidth and the educational usage of devices.

Issues with Missing Data

Some districts could not provide all requested information, which inhibited this review and inhibits the district's ability to effectively manage its IT department.

Five Most Cost-Effective Districts

The following districts showed positive performance across cost-related Key Performance Indicators:

- Coahoma;
- Grenada;
- Pass Christian;
- Sunflower; and,
- Walthall.

SUMMARY OF RECOMMENDATIONS FOR DISTRICTS

1. In FY 2024, each district superintendent, in consultation with the district's technology program personnel, should review the information from this report and implement each of the relevant district recommendations to increase efficiency, improve service levels, and/or achieve cost-savings.
2. For districts that were unable to provide certain information during this review pertaining to their technology programs (e.g., network usage levels), technology program personnel should begin collecting and monitoring this data on an ongoing basis.
3. Technology program personnel should provide an annual report to the district superintendent regarding the status of the technology program using the measures included in this review.
4. For the six districts that separate their IT support and education technology support functions into two departments, and for Perry which contracts its IT functions, the districts should review their current structure and determine whether they should shift to a traditional structure or provide justification for continuing the current, more costly structure.
5. Districts should continue investing in network bandwidth, especially those experiencing capacity issues.
6. Districts should look to their high-performing peers to determine strategies for becoming more cost-effective.

SUMMARY OF RECOMMENDATIONS FOR THE MISSISSIPPI DEPARTMENT OF EDUCATION (MDE)

1. To aid school districts in creating technology and disaster recovery plans, MDE should develop a plan template and provide guidance documents for technology staff to use when developing these plans.
2. MDE should periodically (e.g., every two years) conduct the following surveys, which would enable it to better understand the resources and support needed to assist districts in improving their technology programs:
    a. a detailed technology survey for district technology leaders, and
    b. a detailed survey for teaching staff regarding technology use in the classroom.

For more information, contact: (601) 359-1226 | P.O. Box 1204, Jackson, MS 39215-1204
Representative Jerry Turner, Chair | James F. (Ted) Booth, Executive Director

Restrictions

GlimpseK12 is providing this report to the PEER Committee based on data and extrapolated information provided by the school district at the time of the report. GlimpseK12 does not independently verify the data or information provided to them by the district or its programs. If the district chooses to provide additional data or information, GlimpseK12 reserves the right to amend the report.

All decisions made concerning the contents of this report are understood to be the sole responsibility of any organization or individual making the decision. GlimpseK12 does not and will not in the future perform any management functions for any organizations or individuals related to this report.

This report is solely intended to be a resource guide.

PEER staff contributed to the overall message of this report and recommendations based on the data and information provided by Glimpse. PEER staff also provided quality assurance and editing for this report to comply with PEER writing standards; however, PEER did not validate the source data collected by Glimpse.

Executive Summary

This report presents an assessment of 30 school districts reviewing data from the 2021-2022 school year. Appendix A on page 24 provides a discussion of detailed commendations, observations, and potential opportunities for each district.

Key takeaways regarding technology services that support both educational and traditional information technology functions:

- Many school districts lack critical plans to manage technology and disaster recovery:
    - Only 57% of school districts reviewed have a documented technology plan, which can help schools align their technology goals with their overall educational mission and strategic plan, allocate resources effectively, provide guidance for teacher training, and establish data security and compliance policies.
    - Only 43% of school districts reviewed have a disaster recovery plan, which can help minimize disruption to school operations during an emergency, ensure safety for students and staff, protect data and intellectual property, ensure schools comply with regulations, and ensure sustainability by enabling schools to recover from a disaster.
- Three districts (Hattiesburg, Perry, and Water Valley) keep data backups on-site only. On-site backups for school data are risky, and off-site backup is critical:
    - Keeping data backups only on-site is risky because they could be lost or damaged in the event of a disaster or emergency, making it impossible to recover vital records and data.
    - Off-site backup can protect against data loss due to disasters, cyberattacks, accidental deletion, or corruption.
    - In 2022, ransomware[1] attacks affected 45 U.S. school districts operating 1,981 schools. This highlights the importance of schools having comprehensive disaster recovery plans that include off-site backup.
- In 80% of the districts, parent households were surveyed about their broadband and Wi-Fi accessibility. Out of the 24 districts that participated, 41.7% (10) reported that 50% or less of their students' households have access to the internet. For this reason, the school district plays a critical role in providing students with essential resources for learning and technological proficiency.

Key takeaways regarding technology services performance:

- Approximately one-third of the districts examined reported device per student or staff member ratios greater than the state median and the regional average.[2] Device ratios should typically be higher than one device per staff member or student. Of the districts examined, nine had device per staff member ratios greater than two, and five had device per student ratios greater than two. A substantial number of outdated devices within a district's inventory can distort several key performance indicators, including the device per staff ratio, device per student ratio, and the average age of devices. The ratio may include unusable obsolete devices, and therefore does not accurately reflect the number of usable devices available to students and staff. The district should examine the device inventory thoroughly and remove obsolete devices from service.
- Out of the districts examined, 14 had ratios of more than 1,000 devices per information technology (IT) staff member. The device to technology staff member ratio is a valuable metric to evaluate the efficiency of a district's technology support infrastructure and can aid in assessing staffing levels. However, it is important to recognize that this ratio should be used as an indicator and not the sole determining factor for evaluating staffing levels.

[1] A type of malicious software designed to block access to a computer system until a sum of money is paid.

[2] The regional average is based on data collected from Alabama, Tennessee, Mississippi, and Louisiana school districts.

Other relevant factors include the volume and complexity of support tickets, project-based workloads, and the district's strategic objectives. Districts should consider the skillset and expertise of IT staff members since a larger team does not guarantee better support if staff lacks the necessary skills and knowledge. The following 14 districts should review staffing levels after correcting device inventory levels: Canton, George, Greenville, Grenada, Hattiesburg, Holmes, Louisville, McComb, Natchez-Adams, North Panola, Okolona, Simpson, Water Valley, Wayne, and Yazoo County.

- In 73% of the districts examined, a single blended department was responsible for traditional information technology support functions and educational technology support services. On average, districts that separated these functions into two distinct departments spent $43.02 more per student. However, the assessment team could not determine whether this increased investment improved student outcomes. Whether a district should have one IT department handling both traditional IT and educational support or separate departments for each function can vary depending on several factors. The choice should consider factors like district size, available resources, expertise, and desired technology integration. Close collaboration between the IT department and educators is necessary for successful implementation. Both approaches have advantages and disadvantages, and the best choice will depend on the specific needs and goals of the school district.
    - Having one department offers resource consolidation, synergy, and comprehensive support. It promotes collaboration and cost-effectiveness but may require a broad range of skills and could lead to prioritization challenges.
    - Separate departments allow specialization, targeted support, and clearer focus. They prevent duplication of resources but may face communication challenges, potential integration issues, and higher costs.
- All reviewed districts reported network bandwidth per student below that of regional and national peers. Another measure by the assessment team was the number of days in which district network usage exceeded 75% of capacity. This measure identifies potential network capacity problems but also understanding how much a district utilizes technology daily. Out of the 25 districts that tracked network usage levels, nine reported one day or less when they experienced network capacity issues. Another nine primarily experienced capacity issues during annual testing, ranging from 9 to 40 days per year. Only seven districts reported exceeding 75% capacity for 77 days or more. While many districts have invested in a considerable number of devices for students and staff, as well as network bandwidth upgrades, it appears that most districts are only maximizing device usage for testing and not for daily learning. Districts need to balance investments in internet bandwidth and the educational usage of devices. While high-speed internet ensures equal access to online resources, districts should provide training, curriculum development, and technology tools to teachers. This balance empowers teachers to utilize online resources effectively, create engaging learning experiences, and align infrastructure with educational goals.
- Some districts could not provide all requested information which inhibited the assessment team's ability to conduct a full analysis of information technology functions and inhibits the district's abilities to effectively manage the IT department. Key performance indicators on pages 12 through 23 as well as the data table found in Appendix B on page 42 note which districts were unable to provide information.

Top five most cost-effective districts:

The districts listed below have been recognized as the top performers in terms of technology costs, as they have shown positive performance across cost-related key performance indicators. Positive performance indicates that these districts either meet or exceed the median performance level of their state's comparative peers, and in many cases, they surpass the average performance of their regional peers. Additionally, other factors were considered, including the median age of computers, the number of devices, the quantity of advanced presentation devices, as well as the levels of bandwidth and staffing support.

However, it is worth noting that metrics related to bandwidth revealed that the following assessed districts fell below regional averages.

- Coahoma;
- Grenada;
- Pass Christian;
- Sunflower; and,
- Walthall.

Recommendations:

- The assessment team recommends that every school should have both technology and disaster recovery plans in place. To aid districts in creating these important documents, the Mississippi State Department of Education should consider developing a plan template and providing guidance documents for technology staff to use when developing these plans.
- For three districts (Hattiesburg, Perry, Water Valley), the assessment recommends that they immediately pursue a backup strategy that includes cloud-based backups.
- The assessment team recommends that the six districts (Canton, Holmes, Louisville, Perry, Simpson, Walthall) that have not surveyed parents regarding household internet availability do so. Conducting an annual survey can help schools better understand the needs of their students and families and develop effective strategies to address any digital disparities. An annual survey assessing household internet availability for parents of students in public school districts can be beneficial the following ways:
    - It can help identify households without internet or limited access, enabling schools and policymakers to better understand the extent of the problem and take appropriate steps to address it.
    - The survey can facilitate planning for remote learning by providing insights into the technology resources available to students at home. This can inform the development of strategies to provide internet access and technology resources to those who require them.
    - The survey can enhance communication between schools and parents by identifying households with limited internet access and helping schools to reach out to them through alternative means.
    - Schools can use the survey results to evaluate the effectiveness of their technology programs and assess whether all households are being reached equitably.
- All districts should perform an annual inventory of devices and remove obsolete and non-functioning devices from inventory.
- To enable equitable access, enhance learning, develop teachers, and sustain growth in educational technology integration, districts should prioritize and balance resources by reviewing devices, bandwidth, and effective technology integration supports. Also, all districts should track daily network usage levels.
- To enhance the comprehension of each school district's technology infrastructure, internet capacity, and utilization of technology, the Mississippi State Department of Education should periodically conduct a detailed technology survey with district technology leaders. The outcomes of this survey would offer insights into various aspects, such as the complexity of support tickets, workload on project-based tasks, strategic objectives, skillsets, and expertise of technical staff, as well as future requirements. Also, a detailed survey could be conducted among teaching staff to gain an understanding of how technology is being utilized in the classroom. These two surveys would enable the state department to better understand the necessary resources and support to assist school districts in closing the digital divide and improving the effectiveness and efficiency of deployed technology.

All 30 districts are listed in the table below.

In the chart below, districts that have "one blended" IT department have one IT department that handles both traditional and educational support functions. Districts that have "two separate" IT departments have two distinct IT departments for each function.

Exhibit 1: District Metrics for School Year 2021-2022

District Metrics for School Year 2021-2022								
District	Traditional/ Educational Functions	Total Annual Technology Expenditures	Total Number of District Staff	Total Student Enrollment	Number of Employee Devices	Number of Student Devices	Total IT, Support Staff FTE	District State Grade
Attala	One Blended	$346,250	201	985	147	1,506	2.0	B
Canton	Two Separate	$1,051,473	491	3,300	338	6,470	4.0	B
Coahoma	One Blended	$483,543	221	1,208	300	2,000	3.0	D
Copiah	One Blended	$582,382	330	2,281	500	2,350	4.0	C
George	Two Separate	$1,175,856	616	4,083	2,755	6,300	5.0	A
Greenville	One Blended	$882,595	666	3,644	1,200	5,800	5.0	B
Grenada	One Blended	$2,954,387	606	3,628	710	4,596	4.5	A
Hattiesburg	One Blended	$1,790,138	655	3,569	750	9,064	8.0	A
Hollandale	One Blended	$211,984	107	568	250	950	2.0	D
Holmes	Two Separate	$1,450,640	438	2,542	450	8,300	3.0	C
Louisville	Two Separate	$953,598	385	2,553	375	2,800	3.0	C
Madison	One Blended	$3,894,115	1,850	13,096	1,600	15,500	18.0	A
McComb	Two Separate	$1,179,968	444	2,286	927	6,878	5.0	C
Moss Point	One Blended	$778,003	375	1,563	450	2,200	5.0	C
Natchez-Adams	One Blended	$2,242,956	546	2,830	1,562	3,879	4.0	B
North Panola	Not Provided	$664,078	187	1,250	230	2,615	2.0	D
Noxubee	One Blended	$941,654	192	1,401	150	1,500	3.0	D
Okolona*	One Blended	$171,652	58	518	150	800	1.0	C
Oxford	Two Separate	$3,435,894	646	4,682	1,491	5,636	10.0	A
Pass Christian	One Blended	$1,130,479	294	1,975	700	3,199	4.5	A
Perry	Contracted	$894,283	176	929	131	630	2.0	C
Simpson	One Blended	$628,179	485	3,102	1,509	3,805	5.0	C
Sunflower	One Blended	$1,518,159	542	3,061	1,000	3,288	5.0	B
Tate	One Blended	$419,281	314	2,000	307	2,030	3.0	B
Walthall	One Blended	$661,075	315	1,702	400	2,060	4.0	C
Water Valley	One Blended	$122,629	157	1,057	150	1,700	1.0	B
Wayne	One Blended	$2,079,187	502	2,850	590	5,210	5.0	B
West Point	One Blended	$1,014,995	426	2,770	500	3,500	7.0	C
Wilkinson	One Blended	$167,436	161	888	233	1,328	4.0	F
Yazoo County	One Blended	$725,740	224	1,385	500	2,848	3.0	C
* Data for total number of district staff was unable to be verified								

The chart below summarizes recommendations for improvement.

More detailed information regarding recommendations to improve service levels can be found in Appendix A.

Exhibit 2: District Recommendations for Improvement

District	Recommendations
Attala	The district should develop a formally documented technology plan along with a formally documented disaster recovery plan.
Canton	The district should conduct an annual survey assessing household internet availability for parents of students in public school districts.
Coahoma	The district should develop a formally documented technology plan.
Copiah	None.
George	The district should develop a formally documented disaster recovery plan, invest in network bandwidth, and review its device inventory and remove obsolete devices.
Greenville	The district should develop a formally documented technology plan along with a formally documented disaster recovery plan. The district should review current staffing levels and service delivery to ensure staffing levels are appropriate for the district's goals and needs.
Grenada	The district should develop a formally documented technology plan along with a formally documented disaster recovery plan.
Hattiesburg	The district should establish an additional off-site, cloud-based data backup and review obsolete devices.
Hollandale	The district should develop a formally documented disaster recovery plan, evaluate the current device inventory, and clean up the inventory to accurately reflect usable staff and student devices.
Holmes	The district should develop a formally documented disaster recovery plan. The district should remove obsolete devices from service, as the high number of devices in inventory distorts the ratio of devices per technology staff member. The district should do an annual survey assessing household internet availability for parents of students in public school districts.
Louisville	Investments are needed in network infrastructure and technology support staff. The district should conduct an annual survey assessing household internet availability for parents of students in public school districts.
Madison	The district should develop a formally documented disaster recovery plan.
McComb	The district should develop a formally documented technology plan along with a formally documented disaster recovery plan. The district should carefully review the device inventory, remove obsolete devices from service, and calculate the ratio of devices per staff member to ensure appropriate staffing in technology.
Moss Point	The district should examine overall staffing levels for technology.
Natchez-Adams	The district should develop a formally documented technology plan along with a formally documented disaster recovery plan. Therefore, the district should conduct a thorough review to ensure accurate representation of staff and student-usable devices and remove obsolete devices from service.
North Panola	The district should conduct a thorough review to ensure an accurate representation of usable staff and student devices and remove obsolete devices from service. The district did not provide information regarding whether it had a formal technology plan or disaster recovery plan; if it does not have either of these plans documented, the district should develop these.

Noxubee	The district should evaluate its spending on overall staffing levels for technology versus further investment in network and hardware to ensure a balance between adequate support and appropriate technological capabilities.
Okolona	The district should conduct a comprehensive review to ensure an accurate representation of staff and student-usable devices and retire obsolete devices.
Oxford	The district should develop a formally documented technology plan along with a formally documented disaster recovery plan, conduct a comprehensive review to ensure an accurate representation of staff devices, and retire outdated devices.
Pass Christian	The district should review obsolete devices. Further investment in network capacity should be made.
Perry	The district should develop a formally documented disaster recovery plan. The district should review how much of expenditures were for contracted services versus hardware and consider whether increasing staff would be a better investment than outsourcing. The district should conduct an annual survey assessing household internet availability for parents of students in public school districts.
Simpson	The district should conduct a comprehensive review to ensure an accurate representation of staff devices and retire outdated devices. The district should also conduct an annual survey assessing household internet availability for parents of students in public school districts.
Sunflower	None.
Tate	The district should develop a formally documented technology plan.
Walthall	The district should develop a formally documented disaster recovery plan. The district should do an annual survey assessing household internet availability for parents of students in public school districts.
Water Valley	The district should develop a formally documented technology plan along with a formally documented disaster recovery plan. The ratio of devices per technology staff member is the second highest of state-comparative peers, indicating that the district should consider additional resources for technology support. The district should consider increasing its investment in technology.
Wayne	The district should develop a formally documented technology plan. The district should also conduct a comprehensive review to ensure an accurate representation of staff and student-usable devices and retire obsolete devices.
West Point	The district should develop a formally documented technology plan along with a formally documented disaster recovery plan. The ratio of devices per technology staff member is the fifth lowest of state-comparative peers, indicating that the district should consider additional resources for technology support. The district should consider increasing its investment in technology.
Wilkinson	The district should develop a formally documented disaster recovery plan. The district should review its overall technology plan and adjust if necessary.
Yazoo County	The district should develop a formally documented technology plan along with a formally documented disaster recovery plan, evaluate device inventory, and review obsolete devices.

Benchmarking

Benchmarking is the process of comparing and measuring different organizations' activities. When combined with key performance indicator comparisons, more insight can be gained to identify best practices and opportunities for improvement.

Technology benchmarks help clarify the school districts' deployment and management of technology. Attention should be paid to each benchmark and the overall optimal productivity represented through the relationship between benchmarks and key performance indicators.

Benchmarking Factors for this assessment were limited to:

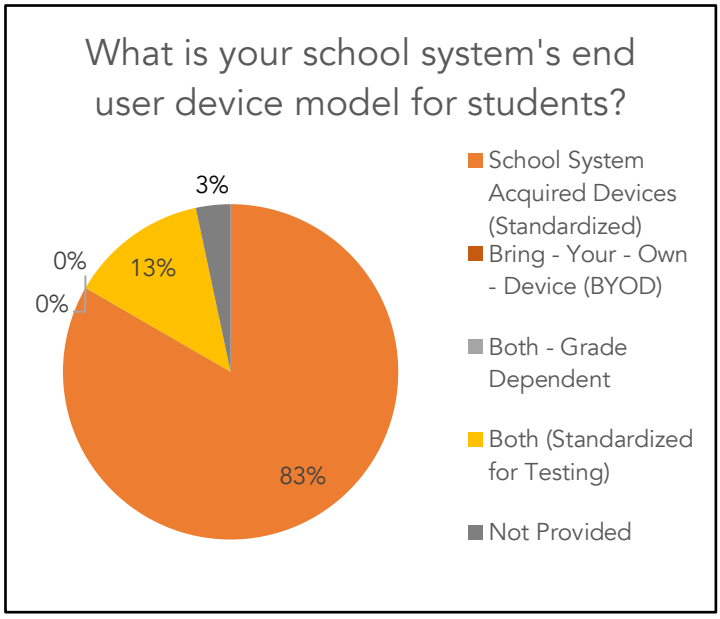
- Student access to technology at school and home;
- End user[3] device deployment and support model;
- School district strategy regarding instructional technology pedagogy; and,
- Data integrity and sustainability of operations.

Benchmark information was received from 29 out of 30 districts. The technology department of North Panola was unable to meet with the assessment team despite multiple attempts, and it did not respond to email inquiries regarding data follow-up. Consequently, its capacity to provide the necessary benchmarking data was impeded.

[3] The term "end user device" refers to personal desktop computers, laptops, tablets, or other technologies used by employees or students.

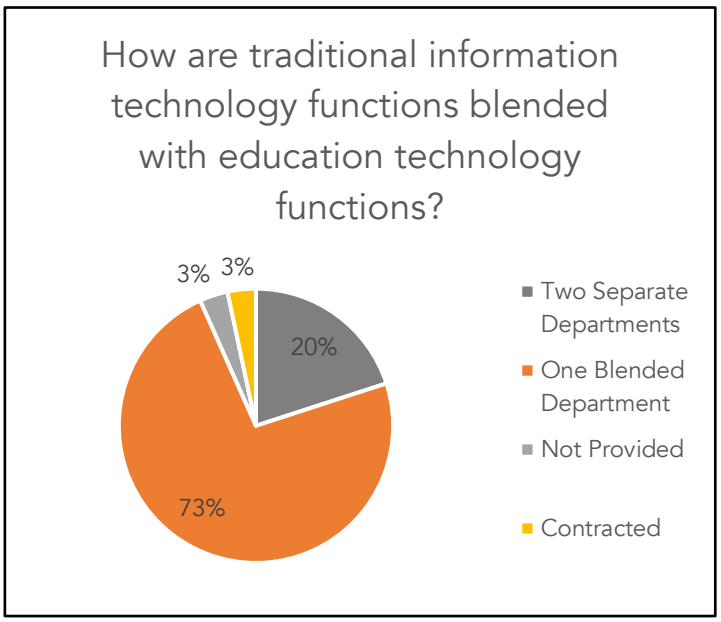
Exhibit 3: Transportation Benchmarks

Figure 3.1: End User Device Model



*Due to rounding, the percentages in this pie chart do not add up to 100%.

Figure 3.2: Type of IT Department



*Due to rounding, the percentages in this pie chart do not add up to 100%.

Figure 3.3: Average Spending per Student

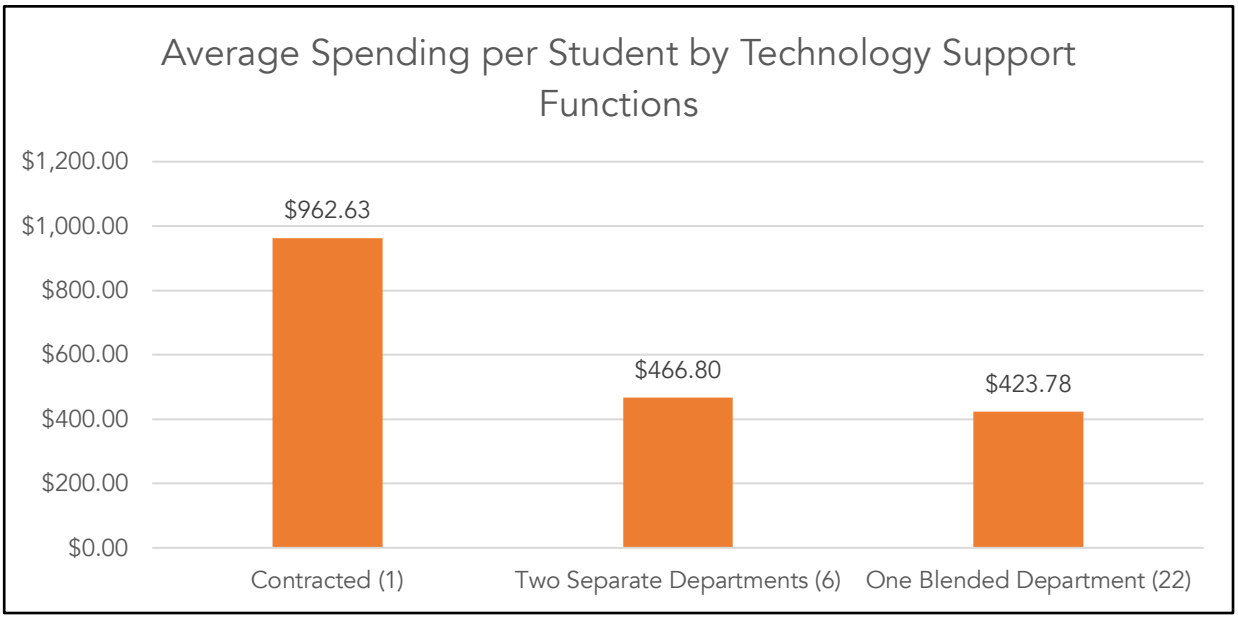


Figure 3.4: Traditional and Educational Technology Support Functions

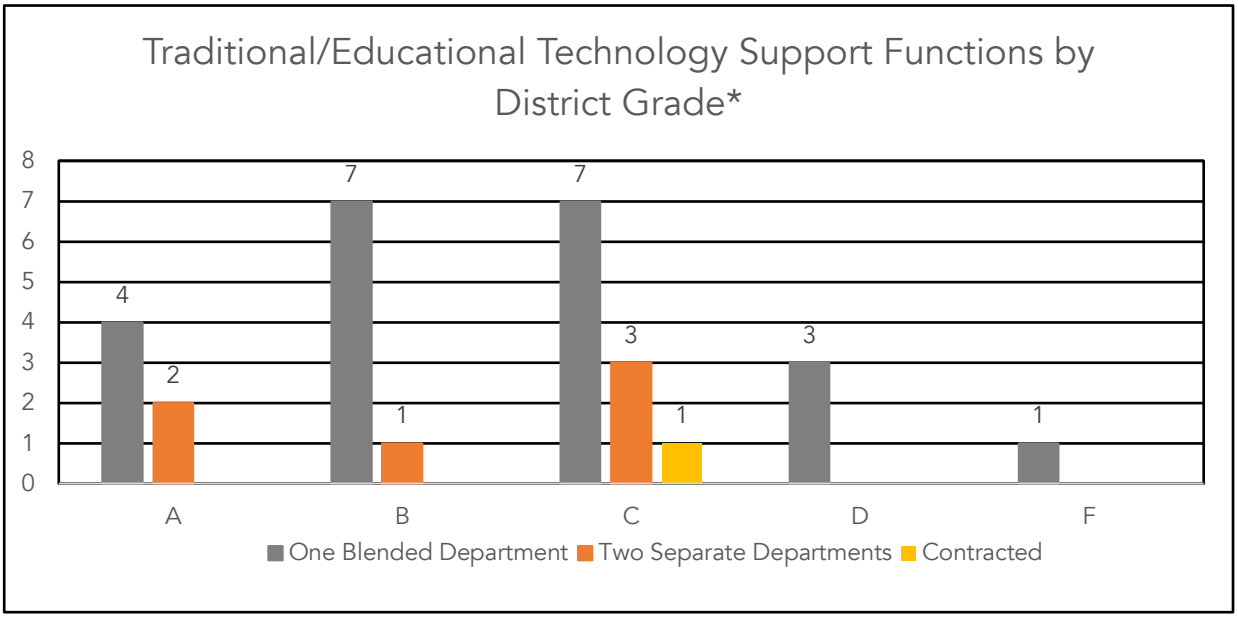


Figure 3.5: Plans to Upgrade Internet Connection

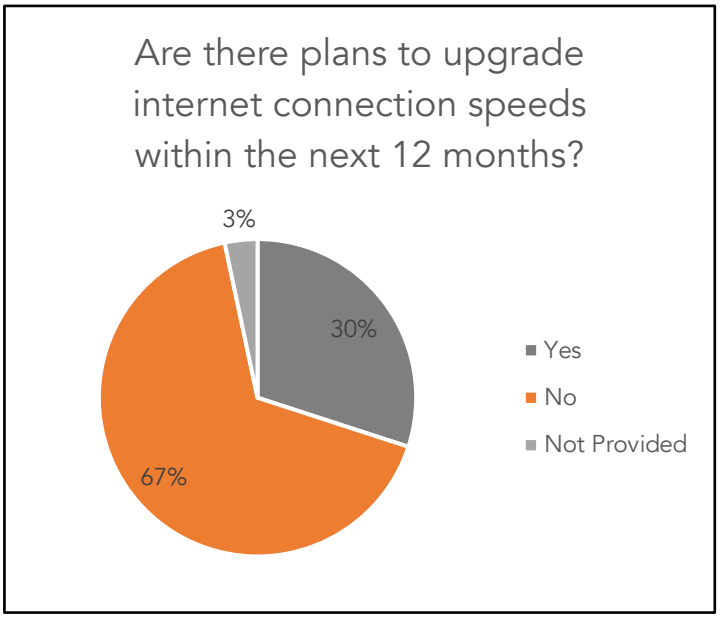


Figure 3.6: Software for IT Orders and Requests

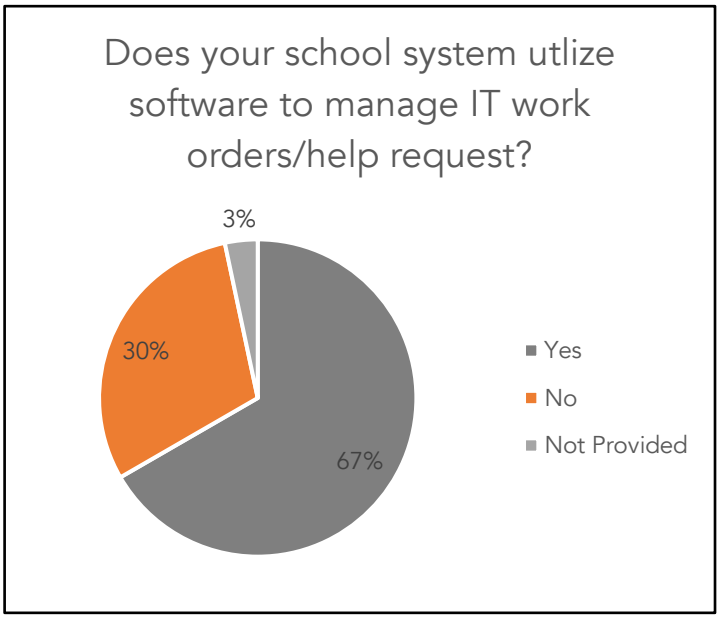


Figure 3.7: Location of Data Backups

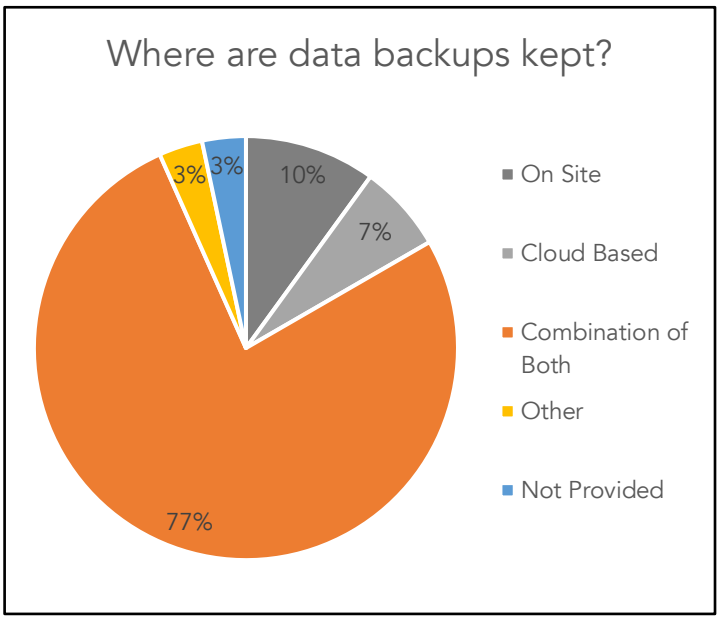


Figure 3.8: Disaster Recovery Plan

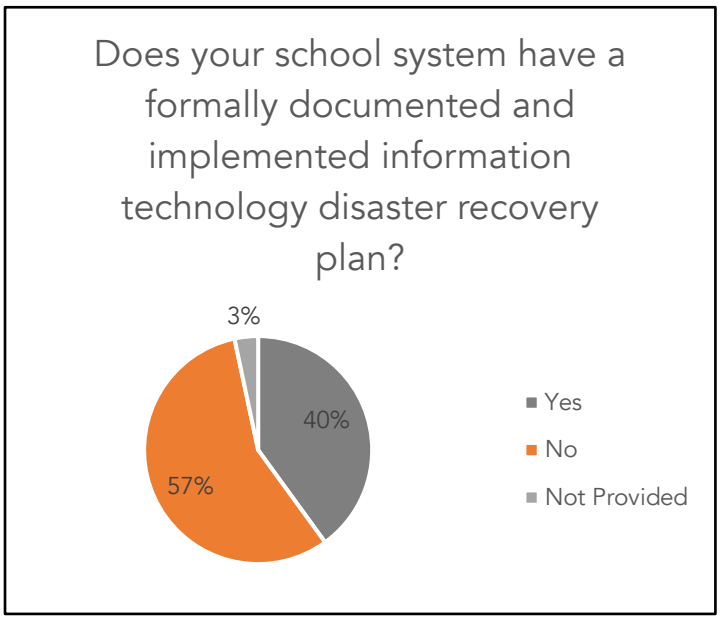
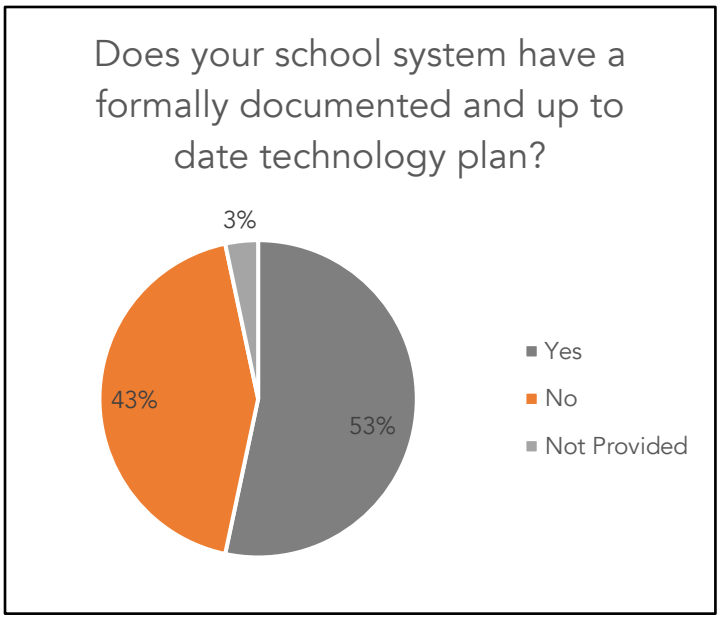
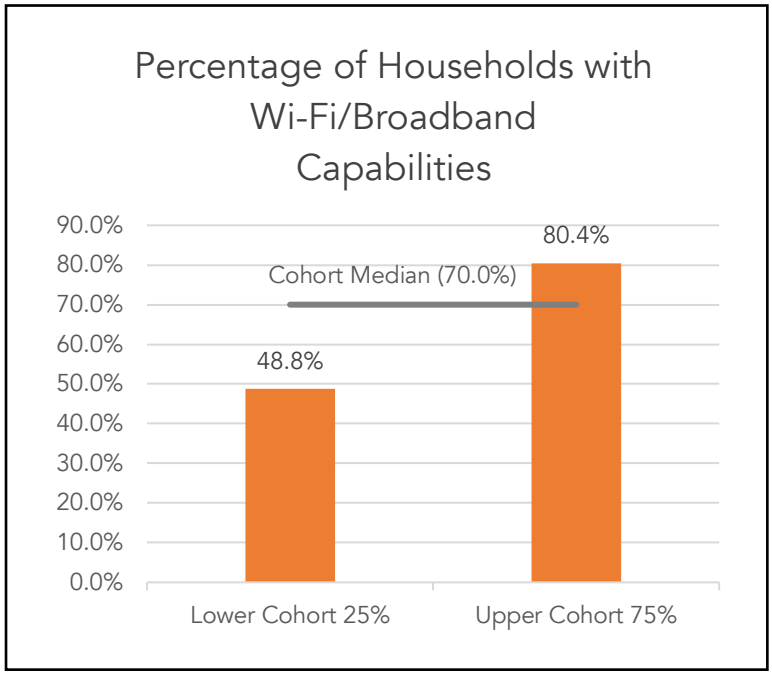


Figure 3.9: Technology Plan



*Due to rounding, the percentages in this pie chart do not add up to 100%.

Figure 3.10: Households with Wi-Fi/broadband Capabilities



Key Performance Indicators

Key performance indicators in technology assess the productivity, cost efficiency, and service levels of a technology department. As more districts employ technology to deliver and aid in student instruction, the focus should be on the effective deployment and maintenance of technology versus reducing expenditures. Districts should consider all key performance indicators together. One indicator should not be viewed as an overall performance measure by itself.

Data points in this review do not consider the district's overall strategy for using technology to drive academic performance or operational efficiencies compared to other district needs and programs. Also, districts should consider additional factors beyond the scope of this analysis (e.g., staff acceptance of new technology) when reviewing the district's viability to pursue noted potential opportunities for improvement.

Factors that influence performance and can steer improvements include:

- School board and administrative policies and procedures;
- School district strategy regarding instructional technology pedagogy;
- Existing school district business systems;
- Implementation and project management for new software applications in both instructional and operations areas;
- Type of devices in use by district (e.g., desktop, laptop, netbook, tablets);
- Age of technology and applications; and,
- District technology standards and support model deployed.

The following Key Performance Indicators were reviewed:

IT Spending as Percent of District Budget – This is the percentage of IT spending in relation to a district's total operating budget. This metric can vary based on many factors such as available resources, the number of devices, device age, bandwidth, network usage capacity, teachers with advanced presentation devices, and technology staffing levels. IT spending should be balanced with other essential needs, such as hiring high-quality teachers, ensuring a safe and supportive environment, and offering extracurricular activities. The exact percentage of a system's overall budget spent on IT considered "good" will depend on the specific circumstances of the school system.

IT Spending per Student – This measurement provides a comprehensive perspective on the expenses related to information technology work (e.g., hardware and software support, network maintenance). It serves as a useful initial benchmark for evaluating IT efficiencies among different school districts. Costs can vary significantly between districts, primarily due to the number of capital projects undertaken. It is advisable to consider other, more specific functional measures for a more comprehensive analysis.

Average Age of Computers – Gaining insights into the average age of computers yields valuable data for budgetary and planning purposes, exerting considerable influence on areas such as break-fix support, procurement of supplies, and provision of training. Acquiring a thorough understanding of computer aging plays a pivotal role in assessing the readiness of the district in adopting newly available software applications for both staff and students.

Devices per Employee – This measurement establishes the number of computers used by employees. Knowing the number of computers used by employees is important for effective resource allocation, robust security measures, adherence to software licensing compliance, efficient IT support provision, streamlined asset management, and informed decision making.

Devices per Student – This measurement monitors the progress made in achieving a one-to-one ratio of students to devices. The 1 to 1 initiative has the potential to transform education by integrating technology into the learning process and empowering students with valuable digital skills and resources.

Network-Bandwidth per Student – This metric serves as a comparative tool, offering a quantifiable indication of progress towards the goal of providing sufficient bandwidth to support the teaching and learning environment. The bandwidth per

student ratio provides a relative measure of a district's capacity to facilitate computing applications in a manner that fosters effective teaching, learning, and district operations. Lower capacity can result in suboptimal performance.

Network Days Usage Exceeded 75% of Capacity – This measure identifies potential network capacity problems but also an understanding of how much a district utilizes technology daily. This metric can serve as a valuable justification for network expansion and capacity planning.

Advanced-Presentation Devices per Teacher – This metric helps to identify districts who have provided teachers with advanced presentation devices. These devices empower teachers to create engaging and interactive learning environments, improve content delivery, foster collaboration, and enhance student engagement. By leveraging these devices, teachers can enhance their teaching effectiveness and provide students with an enriched and modern educational experience.

Devices per IT Staff – The ratio of devices per IT staff evaluates the efficiency of a district's information technology department maintenance and repair infrastructure and can aid in assessing staffing levels. However, it is important to recognize that this ratio should be used as a singular indicator and not the sole determining factor for evaluating staffing levels. Other relevant factors include the age and condition of devices, the complexity of repair activities, and if the district sub-contracts any maintenance/repair activities.

Percentage of Households with Wi-Fi/broadband capabilities – The percentage of households with Wi-Fi/broadband capabilities is a valuable metric to assess household internet availability. It can help identify households without internet or limited access, enabling schools and policymakers to better understand the extent of the problem and take appropriate steps to address it. It can also facilitate planning for remote learning by providing insights into the technology resources available to students at home.

Guidelines for reading charts:

Performance indicator levels are provided as quartiles—the 25th percentile and 50th percentile (median). Results are only reported when there are three or more responses for a given key performance indicator. The preferred placement for each key performance indicator is usually designated in the 50th percentile. For some key performance indicators, the 50th percentile only reflects the statistical division of responses and does not indicate a preferred placement.

The regional peer average is based on data collected from Alabama, Tennessee, Mississippi, and Louisiana school districts. National peer ranges are taken from the Council of Great City Schools data.

In the following charts, a distinction has been made between districts and how their technology departments are structured. Districts that have two separate departments for traditional/educational technology support functions are noted on the following charts by gray bars. Districts that have one blended department for traditional/educational technology support functions are noted on the following charts by orange bars. Districts that contracted out support functions are noted on the following chart by yellow bars. North Panola is noted in blue because it did not provide benchmarking data.

Exhibit 4: IT Spending as Percent of District Budget

Total IT staffing, hardware, systems, and service costs divided by total district operating budget.

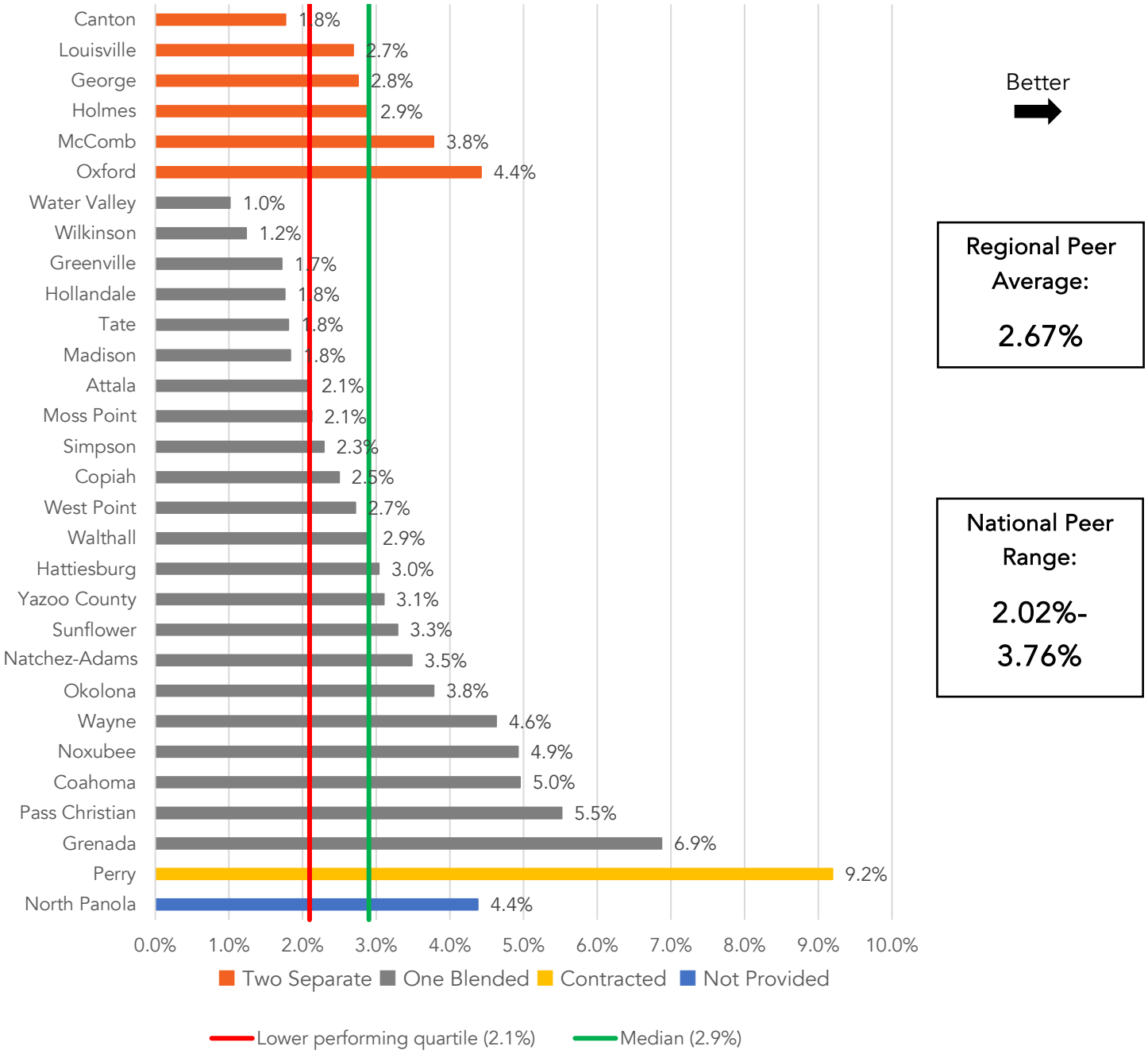


Exhibit 5: IT Spending per Student

Total IT staffing, hardware, systems, and service costs divided by total student enrollment.

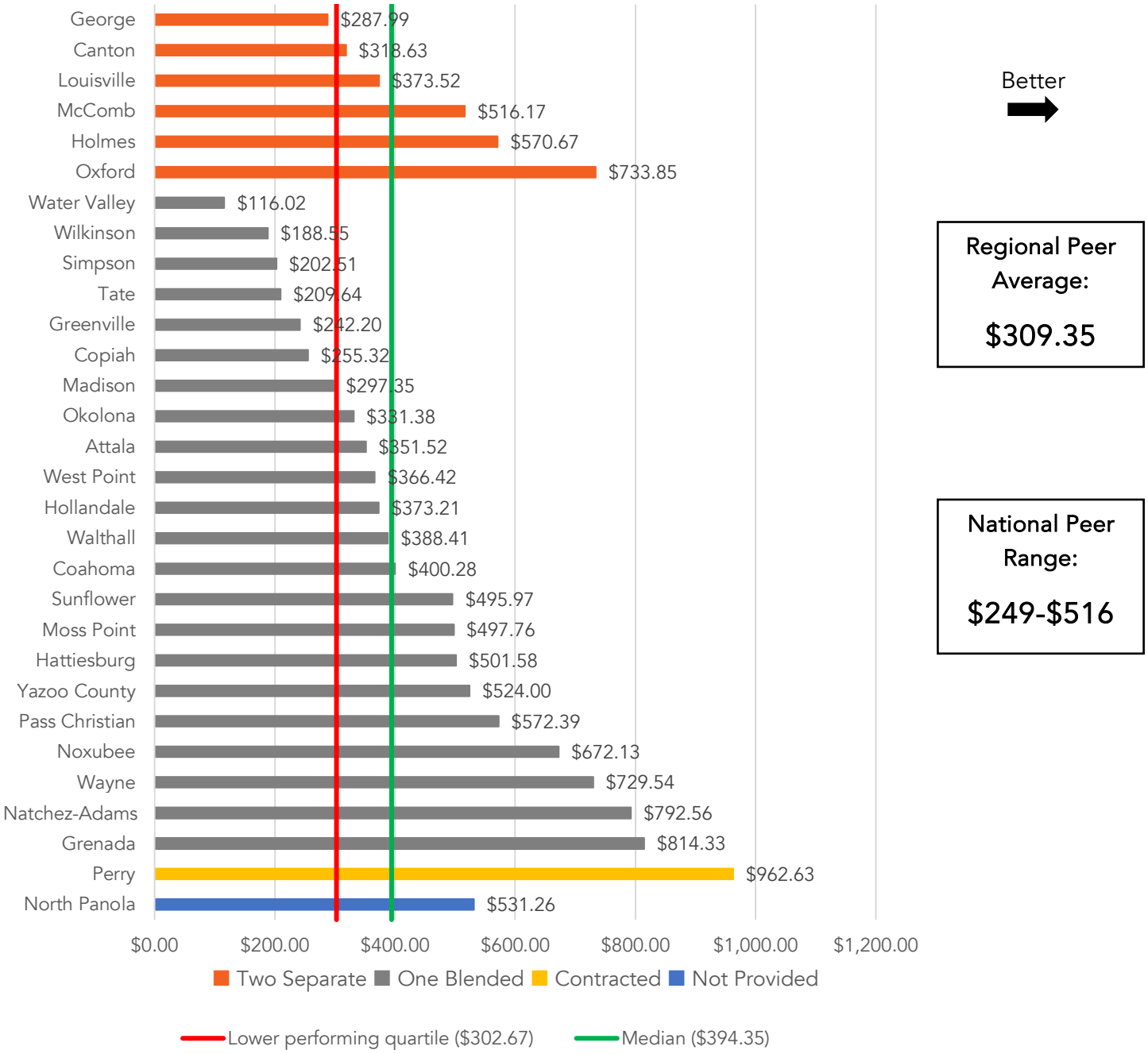


Exhibit 6: Average Age of Devices

Weighted average (number of 1-year-old computers, plus 2-year-old x 2, plus 3-year-old x 3, plus 4-year-old x 4, plus 5 years and older x 5).

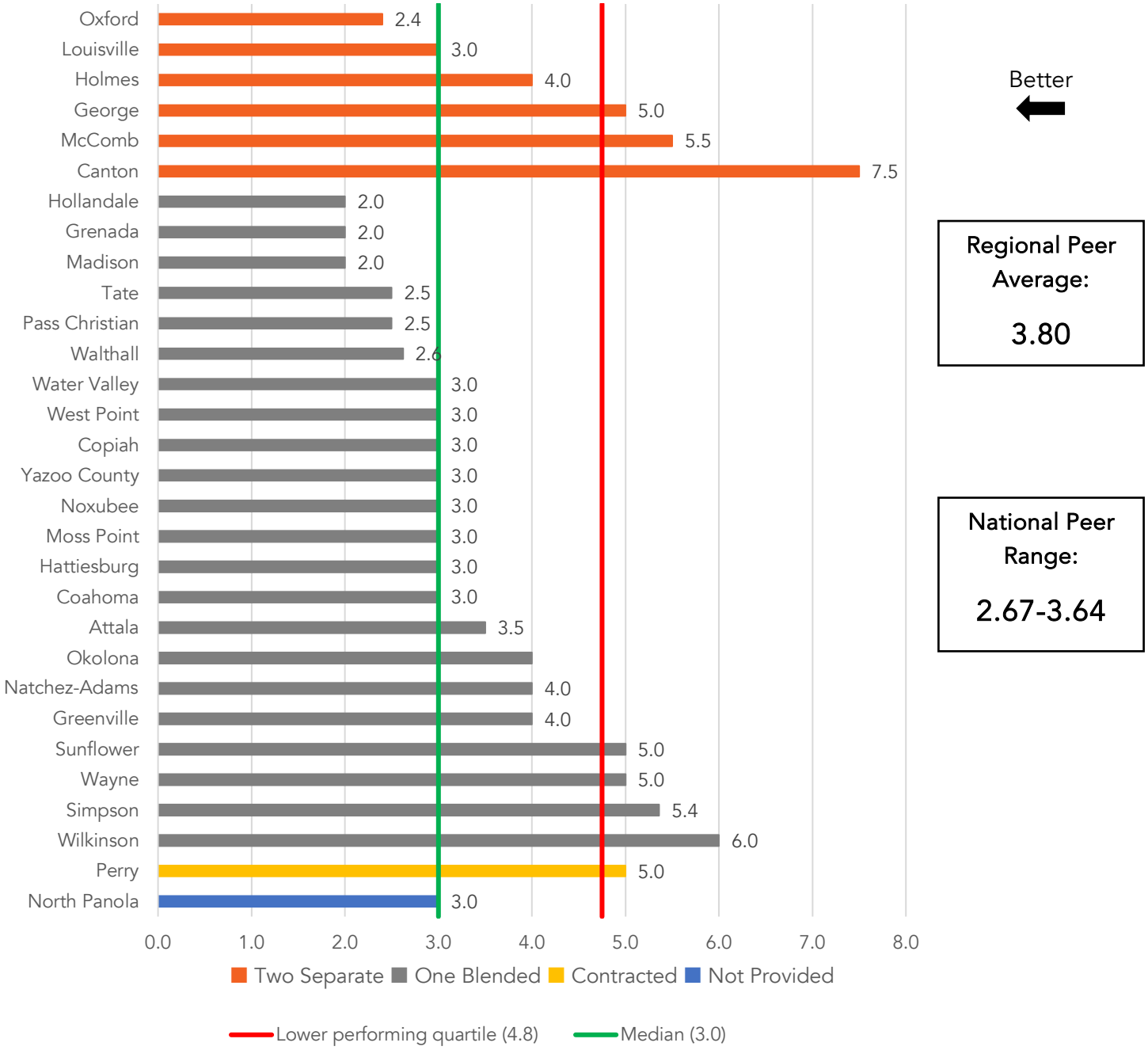
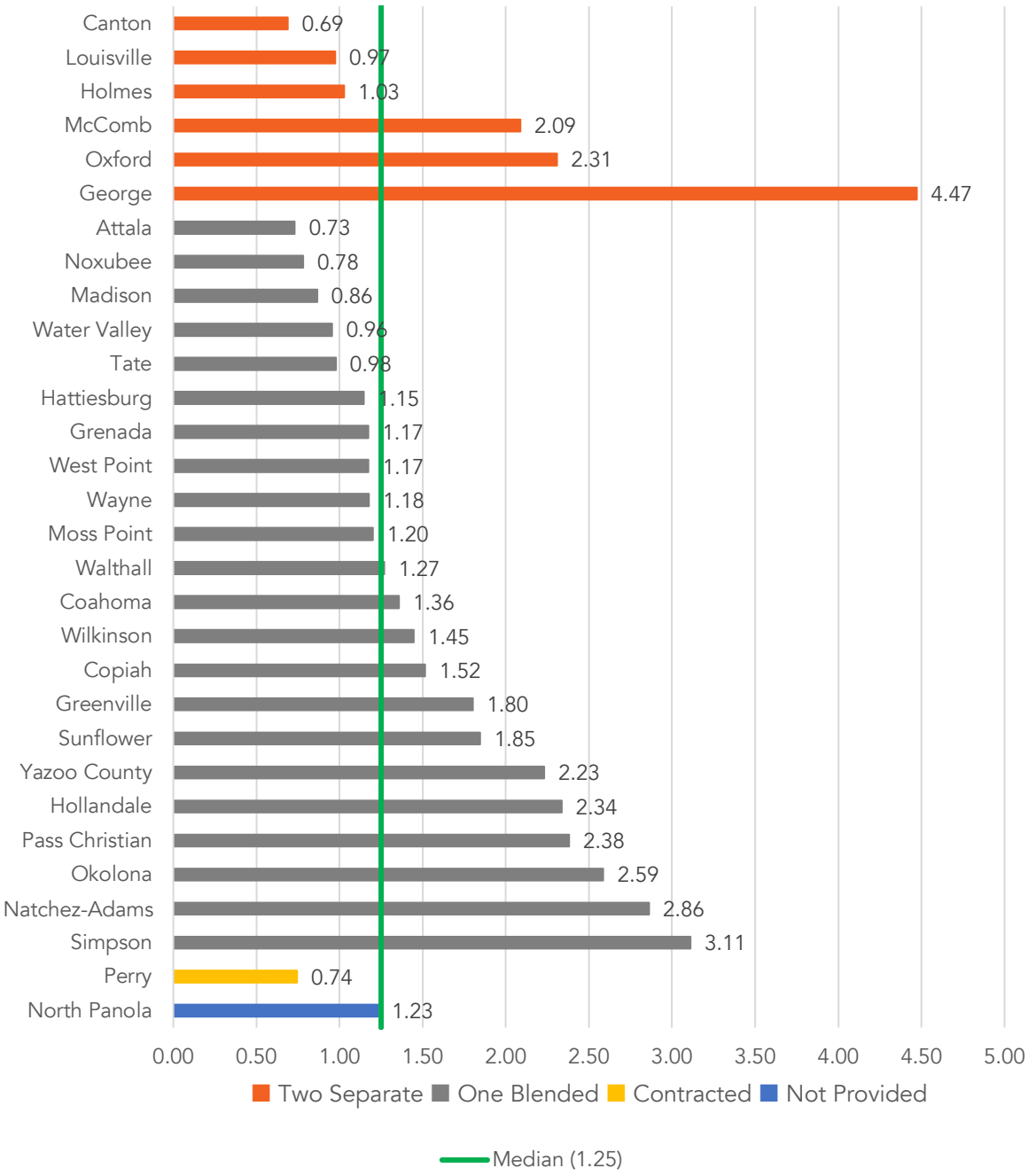


Exhibit 7: Device per Staff Member

Total number of employee laptops and desktops divided by the total number of district employees. Devices ratios are typically higher than one device per staff member to allow for the district's device repair strategy and the number of loaner devices required to sustain work and instruction during device repair situations.



Regional Peer Average:

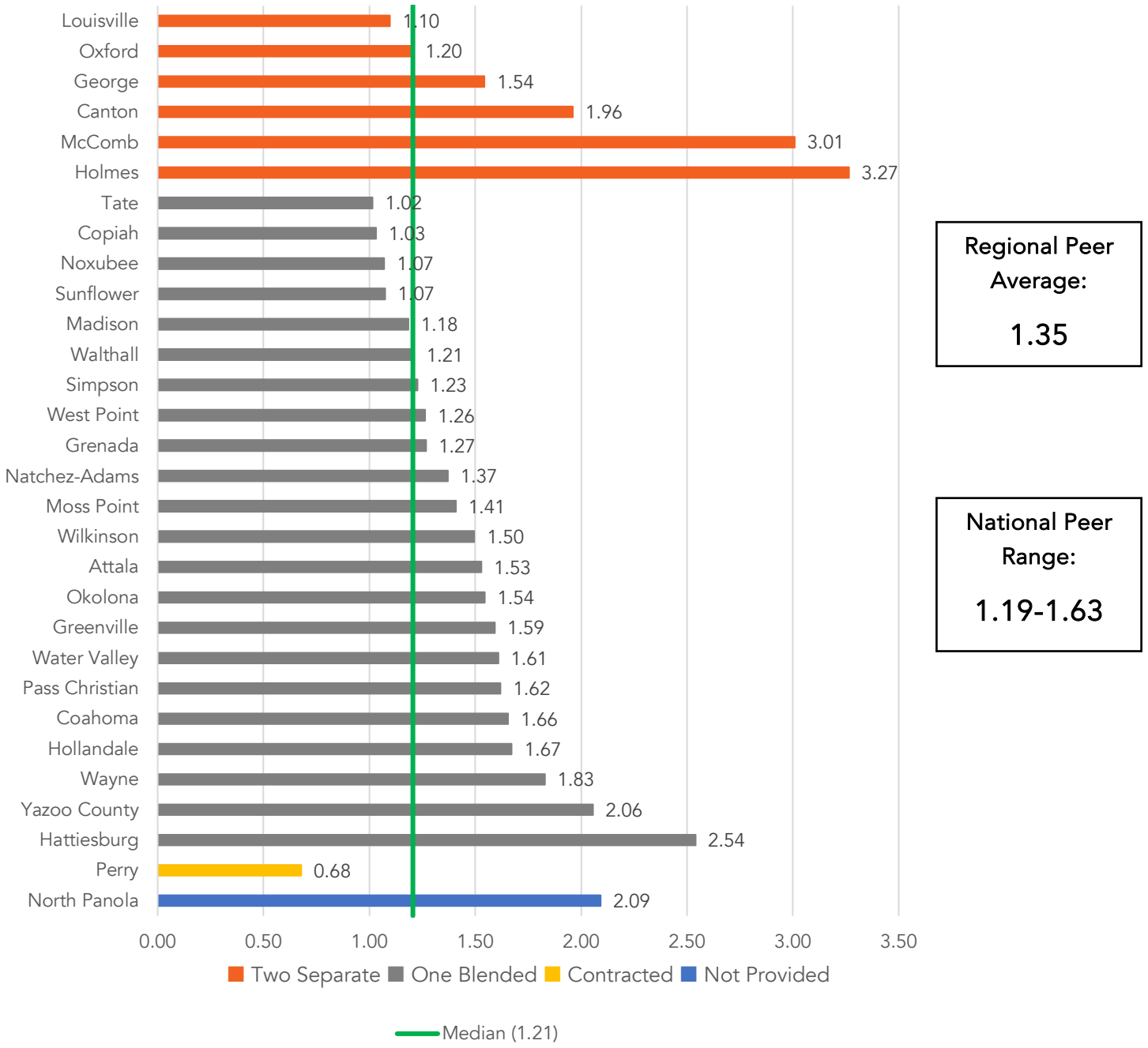
1.40

National Peer Range:

1.12-1.59

Exhibit 8: Device per Student

Total number of desktops, laptops, and tablets for student use only or mixed-use divided by total student enrollment. Devices ratios are typically higher than one device per student to allow for the district's device repair strategy and the number of loaner devices required to sustain work and instruction during device repair situations.



Regional Peer Average:

1.35

National Peer Range:

1.19-1.63

Exhibit 9: Network-bandwidth per Student

Total standard available bandwidth divided by total student enrollment.

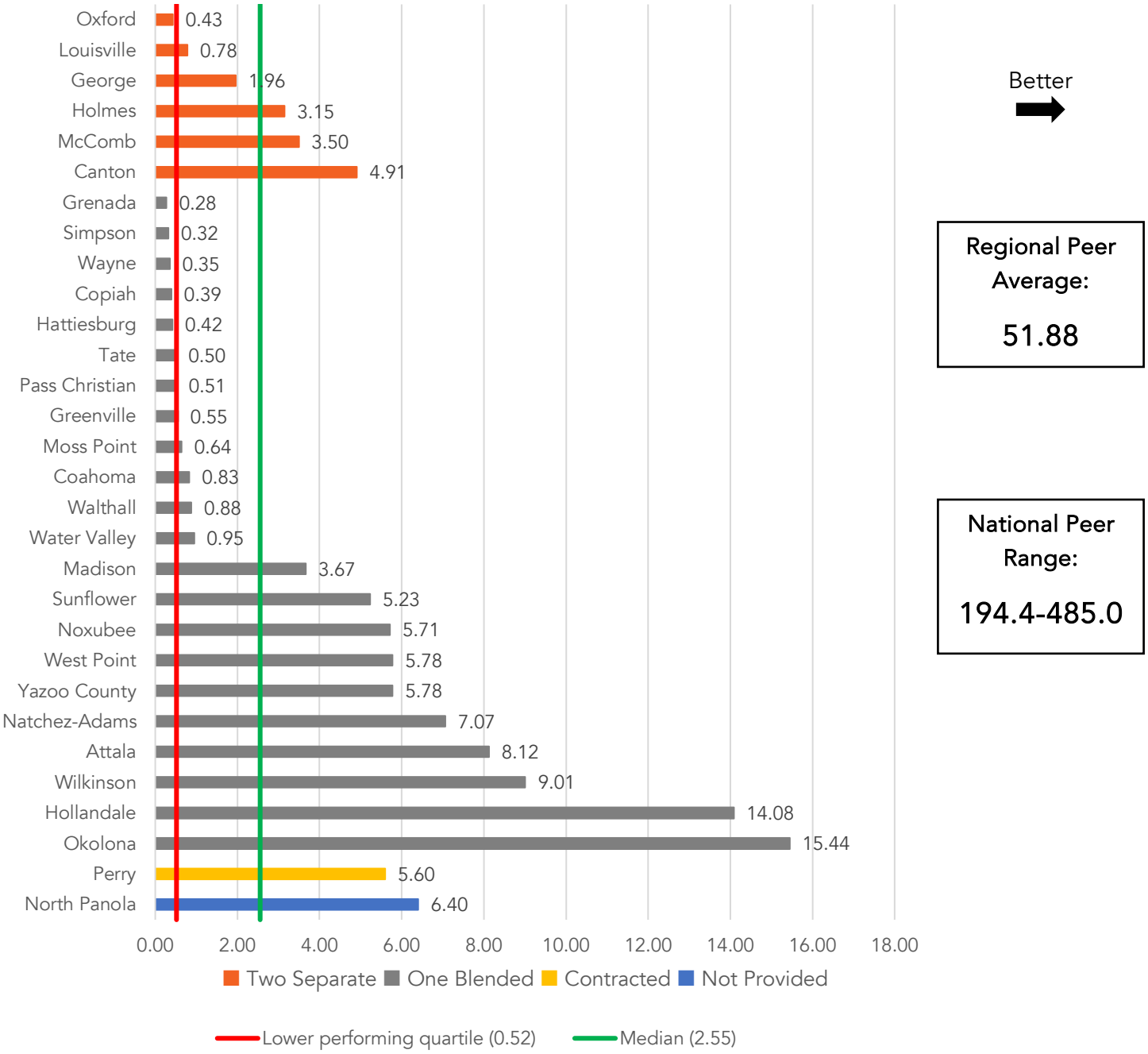
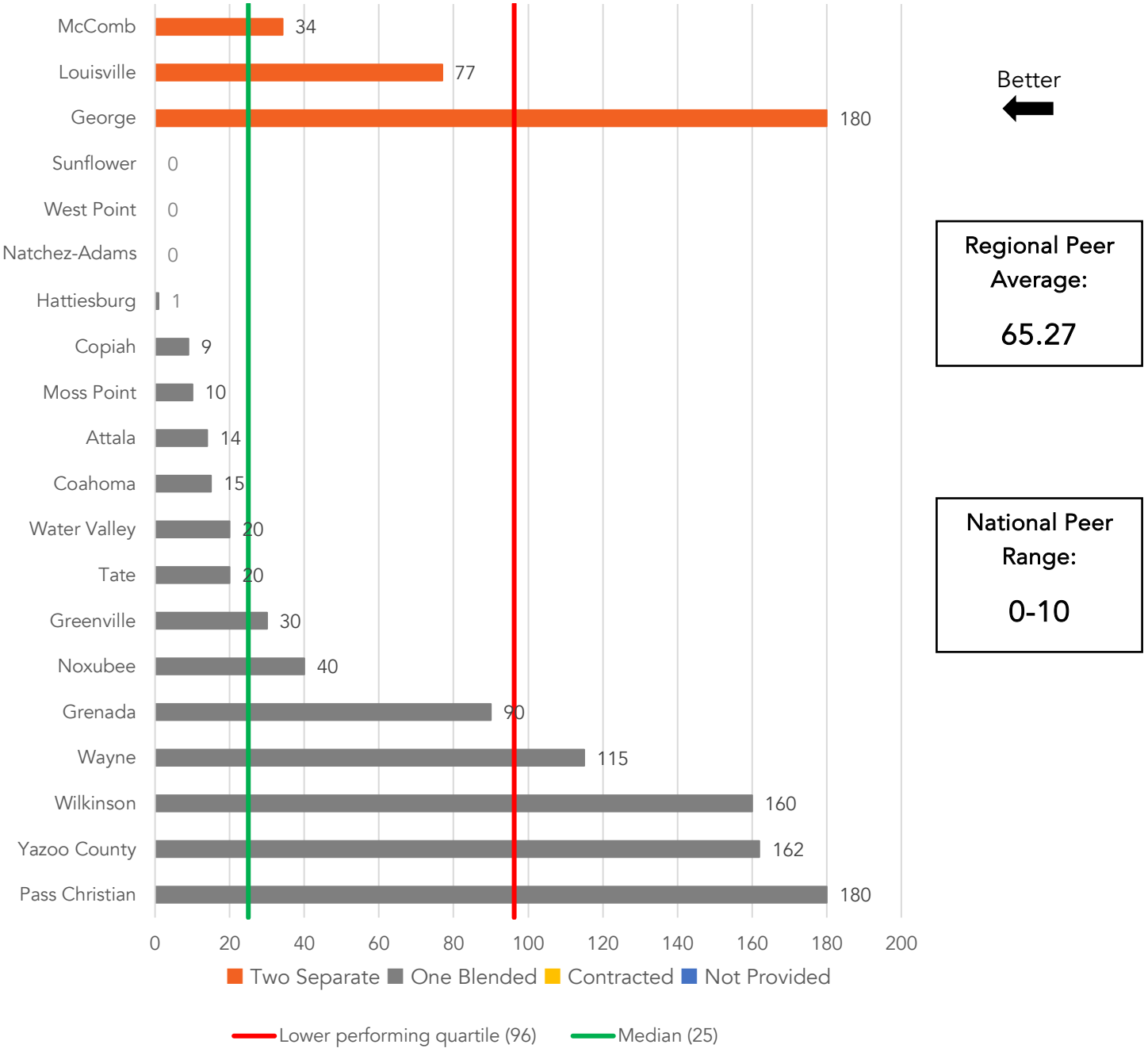


Exhibit 10: Network Days Usage Exceeded 75% of Capacity

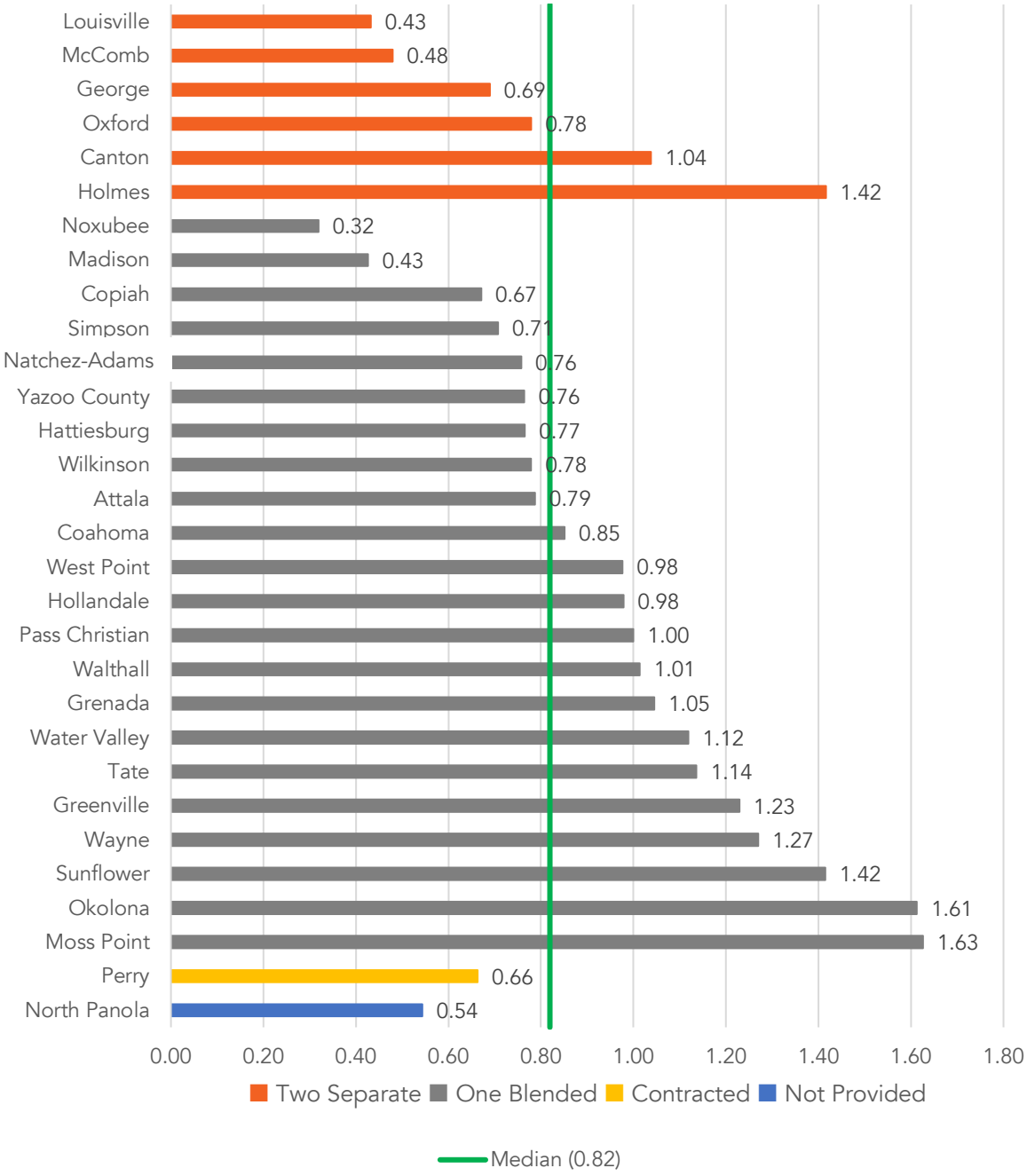
Number of days that peak daily internet usage reaches more than 75% of standard available bandwidth for 5 minutes or longer.



Note: Canton, Madison, Oxford, Perry, and Walthall do not track.

Exhibit 11: Advanced Presentation Devices per Teacher

Total number of devices (video/data projectors/document cameras/whiteboards, etc.) divided by the total number of teachers.



Regional Peer Average:

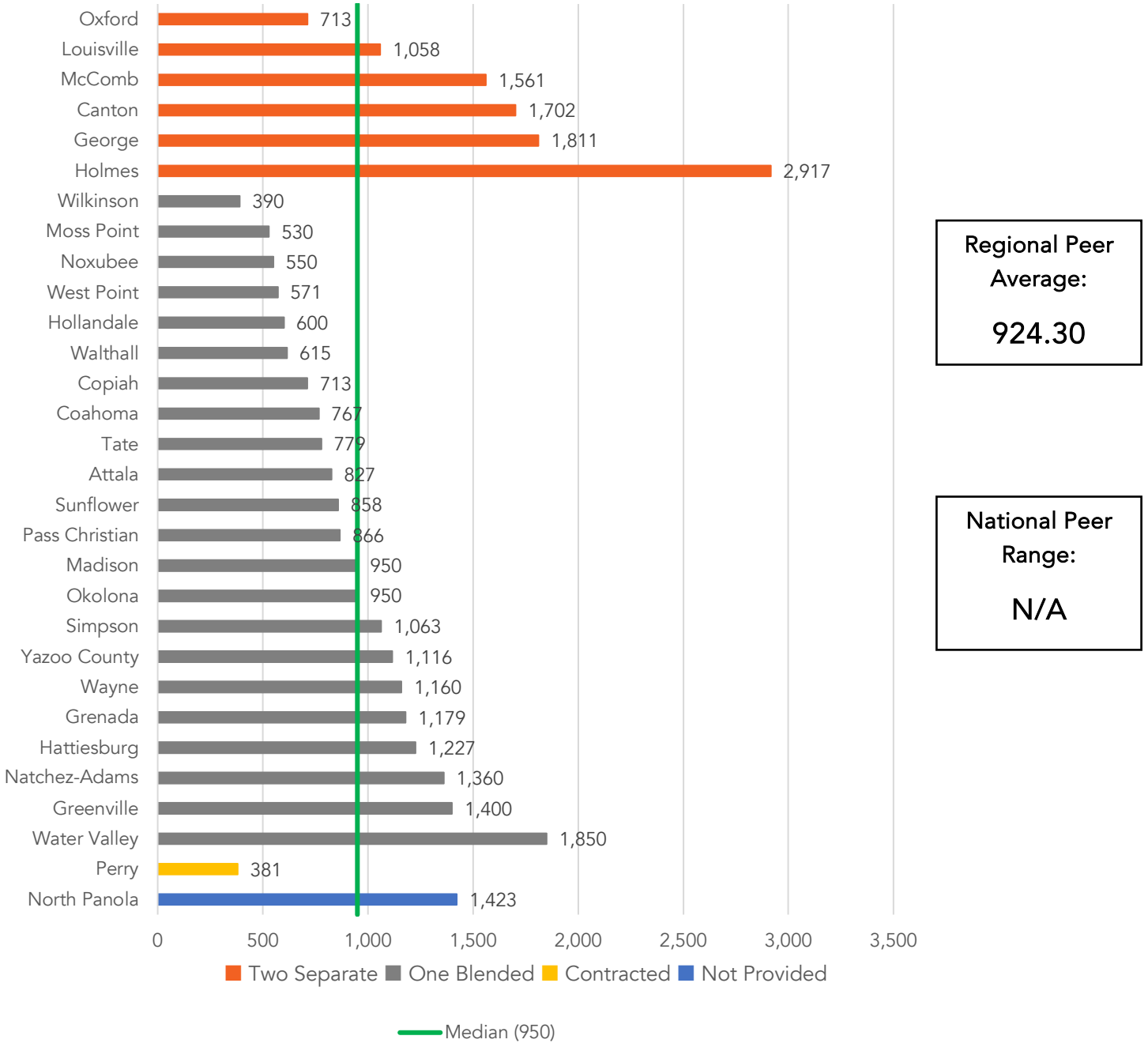
1.02

National Peer Range:

1.42-2.83

Exhibit 12: Devices per IT Staff

Total student and employee devices (excluding presentation devices) divided by the total number of IT staff FTEs.



Regional Peer Average:

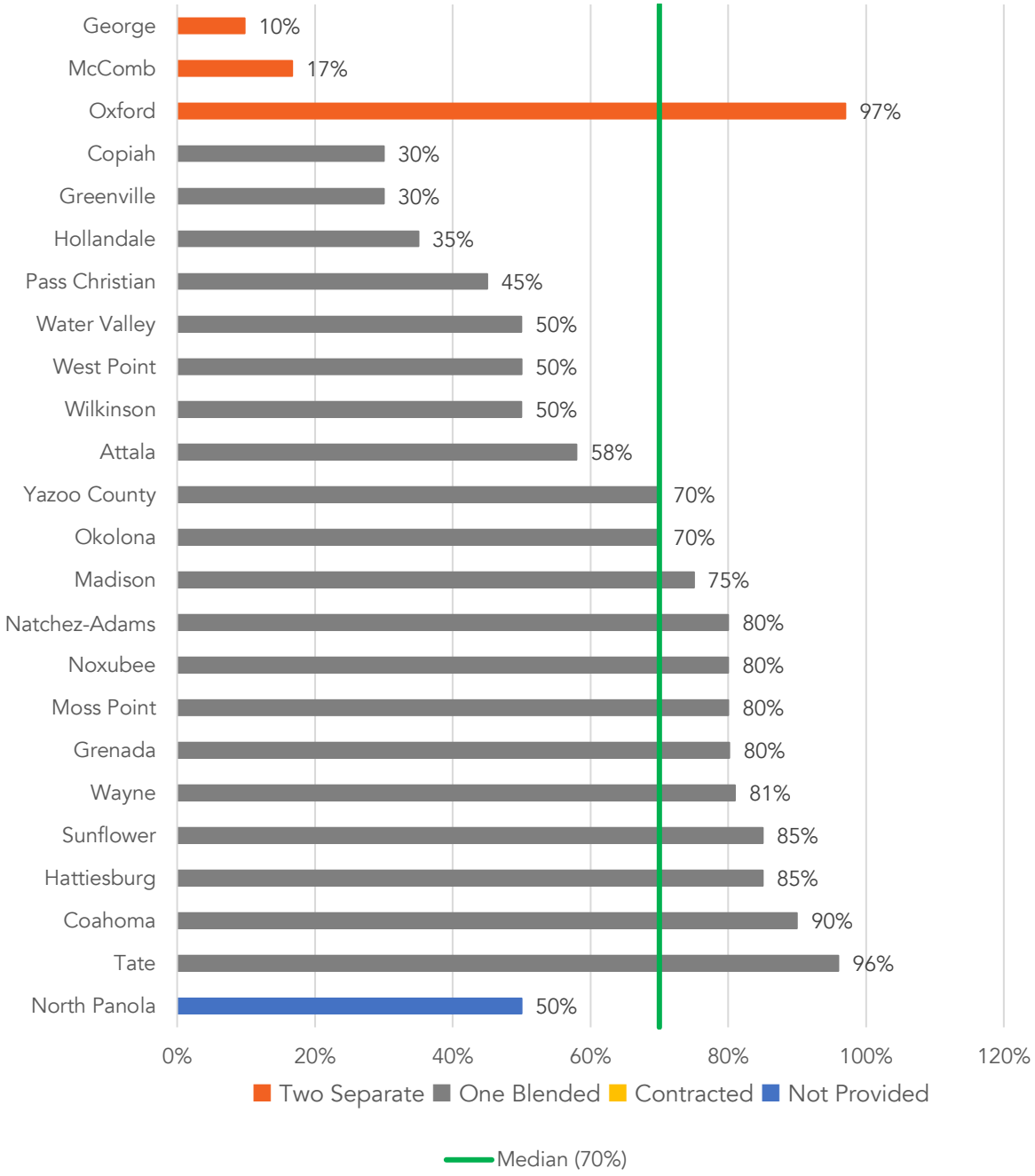
924.30

National Peer Range:

N/A

Exhibit 13: Percentage of Households with Wi-Fi/broadband Capabilities

Total number of student households with Wi-Fi/broadband capabilities divided by the total number of student households.



Note: Canton, Holmes, Louisville, Perry, Simpson, and Walthall data not provided.

APPENDIX A

District Detailed Commendations, Observations & Potential Opportunities

District Detailed Commendations, Observations, and Potential Opportunities

The regional peer average is based on data collected from Alabama, Tennessee, Mississippi, and Louisiana school districts. National peer ranges are taken from the Council of Great City Schools data.

Attala

The district does not have a formally documented technology plan or a formally documented disaster recovery plan. District data backups are cloud-based. The district has one blended department responsible for traditional information technology support functions and educational technology support services. The district currently has no plans to upgrade internet connection speeds in the next 12 months.

The district's technology spending as a percentage of the budget is lower than similar peer groups. While IT spending per student falls below the state median, it is higher than the regional peer average and aligns with the national peer range. Integrating technology into education can provide a valuable tool for enhancing learning and preparing students for the digital world. However, schools must prioritize other essential needs, such as hiring high-quality teachers, ensuring a safe and supportive environment, and offering extracurricular activities. Districts should balance investing in technology and addressing students' needs, and schools should consider the unique needs of their community. When assessing technology spending levels, districts should consider factors, such as the number of devices, device age, bandwidth, network usage capacity, teachers with advanced presentation devices, and technology staffing levels. In most cases, the district is meeting or exceeding the state median when evaluating these measures.

To ensure the effective and efficient use of technology to support teaching and learning and address critical issues related to resource allocation, professional development, security, and compliance, it is recommended that the district develop a formally documented technology plan. Such a plan can also guide future technology spending and investments to ensure that technology spending is appropriately balanced to meet student and district needs.

Developing a formally documented disaster recovery plan ensures districts can continue operating and providing services during and after a disaster or emergency. This plan helps minimize disruption to normal school operations, ensure safety, protect data, comply with regulations, and ensure sustainability. Before developing a disaster recovery plan, the district should immediately add an off-site, cloud-based data backup to protect against data loss due to a wide range of threats. Schools can quickly recover from any data loss event by keeping backup data off-site and continuing their operations with minimal disruption.

Canton

The district has both a formally documented technology plan and a documented disaster recovery plan. Technology resources are divided into two distinct departments. One focuses on traditional IT functions, and one provides education technology support. Data backups are cloud-based. The district plans to upgrade internet connection speeds in the next 12 months.

The district's technology spending is lower than comparative peer groups, with IT spending per student below the state median but higher than the regional peer average and within the national peer range. While integrating technology into education is valuable, schools must prioritize essential needs such as hiring quality teachers, ensuring a safe environment, and offering extracurricular activities. Districts should balance investing in technology and addressing students' needs, and schools should consider the unique needs of their community. When assessing technology spending, the district should consider factors such as device count, device age, bandwidth, network usage capacity, teacher technology, and staffing levels. The comparably high number of devices provided for student use may contain obsolete devices, resulting in an average device age of 7.5 years and a ratio of 1,702 devices per IT staff member. The district network bandwidth is slightly higher than reviewed peers, but network capacity is not measured. Due to these factors, the assessment team cannot

determine if technology spending is appropriate and recommends that the district review the device inventory, calculate the above measures, and adjust technology spending levels accordingly.

The district has not recently surveyed parent households regarding Wi-Fi/broadband access. An annual survey assessing household internet availability for parents of students in public school districts can be beneficial in several ways. First, it can help identify households without internet or limited access, enabling schools and policymakers to better understand the extent of the problem and take appropriate steps to address it. Additionally, the survey can facilitate planning for remote learning by providing insights into the technology resources available to students at home. This can inform the development of strategies to provide internet access and technology resources to those who require them. Additionally, the survey can enhance communication between schools and parents by identifying households with limited internet access and helping schools to reach out to them through alternative means. Schools can use the survey results to evaluate the effectiveness of their technology programs and assess whether all households are being reached equitably. Overall, conducting an annual survey can help schools better understand the needs of their students and families and develop effective strategies to address any digital disparities.

Coahoma

The district needs to have a formally documented technology plan. The district does have a formally documented disaster recovery plan. District data backups are both on-site and cloud-based. The district has one blended department responsible for traditional information technology support functions and educational technology support services.

The district's allocation of budgetary funds toward technology is higher than that of its comparative peer groups. In addition, the district's spending on IT per student is above the state median. While the integration of technology into education holds value, school districts should prioritize essential needs such as the recruitment of quality teachers, the provision of a secure environment, and the offering of extracurricular activities. Striking a balance between investing in technology and addressing student needs is important.

Various resources must be considered when evaluating technology spending, including device count, device age, bandwidth, network usage capacity, teacher technology, and staffing levels. The district has made investments to ensure that students and staff have access to devices. The ratio of devices per staff member is above the state median. The ratio of devices per student is above the state median, the regional peer average, and the national peer range, which demonstrates a satisfactory level of access. The average age of devices aligns with the state median, indicating that the district has made efforts to maintain an updated inventory of devices. However, the ratio of devices per student exceeds the state median. This may be attributed to the district procuring an inventory of devices to support repairing damaged devices by having loaner devices readily available.

Staffing levels appear adequate for supporting the overall number of district devices. However, additional investment in technology may be necessary because the current network bandwidth per student is lower than the state median.

Approximately 90% of student households have broadband or Wi-Fi internet access.

To ensure the effective and efficient use of technology to support teaching and learning and address critical issues related to resource allocation, professional development, security, and compliance, it is recommended that the district develop a formally documented technology plan. Such a plan can also guide future technology spending and investments to ensure that technology spending is appropriately balanced to meet student and district needs.

Copiah

The district has both a technology plan and a disaster recovery plan. Their disaster recovery plan for technology is integrated into the plan for the whole district. The district's data backups are stored on-site and on the cloud. A single blended department supports traditional information technology and educational technology services. While the district's technology spending as a percentage of its budget is slightly below the state median and the regional peer average, the spending per student is lower than the state median. The district should prioritize fundamental needs such as hiring quality teachers, maintaining a safe learning environment, and providing extracurricular activities while integrating technology into education.

To evaluate technology spending, the district should consider factors such as device count, device age, bandwidth, network usage capacity, teacher technology, and staffing levels. The ratio of devices per staff member is higher than both the state median and the regional peer average. While the ratio of devices per student is lower than the state median and the regional peer average, it is still greater than one, indicating that most students have access to devices. However, not all teachers have access to advanced presentation devices, with a lower ratio of advanced presentation devices per teacher than the state median. The ratio of devices per technology staff member is below the state median and the regional peer average.

The district has no plans to upgrade internet connection speed within the next year, and the network bandwidth per student is within the lower-performing quartile compared to state peers. Although the district reported that network utilization exceeded 75% of capacity for nine days during the school year, indicating low technology utilization, the district will need to invest further in internet connectivity speeds in the years ahead as technology utilization increases.

Only 30% of student households have broadband access, making the school district a primary source for students to learn and become accustomed to technology. To ensure the effective and efficient use of technology to support teaching and learning and address critical issues related to resource allocation, professional development, security, and compliance, it is recommended that the district develop a formally documented technology plan. This plan can guide future technology spending and investments to ensure that technology spending is appropriately balanced to meet student and district needs.

George

The district has a formal technology plan in place, but there is no documented disaster recovery plan. The district's data backups are stored both on-site and on the cloud. The district supports technology through two distinct departments: one the traditional information technology department and the other being curriculum that supports the application of technology in education.

School districts should develop a disaster recovery plan to ensure continuity of operations during and after a disaster or emergency. This plan can help minimize disruptions, ensure safety, protect data, comply with regulations, and promote sustainability.

The district's technology budget is close to the median of its peer groups, and IT spending per student is below the state median. However, schools must prioritize essential needs like hiring quality teachers, providing a secure environment, offering extracurricular activities, and investing in technology.

George has the highest ratio of devices per employee of all reviewed districts.

When evaluating technology spending, districts should consider device count, age, bandwidth, network usage capacity, teacher technology, and staffing levels. The district has made significant investments in providing access to devices for students and staff. The ratio of devices per staff member is the highest of all reviewed districts. The ratio of devices per student is above the state median. The average device age is five years. The district should review its device inventory and remove obsolete devices.

Further technology investment may be necessary, as the district's network bandwidth per student is below the state median, and network usage is frequently at or above 75% capacity. The district plans to upgrade internet connection speeds in the coming year.

Only 10% of student households have broadband access, making the school district a primary source for students to learn and become accustomed to technology.

Greenville

The district currently lacks official documentation for its technology plan and disaster recovery plan. Data backups are stored on-site and on the cloud. A single department provides support for traditional information technology and educational technology services. While the district's technology spending as a percentage of its budget is below the state median and regional peer average, the spending per student is in the lower quartile compared to state peers. However, it

is important to prioritize fundamental needs such as hiring quality teachers, maintaining a safe learning environment, and providing extracurricular activities while integrating technology into education.

To evaluate technology spending, it is important to consider factors such as device count, device age, bandwidth, network usage capacity, teacher technology, and staffing levels. The ratio of devices per staff member and per student is higher than both the state median and regional average, and the average age of devices is four years, which is above the state median. Almost all teachers have access to advanced presentation devices with a ratio of 1.23 devices per teacher.

The district has no plans to upgrade internet connection speed within the next year, and the network bandwidth per student is in the lower quartile compared to state peers. Although network utilization exceeded 75% of capacity for approximately 17% of the school year, indicating low technology utilization, the district will need to invest further in internet connectivity speeds in the years ahead as technology utilization increases.

The ratio of devices per technology staff member is higher than both the state median and regional peer average. The district should review current staffing levels and service delivery to ensure that staffing levels are appropriate for the district's goals and needs. The district reported annual technology staff costs of $107,000 and 5 staff members, only $21,400 per staff member. The district should review technology staff costs to ensure that this number is accurately reported and not a result of miscalculating expenditures.

Only 30% of student households have broadband access, which means that the school district is the primary location in which students can learn and become accustomed to technology. Therefore, to ensure effective and efficient use of technology to support teaching and learning, and address critical issues related to resource allocation, professional development, security, and compliance, it is recommended that the district develop a formally documented technology plan. This plan can guide future technology spending and investments to ensure that technology spending is appropriately balanced to meet student and district needs.

Finally, it is recommended that the district develop a formally documented disaster recovery plan. A disaster recovery plan ensures districts can continue operating and providing services during and after a disaster or emergency. The plan helps minimize disruption to normal school operations, ensure safety, protect data, comply with regulations, and ensure sustainability.

Grenada

Grenada has the second highest percentage of total expenses dedicated to technology of all reviewed districts.

The district currently lacks official documentation for its technology plan and disaster recovery plan. Data backups are stored both on-site and on the cloud. A single department supports traditional information technology and educational technology services. The district's technology spending, measured as a percentage of its budget and spending per student, is the second highest of state comparative peers and above the average of all peer groups. The district has invested in technology.

To evaluate technology spending, it is important to consider device count, device age, bandwidth, network usage capacity, teacher technology, and staffing levels. The ratio of devices per staff member is below the state median but still represents a high enough ratio to ensure most staff members have at least one device. The device ratio per student is higher than the state median, and the average age of devices is two years, among the lowest average device age across state comparison peers. Almost all teachers have access to advanced presentation devices, with a ratio of 1.05 devices per teacher.

Grenada is tied for the lowest average age of devices of all reviewed districts.

The district has yet to make plans to upgrade internet connection speed. The network bandwidth per student was the lowest of state comparison peers, and network utilization exceeded 75% of capacity for approximately 50% (90 days) of the school year. Also, the devices per technology staff member ratio is higher than the state median and regional peer average. The district should review current staffing levels and service delivery to ensure staffing levels are appropriate for the district's goals and needs. Based on the district's objectives associated with utilizing technology in the classroom, the district should invest further in internet connectivity and support staff.

Grenada has the lowest network bandwidth per student of all reviewed districts.

To ensure the effective and efficient use of technology to support teaching and learning and address critical issues related to resource allocation, professional development, security, and compliance, it is recommended that the district develop a formally documented technology plan. A technology plan can guide future technology spending and investments to ensure that technology spending is appropriately balanced to meet student and district needs.

The district is recommended to develop a formally documented disaster recovery plan. A disaster plan ensures that the district can continue operating and providing services during and after a disaster or emergency. The plan helps minimize disruption to normal school operations, ensure safety, protect data, comply with regulations, and ensure sustainability.

In the district, 80% of student households have Wi-Fi access.

Hattiesburg

The district has a formally documented technology plan and a disaster recovery plan. The district data backups are now stored on-site. However, the assessment team recommends that the district establish an off-site, cloud-based data backup to safeguard against data loss due to various threats. Schools can recover quickly from data loss events with an off-site backup and maintain their operations with minimal disruptions.

Although the district's technology spending as a percentage of the budget is slightly higher than the state median and the regional peer average, technology spending per student is significantly higher than the state median and the regional peer average. While integrating technology into education is undoubtedly valuable, schools must prioritize essential needs such as hiring quality teachers, ensuring a safe environment, and offering extracurricular activities. It is critical to strike a balance between investing in technology and addressing student needs. When evaluating technology spending, districts should consider factors such as device count, device age, bandwidth, network usage capacity, teacher technology, and staffing levels.

The district has a ratio of devices per student that is significantly higher than the state median, which may be attributed to the district procuring an inventory of devices to support the repair of damaged devices by having loaner devices and retaining some obsolete inventory. The average age of devices is three years, and the ratio of devices per technology staff member is 1,227. It is necessary to examine the device inventory more thoroughly and remove obsolete devices from service. Once this process is complete, the ratio of devices per staff member should be calculated to determine if the district is appropriately staffed in technology.

Further technology investment may be necessary, as the district's network bandwidth per student is lower-performing than state peers. The district plans to upgrade internet connection speeds in the coming year.

According to recent surveys, 90% of student households have internet access.

Hollandale

Although the district has a comprehensive technology plan, it does not possess a formal disaster recovery plan, and data backups are currently stored both on-site and on the cloud. Additionally, a single department is responsible for managing both traditional information technology functions and educational technology support. Despite having the fourth lowest technology spending as a percentage of the district's budget compared to its peers within the state, its technology spending per student is slightly below the state median and higher than the regional peer average.

To evaluate technology spending, districts should consider device count, device age, bandwidth, network usage capacity, teacher technology, and staffing levels. The ratios of devices per staff member and devices per student are above the state median. Elevated levels of devices are often an indicator of inventory that has not been thoroughly vetted for obsolescence devices. When this is true, the average age of devices usually runs high. The average age of devices was two years, the lowest of most state-comparative peers. The ratio of advanced presentation devices per teacher was above the state median but below the regional peer average.

Hollandale is tied for the lowest average age of devices of all reviewed districts.

Almost all teachers have access to advanced presentation devices with a ratio of 0.98 devices per teacher. The district should look at the current device inventory and clean up the inventory to accurately reflect staff and student-usable devices.

The district does not track the number of days that network usage exceeded 75% of capacity; the assessment team recommends that the district track this number going forward. The district has the second highest network bandwidth per student.

Hollandale has the second highest network bandwidth per student.

Only 35% of student households have broadband access.

It is recommended that the district develop a formally documented disaster recovery plan. A disaster recovery plan ensures districts they can continue operating and providing services during and after a disaster or emergency. The plan helps minimize disruption to normal school operations, ensure safety, protect data, comply with regulations, and ensure sustainability.

Holmes

The district currently has a formally documented technology plan in place but lacks a formal disaster recovery plan. Technology resources are divided into two departments: one focused on traditional IT functions and the other dedicated to providing educational technology support. Data backups are maintained on-site and on the cloud. Plans are underway to upgrade internet connection speeds within the next 12 months.

While the district's technology spending as a percentage of the overall budget (2.9%) aligns with state-comparative peers, it's spending per student ($570.67) is higher than all comparative peer groups. This indicates that the district has made substantial investments in student devices, advanced presentation devices for teachers, and internet connectivity; all measures exceed the state median. The district also has the highest ratio of devices per student (3.27) of all reviewed districts. Devices have an average age of four years. These measurements suggest that the district may have many outdated devices in its inventory, necessitating a thorough review to ensure accurate representation of usable staff and student devices. The district should remove obsolete devices from service, as the high number of devices in inventory distorts the ratio of devices per technology staff member, resulting in the district having the highest ratio of all reviewed districts (2,917). Once this process is complete, the ratio of devices per staff member should be recalculated to determine appropriate staffing levels in technology.

Holmes has the highest ratio of devices per student of all reviewed districts.

It is recommended that the district develop a formally documented disaster recovery plan. This is important to ensure uninterrupted operation and service provision during and after a disaster or emergency. The plan also helps minimize disruption to normal school operations, ensure safety, protect data, comply with regulations, and ensure sustainability.

Holmes has the highest ratio of devices per IT staff member of all reviewed districts.

The district has not recently surveyed parent households regarding Wi-Fi/broadband access. Conducting an annual survey can be beneficial in several ways. First, it can help identify households without internet access or limited access, enabling schools and policymakers to understand the scope of the problem better and take appropriate measures to address it. Additionally, the survey can facilitate planning for remote learning by providing insights into the technology resources available to students at home, informing the development of strategies to provide internet access and technology resources to those in need. The survey can also enhance communication between schools and parents by identifying households with limited internet access and helping schools reach out to them through alternative means. Schools can use survey results to evaluate the effectiveness of their technology programs and assess whether all households are being reached equitably. Conducting an annual survey can help schools better understand the needs of their students and families and develop effective strategies to address any digital disparities that may exist.

Louisville

The district has documented technology and disaster recovery plans, with data backups stored on-site and on the cloud. There are two distinct technology departments, one for IT functions and one for education technology support. However, the district's IT spending per student is below the state median and higher than the regional peer average. Therefore, while integrating technology into education is valuable, schools must prioritize essential needs such as hiring quality teachers, ensuring a safe environment, and offering extracurricular activities. A balance between investing in technology

and addressing student needs is important. The district should consider factors such as device count, device age, bandwidth, network usage capacity, teacher technology, and staffing levels.

The district has made significant investments in technology over prior years based on the average age of devices and the ratio of devices per student. Still, further investment is needed in network infrastructure and technology support staff. The district's current network bandwidth per student is less than the state median, and during 42% of school days, network usage exceeded 75% of capacity.

The district should evaluate technology support staffing levels, as the ratio of devices per technology staff member is high. The district should review current support needs for operational and instructional technology use and determine if additional staffing is necessary.

The district has not recently surveyed parent households regarding Wi-Fi/broadband access. Conducting an annual survey can be beneficial in several ways. First, it can help identify households without internet or limited access, enabling schools and policymakers to understand the extent of the problem and take appropriate steps to address it. Additionally, the survey can facilitate planning for remote learning by providing insights into the technology resources available to students at home, informing the development of strategies to provide internet access and technology resources to those who require them. Additionally, the survey can enhance communication between schools and parents by identifying households with limited internet access and helping schools to reach out to them through alternative means. Finally, schools can use the survey results to evaluate the effectiveness of their technology programs and assess whether all households are being reached equitably. Conducting an annual survey can help schools gain a clearer understanding of the needs of their students and families and develop effective strategies to address any digital disparities.

Madison

The district has a formal technology plan but needs a documented disaster recovery plan. Data backups are stored both on-site and on the cloud. Technology services are provided by a single department that oversees traditional information technology functions and educational technology support. Despite this, the district's IT spending per student falls below the state median and the regional peer average. It is, therefore, important for schools to prioritize essential needs such as hiring quality teachers, ensuring a safe environment, and offering extracurricular activities while integrating technology into education.

Madison is tied for the lowest average age of devices of all reviewed districts.

Districts should balance technology investment with addressing student needs; factors such as device count, device age, bandwidth, network usage capacity, teacher technology, and staffing levels should be considered. Fortunately, most of these measures are positive: the average age of devices in the district is two years, the ratio of devices per student is slightly under the state median but greater than one device per student, and network bandwidth per student is higher than the state median. The ratio of devices per IT staff member aligns with the state median. However, less than half of the teachers in the district have access to advanced presentation devices, indicating a need for further investment in supplying teachers with these devices.

School districts should develop a disaster recovery plan to ensure continuity of operations during and after a disaster or emergency. A disaster recovery plan can help minimize disruptions, ensure safety, protect data, comply with regulations, and promote sustainability.

Approximately 75% of student households have broadband or Wi-Fi internet access, which could be leveraged to support remote learning or other technology initiatives.

McComb

The district lacks a documented technology plan and a disaster recovery plan. Data backups are stored both on-site and on the cloud. Two different technology departments are responsible for IT functions and educational technology support. The district has higher per-student IT spending and IT spending accounts for a higher percentage of the district budget than both the median of state comparative peers and the average of regional peers.

To evaluate technology spending, districts should consider factors such as device count, device age, bandwidth, network usage capacity, teacher technology, and staffing levels. The district has made significant investments in devices for both students and teachers; however, older devices have not been retired, resulting in a ratio of devices per staff member over two, a ratio of devices per student over three, and an overall average device age of 5.5 years. The network bandwidth per student is higher than the state median, yet the district still exceeds 75% network capacity over 34 days during the school year. Additionally, less than half of teachers have advanced presentation devices.

The high ratio of devices per student may be attributed to the factors mentioned previously. The district should carefully review the device inventory, remove obsolete devices from service, and calculate the ratio of devices per staff member to ensure appropriate staffing in technology.

To support teaching and learning effectively and efficiently and address critical issues related to resource allocation, professional development, security, and compliance, it is recommended that the district develop a formally documented technology plan. A technology plan will guide future technology spending and investments to ensure that technology spending appropriately balances student and district needs.

A disaster recovery plan ensures districts they can continue operating and providing services during and after a disaster or emergency. Disaster recovery plans help minimize disruption to normal school operations, ensure safety, protect data, comply with regulations, and ensure sustainability.

Finally, it is important to note that only 17% of student households have broadband access, making the school district the primary location for students to learn and become accustomed to technology.

Moss Point

The district has a disaster recovery plan. Data backups are stored on-site and on the cloud. Technology services are provided by a single department that oversees traditional information technology functions and educational technology support.

While the district's technology spending as a percentage of the budget is lower than the state median and the regional peer average, technology spending per student surpasses the state median and the average of regional peers. However, districts should prioritize essential needs such as hiring quality teachers, ensuring a safe environment, and offering extracurricular activities while integrating technology into education. Striking a balance between investing in technology and addressing student needs is critical.

When evaluating technology spending, the district should consider factors such as device count, device age, bandwidth, network usage capacity, teacher technology, and staffing levels. The number of devices per staff member is slightly below the state median but still greater than one device per staff member. The number of devices per student was above the state median and slightly higher than the regional average. The district also had a higher ratio of advanced presentation devices than state and regional comparatives.

More investment may be needed as the district increases technology utilization, particularly concerning available internet connectivity. Bandwidth per student was significantly below the median of state peers and slightly higher than the lower-performing quartile of state-comparative peers. However, the district was not planning to increase bandwidth over the next 12 months.

The district should examine overall staffing levels for technology. The ratio of devices per IT staff member was significantly lower than the state median and the regional average.

The student households' access to broadband or Wi-Fi capabilities is high, with 80% having access. However, to ensure the effective and efficient use of technology to support teaching and learning and address critical issues related to resource allocation, professional development, security, and compliance, it is recommended that the district develop a formally documented technology plan. Such a plan can guide future technology spending and investments to ensure that technology spending is appropriately balanced to meet student and district needs.

Natchez-Adams

The district lacks official documentation for its technology plan and disaster recovery plan. Data backups are stored on-site and on the cloud. A single department provides support for traditional information technology and educational technology services. The district's technology spending, measured as a percentage of its budget and spending per student, is higher than the state median. School districts should balance technology spending and essential needs such as hiring quality teachers, maintaining a safe learning environment, and providing extracurricular activities while integrating technology into education.

To evaluate technology spending, districts should consider several factors, including device count, device age, bandwidth, network usage capacity, teacher technology, and staffing levels. The district has the fifth-highest network bandwidth per student among all state-comparative peers and the third-highest ratio of devices per staff member (2.86) of all reviewed districts. The ratio of devices per student is slightly higher than the state median and the regional peer average. The devices had an average age of four years, suggesting many outdated devices in the inventory. The district should conduct a thorough review to ensure accurate representation of staff and student-usable devices and remove obsolete devices from service. This will help to recalculate the ratio of devices per staff member to determine appropriate staffing levels in technology.

Access to broadband or Wi-Fi capabilities in student households is high, with 80% having access. However, to ensure the effective and efficient use of technology to support teaching and learning and address critical issues related to resource allocation, professional development, security, and compliance, the district should develop a formally documented technology plan. A technology plan can guide future investments to ensure that technology spending is appropriately balanced to meet student and district needs.

The district should develop a formally documented disaster recovery plan. A disaster recovery plan ensures districts they can continue operating and providing services during and after a disaster or emergency. The plan helps to minimize disruption to normal school operations, ensure safety, protect data, comply with regulations, and ensure sustainability.

North Panola

The assessment team could not obtain benchmarking information on technology services from the district. However, they were provided with key performance indicator data, which revealed that the district's technology spending as a percentage of the budget was higher than the state median, the regional peer average, and the national peer range. Additionally, the technology spending per student was the sixth highest among state-comparative peers with one blended system. The data also suggests that the district has significantly invested in technology, particularly concerning student devices and internet connectivity.

The ratio of devices per staff member was close to the state median. However, the ratio of devices per student was comparably high, indicating that the district may have unused devices that need to be retired. It is recommended that the district conduct a thorough review to ensure an accurate representation of usable staff and student devices and remove obsolete devices from service. This will help when recalculating the ratio of devices per staff member and determine appropriate staffing levels in technology.

Only 50% of student households have broadband access. Therefore, the school district is the primary location that provides students with the necessary resources to learn and become familiar with technology. If the district does not have a formally documented technology plan, it should develop one. This will ensure the effective and efficient use of technology to support teaching and learning and address critical issues related to resource allocation, professional development, security, and compliance. A technology plan can guide future investments to ensure that technology spending is appropriately balanced to meet student and district needs.

Additionally, the district did not provide benchmarking information related to a disaster recovery plan. If the district does not have a disaster recovery plan, it is recommended that it develop one.

Noxubee

The district has established comprehensive technology and disaster recovery plans. The district has data backups stored on-site and on the cloud. All technology services are managed by a single department responsible for traditional information technology functions and educational technology support. The district has made substantial investments in technology, reflected in budget allocation and per-student spending. However, districts should prioritize fundamental needs such as hiring quality teachers, ensuring a safe learning environment, and providing extracurricular activities while integrating technology into education. Therefore, the district must balance investing in technology and addressing student needs.

When assessing technology spending, the district should consider factors such as device count, device age, bandwidth, network usage capacity, teacher technology, and staffing levels. Currently, the number of devices per staff member is below the state median and the regional peer average. The number of devices per student is also below the state median but still exceeds one device per student. The district also has a significantly lower ratio of advanced presentation devices than the state median and regional peer average. Although district bandwidth is higher than the state median, the district utilizes technology at higher rates than several peers, with over 21% of school days experiencing 75% of bandwidth usage.

The ratio of devices per IT staff member is significantly lower than the state median and the regional peer average. The district should review its spending on overall staffing levels for technology versus further investment in network and hardware to ensure a balance between adequate support and appropriate technological capabilities.

The district's student households have high broadband or Wi-fi capabilities, with 80% of households having access.

Okolona

The district has developed comprehensive technology and disaster recovery plans, incorporating on-site and non-cloud-based off-site data backups. All technology services are managed by a single department, including traditional information technology functions and educational technology support. Although the district's technology spending as a percentage of its overall budget was higher than that of all comparable groups, technology spending per student was slightly below the state median and marginally higher than the regional peer average.

Okolona has the highest network bandwidth per student and the second highest ratio of advanced presentation devices per teacher of all reviewed districts.

Several factors must be considered to assess technology spending accurately, such as device count, device age, bandwidth, network usage capacity, teacher technology, and staffing levels. The ratio of devices per staff member (2.59) is the third highest of all reviewed districts with one blended system. The ratio of devices per student (1.54) is above the state median and higher than the regional average. The average device age is four years, suggesting the district may have unused devices that must be retired. The district boasts the highest network bandwidth per student and the second-highest ratio of advanced presentation devices per teacher of all reviewed districts.

The ratio of devices per IT staff member is at the state median and slightly higher than the regional peer average. Staffing levels seem appropriate, particularly since obsolete devices could negatively impact this ratio. It is recommended that the district conducts a comprehensive review to ensure an accurate representation of usable staff and student devices and retire obsolete devices. This will help improve the ratio of devices per staff member and enable the district to assess staff loading accurately in the future.

The district's student households have high broadband or Wi-fi capabilities, with 70% of households having access.

Oxford

The district currently lacks official documentation for its technology plan and disaster recovery plan. Data backups are stored on-site and on the cloud. Technology resources are divided into two departments, with one focused on traditional IT functions. At the same time, the other provides educational technology support. The district's technology spending as a percentage of the budget was higher than the average of all comparative peer groups with two separate departments. Technology spending per student was the fourth highest of all reviewed districts.

To evaluate technology spending, districts should consider several factors, including device count, device age, bandwidth, network usage capacity, teacher technology, and staffing levels. The district's ratio of devices per staff member (2.31) is the seventh highest among state-comparative peers, while the ratio of devices per student (1.20) is slightly below the state median. The average device age is 2.4 years.

Further investment in technology may be needed, particularly regarding internet connectivity and teacher access to advanced presentation devices. The district's network bandwidth per student was below the lowest-performing quartile of state-comparative peers. The ratio of advanced presentation devices per student was less than the state median, with less than one device per teacher.

The ratio of devices per IT staff member is significantly below the state median and below the regional peer average. Staffing levels may be slightly high since unusable obsolete devices may distort this ratio. It is recommended that the district conduct a comprehensive review to ensure an accurate representation of staff devices and retire outdated devices. This will lower the ratio of devices per staff member and enable the district to assess staff loading accurately in the future.

It is recommended that the district develop a formally documented technology plan if it does not have one. This will ensure the effective and efficient use of technology to support teaching and learning and to address critical issues related to resource allocation, professional development, security, and compliance. This plan can guide future technology spending and investments to ensure that technology spending is appropriately balanced to meet student and district needs.

The assessment team recommends that the district develop a documented disaster recovery plan. A disaster recovery plan would ensure a school district continued operating and providing services during and after a disaster or emergency. The plan helps minimize disruption to normal school operations, ensure safety, protect data, comply with regulations, and ensure sustainability.

The district's student households have the highest broadband access or Wi-Fi capabilities of all state-comparative peers, with 97% of households having access.

Pass Christian

The district has formulated a comprehensive technology plan and a disaster recovery plan, which includes on-site and cloud-based data backups. A single department manages all technology services, encompassing traditional information technology functions and educational technology support. The district has made significant technological investments, as evidenced by budget allocation and per-student spending. Nonetheless, the community must prioritize fundamental needs such as hiring quality teachers, ensuring a safe learning environment, and providing extracurricular activities while integrating technology into education. Districts should balance investing in technology and addressing student needs.

Several critical resources should be considered when evaluating technology spending, including device count, device age, bandwidth, network usage capacity, teacher technology, and staffing levels. Currently, the district has a high ratio of devices per staff member (2.38 devices per staff member), which could be attributed to obsolete devices kept in inventory. The average age of devices in the district is 2.5 years. The district has a high ratio of devices per student (1.62), which may make up for the obsolete staff devices. All teachers have at least one advanced presentation device, which may increase the ratio of devices per staff member.

The district's investments in technology have focused on devices and providing adequate support. The ratio of devices per technology staff member is lower than the state median and the average of regional peers. Further investment in network capacity should be made, as the district was in the lowest-performing quartile of network bandwidth per student. The technology staff reported that the network usage exceeded 75% of capacity for 100% of school days (180 days). The district plans to upgrade its internet connection speeds within the next 12 months.

The district should review its spending on overall staffing levels for technology versus further investment in network and hardware to ensure a balance between adequate support and appropriate technological capabilities. Only 45% of student households have broadband access, making the school district a primary source for students to learn and become accustomed to technology.

Perry

Perry has the highest spending level and spending per student of all reviewed districts.

The district has a formally documented technology plan but lacks a formally documented disaster recovery plan. Data backups are stored on-site. In terms of technology spending, the district has the highest spending level (9.2%) of all reviewed districts, higher than regional peer average and the national peer range. Similarly, the district's spending per student is also the highest ($962.63) of all reviewed districts and significantly higher than the regional peer average and national peer range. The district must examine its technology expenditures, including factors such as device count, age, bandwidth, network usage capacity, teacher technology, and staffing levels.

During the assessment, it was found that the district had ratios of devices per staff, devices per student, and advanced presentation devices per teacher that were all significantly lower than the state median and the regional peer average. The district spent over $730,000 on hardware, systems, and services, which does not include the salary and benefits cost of the district's two technology staff members. The district should review how much of the expenditures were for contracted services versus hardware and consider whether increasing staff would be a better investment than outsourcing.

The district should develop a formally documented disaster recovery plan. Disaster recovery plans ensure districts can continue operating and providing services during and after a disaster or emergency. The plan helps minimize disruption to normal school operations, ensure safety, protect data, comply with regulations, and ensure sustainability. Also, it is recommended that the district immediately add an off-site, cloud-based data backup to protect against data loss due to a wide range of threats. This should be done before developing a disaster recovery plan, as this would enable schools to quickly recover from any data loss event by keeping backup data off-site and continuing their operations with minimal disruption.

The district has not recently surveyed parent households regarding Wi-Fi/broadband access. Conducting an annual survey to assess household internet availability for parents of students in public school districts can be beneficial in several ways. First, it can help identify households without internet or limited access, enabling schools and policymakers to understand the extent of the problem better and take appropriate steps to address it. Additionally, the survey can enhance communication between schools and parents by identifying households with limited internet access and helping schools to reach out to them through alternative means. Conducting an annual survey can help schools gain a clearer understanding of the needs of their students and families and develop effective strategies to address any digital disparities.

Simpson

The district has developed comprehensive technology and disaster recovery plans, including on-site and non-cloud-based off-site data backups. A single department responsible for traditional information technology functions and educational technology support manages all technology services. However, despite the potential benefits of integrating technology into education, the district should prioritize other essential needs, such as hiring high-quality teachers, ensuring a safe and supportive environment, and offering extracurricular activities.

When assessing technology spending levels, the district should consider factors, such as the number of devices, device age, bandwidth, network usage capacity, teachers with advanced presentation devices, and technology staffing levels. The district's technology spending as a percentage of the budget is lower than the state median and the regional peer average. Technology spending per student ($202.51) is below the lowest-performing quartile of state comparatives and all comparative peer groups. The district reported that they do not track technology costs separately (e.g., hardware, systems, service costs, business systems technology costs, or instructional technology costs). The district should track technology costs separately to provide district administration with better insight into technology expenditures.

Simpson has the second highest ratio of devices per staff member of all reviewed districts. Simpson also has the second lowest network bandwidth per student of all reviewed districts.

The ratio of devices per staff member (3.11) is the second highest of all state-comparative peers, and the average age of devices is the fourth oldest of state comparatives at 5.4 years. Network bandwidth per student is the second lowest of all comparative peers. The district does not track the number of

days that network usage exceeds 75% of capacity, and the ratio of advanced presentation devices is below the state median. Based on these metrics, it is recommended that the district consider investing more in technology.

Obsolete devices may be included in the device inventory counts, negatively impacting the ratio of devices per staff member. Thus, it is recommended that the district conducts a comprehensive review to ensure an accurate representation of staff devices and retire obsolete devices. This will lower the ratio of devices per staff member and enable the district to assess staff loading accurately in the future.

The district has not recently surveyed parent households regarding Wi-Fi/broadband access. Conducting an annual survey can be beneficial in several ways. First, it can help identify households without internet access or with limited access, enabling schools and policymakers to understand the scope of the problem better and take appropriate measures to address it. Additionally, the survey can facilitate planning for remote learning by providing insights into the technology resources available to students at home, informing the development of strategies to provide internet access and technology resources to those in need. The survey can also enhance communication between schools and parents by identifying households with limited internet access and helping schools reach out to them through alternative means. Finally, schools can use survey results to evaluate the effectiveness of their technology programs and assess whether all households are being reached equitably. Conducting an annual survey can help schools better understand the needs of their students and families and develop effective strategies to address any digital disparities.

Sunflower

The district has developed a comprehensive technology plan that includes on-site and non-cloud-based off-site data backups and a disaster recovery plan. All technology services are managed by a single department responsible for traditional information technology functions and educational technology support. While integrating technology into education has potential benefits, it is important to prioritize other essential needs, such as hiring high-quality teachers, ensuring a safe and supportive environment, and offering extracurricular activities. Districts should balance investing in technology and addressing students' needs, and schools must consider the unique needs of their community.

To assess technology spending levels, it is important to consider factors such as the number of devices, device age, bandwidth, network usage capacity, teachers with advanced presentation devices, and technology staffing levels. The district's technology spending as a percentage of the budget and spending per student is above the state median and above the regional peer average. The ratio of devices per staff member (1.85) is higher than the state median, while the ratio of devices per student (1.07) is below the state median and the regional peer average. The average age of devices is five years, and network bandwidth per student was significantly higher than the state median. The ratio of advanced presentation devices per teacher was tied for the third highest of state-comparative peers. The ratio of devices per technology staff member is below the state median and the regional peer average; the district appears to be appropriately staffed.

The district has chosen to invest in internet connectivity and advanced presentation devices for teachers. However, based on the average age of devices, the district will require further technology investment in updating staff and student devices. The district’s student households have high broadband access or Wi-fi capabilities, with 85% of households having access.

Tate

The district has a formal disaster recovery plan in place, but it needs a formally documented technology plan. All technology services are managed by a single department responsible for traditional information technology functions and educational technology support. While incorporating technology into education has potential benefits, the district should prioritize other critical needs, such as hiring high-quality teachers, providing a safe and supportive environment, and offering extracurricular activities. The district should balance investing in technology and addressing students' needs, and schools must consider the unique needs of their community.

Compared to other districts of all reviewed districts, the district's technology spending as a percentage of the budget is tied for the fourth lowest, and technology spending per student is the fourth lowest. Several factors must be considered to assess technology spending levels, such as the number of devices, device age, bandwidth, network usage capacity, teachers with advanced presentation devices, and technology staffing levels.

The district's ratio of devices per staff member (0.98) is lower than the state median and the average of regional peers. The ratio of devices per student (1.02) is below the state median and the of regional peer average. The average age of devices is 2.5 years. Additionally, network bandwidth per student was below the lowest quartile of state-comparative peers, and network usage exceeded 75% capacity for over 20% of the school year during periods of student testing. However, the district's ratio of advanced presentation devices per teacher is higher than the state median and the average of regional peers. The ratio of devices per technology staff member is below the state median and the regional peer average; the district seems to be adequately staffed.

Based on the above metrics, the district should consider increasing investment in technology. To ensure effective and efficient use of technology to support teaching and learning and to address critical issues related to resource allocation, professional development, security, and compliance, it is recommended that the district develop a formally documented technology plan if it does not have one. This plan can guide future technology spending and investments to ensure that technology spending is appropriately balanced to meet student and district needs.

> Tate has the second highest level of broadband access or Wi-Fi capabilities of all reviewed districts.

The district's student households have the second-highest level of broadband access or Wi-Fi capabilities of all state-comparative peers, with 96% of households having access.

Walthall

The district has developed a comprehensive technology plan but lacks a formal disaster recovery plan. Data backups are stored on-site and on the cloud. One department manages both traditional information technology functions and educational technology support. The district's technology spending aligns with the state median. The district should prioritize fundamental needs such as hiring quality teachers, ensuring a safe learning environment, and providing extracurricular activities while integrating technology into education.

Critical resources such as device count, age, bandwidth, network usage capacity, teacher technology, and staffing levels should be considered when evaluating technology spending. The district's ratio of devices per staff member, devices per student, and advanced presentation devices per teacher all meet or exceed the state median. The district's average age of devices is 2.6 years, lower than the state median. The devices per technology staff member ratio is below the regional average.

The district does not plan to increase internet connection speeds in the next 12 months. The network bandwidth per student is significantly lower than the state median. The district should track the number of days that network utilization exceeds 75% of capacity to determine when network capacity needs to be addressed.

The district should also develop a formally documented disaster recovery plan. Disaster recovery plans ensure districts can continue operating and providing services during and after a disaster or emergency.

The district has not recently surveyed parent households regarding Wi-Fi/broadband access. Conducting an annual survey to assess household internet availability for parents of students in public school districts can help identify households without internet or limited access. This can inform the development of strategies to provide internet access and technology resources to those who require them. Additionally, the survey can enhance communication between schools and parents by identifying households with limited internet access and helping schools to reach out to them through alternative means. Schools can use the survey results to evaluate the effectiveness of their technology programs and assess whether all households are being reached equitably.

Water Valley

The district lacks official documentation for its technology plan and disaster recovery plan, and data backups are stored on-site. The assessment team recommends that the district establishes an off-site, cloud-based data backup to safeguard against data loss due to various threats. This measure will enable schools to recover quickly from data loss events and maintain operations with minimal disruptions.

Districts should prioritize critical needs, such as hiring high-quality teachers, providing a safe and supportive environment, and offering extracurricular activities. Schools must consider the unique needs of their community.

Water Valley has the lowest spending as a percentage of budget as well as the lowest spending per student of all reviewed districts.

When assessing technology spending levels, districts should consider factors such as the number of devices, device age, bandwidth, network usage capacity, teachers with advanced presentation devices, and technology staffing levels. The district's technology spending as a percentage of the budget and spending per student is the lowest of all reviewed districts. The district's ratio of devices per staff member is lower than the state median and the regional peer average. However, the ratio of devices per student is higher than the state median and the regional peer average. The average age of devices is three years, and network bandwidth per student is below the state median. Network usage exceeded 75% capacity for over 20% of the school year during periods of student testing. The district's ratio of advanced presentation devices per teacher is significantly higher than the state median and the average of regional peers. The ratio of devices per technology staff member is the second highest of state-comparative peers, indicating that the district should consider additional resources for technology support.

Water Valley's ratio of devices per technology staff member is the second highest of all reviewed districts.

Based on these metrics, the district should consider increasing its investment in technology. Only 50% of student households have broadband access, making the school district a primary location that provides students with the necessary resources to learn and become familiar with technology. Therefore, to ensure the effective and efficient use of technology to support teaching and learning and to address critical issues related to resource allocation, professional development, security, and compliance, it is recommended that the district develop a formally documented technology plan. This plan can guide future technology spending and investments to ensure that technology spending is appropriately balanced to meet student and district needs.

The district is recommended to develop a formal disaster recovery plan. A disaster recovery plan ensures that districts can continue operating and providing services during and after a disaster or emergency. The plan helps minimize disruption to normal school operations, ensures safety, protects data, complies with regulations, and ensures sustainability.

Wayne

The school district lacks a comprehensive technology plan but does have a formal disaster recovery plan that covers on-site and cloud-based data backups. All technology services are managed by a single department, including traditional information technology functions and educational technology support. The district has invested significantly in technology, with a budget allocation of 4.6% and per-student spending of $729.54. The district should prioritize fundamental needs such as hiring quality teachers, maintaining a safe learning environment, and providing extracurricular activities while integrating technology into education. It is important to balance technology investment and student needs.

When evaluating technology spending, districts should consider factors such as device count, age, bandwidth, network usage capacity, teacher technology, and staffing levels. The current ratio of devices per staff is below the state median but greater than one. The ratio of devices per student is comparably high at 1.83, but this number may include obsolete devices. The district has an average device age of five years and a ratio of 1,160 devices per staff member, both of which are higher than the respective state medians. It is recommended that the district review the device inventory, remove obsolete devices, and adjust technology spending levels accordingly.

Wayne has the third lowest network bandwidth per student of all reviewed districts.

The district has no plans to upgrade internet connection speed within the next year. More investment will be necessary to improve network bandwidth per student as technology use increases across the district. The network bandwidth per student is the third lowest of all reviewed districts, and network utilization exceeded 75% of capacity for approximately 64% (115 days) of the school year.

The assessment team recommends that the district develop a formally documented technology plan to ensure the effective and efficient use of technology to support teaching and learning and to address critical issues related to resource

allocation, professional development, security, and compliance. A technology plan can guide future technology spending and investments to ensure that technology spending is appropriately balanced to meet student and district needs.

The district's student households have high broadband access or Wi-fi capabilities, with 81% of households having access.

West Point

The district currently lacks official documentation for its technology plan and disaster recovery plan. Data backups are stored on-site and on the cloud. All technology services are managed by a single department responsible for traditional information technology functions and educational technology support. Technology spending as a percent of the district budget and per student is below the state median, but higher than the regional peer average. Districts should prioritize other critical needs, such as hiring high-quality teachers, providing a safe and supportive environment, and offering extracurricular activities. Districts should balance investing in technology and addressing students' needs, and schools must consider the unique needs of their community.

Several factors must be considered to assess technology spending levels, such as the number of devices, device age, bandwidth, network usage capacity, teachers with advanced presentation devices, and technology staffing levels. The district's ratio of devices per staff member is slightly lower than the state median and the average of regional peers. However, the ratio of devices per student is higher than the state median. The average age of devices is three years. Network bandwidth per student was above the state median, and the district had zero days where network usage exceeded 75% capacity. The district's ratio of advanced presentation devices per teacher is slightly higher than the state median. The ratio of devices per technology staff member is the fifth lowest of state-comparative peers, indicating that the district should consider additional resources for technology support.

Based on these metrics, the district should consider increasing its investment in technology. Only 50% of student households have broadband access, making the school district the primary location that provides students with the necessary resources to learn and become familiar with technology. To ensure the effective and efficient use of technology to support teaching and learning and to address critical issues related to resource allocation, professional development, security, and compliance, it is recommended that the district develop a formally documented technology plan. This plan can guide future technology spending and investments to ensure that technology spending is appropriately balanced to meet student and district needs.

The district is recommended to develop a formal disaster recovery plan. This plan ensures school districts can continue operating and providing services during and after a disaster or emergency. The plan helps minimize disruption to normal school operations, ensures safety, protects data, complies with regulations, and ensures sustainability.

Wilkinson

Wilkinson has the second lowest technology spending as a percentage of the district budget as well as the second lowest spending per student.

The district has a documented technology plan in place but lacks a formal disaster recovery plan. Data backups are stored on-site and on the cloud. All technology services are managed by a single department responsible for traditional information technology functions and educational technology support. However, technology spending as a percentage of the district budget and spending per student is second lowest of all reviewed districts. Districts should prioritize critical needs such as hiring high-quality teachers, providing a safe and supportive environment, and offering extracurricular activities. Schools must balance investing in technology and addressing students' needs and consider the unique needs of their community.

When assessing technology spending levels, districts should consider the number of devices, device age, bandwidth, network usage capacity, teachers with advanced presentation devices, and technology staffing levels. The district's ratio of devices per staff member and devices per student is higher than the state median and slightly higher than the regional peer average. However, the average age of devices is six years, which is the second oldest average age of

Wilkinson has the second highest average age of devices of all reviewed districts.

Wilkinson has the second lowest ratio of devices per technology staff member of all reviewed districts.

devices of all reviewed districts. The network bandwidth per student is higher than the state median, yet network usage exceeded 75% capacity for over 88% of the school year (160 days). Additionally, the district's ratio of advanced presentation devices per teacher is lower than the state median and the regional peer average. The ratio of devices per technology staff member is the second lowest of all reviewed districts.

Although the district is making effective use of technology, it should be noted that devices are reaching the end of life, and internet connectivity needs further improvement. Staffing levels may be high, and the district should review its overall technology plan and adjust. Only 50% of student households have broadband access, making the school district a primary location that provides students with the necessary resources to learn and become familiar with technology.

Yazoo County

The district currently lacks formal documentation for both its technology plan and disaster recovery plan. District data backups are stored on-site and on the cloud. Support for traditional information technology and educational technology services is provided by a single blended department. The district has invested significantly in technology, with a budget allocation of 3.1% and per-student spending of $524; both are higher than the state median and the regional peer average. The district should prioritize fundamental needs such as hiring quality teachers, maintaining a safe learning environment, and providing extracurricular activities while integrating technology into education. Districts should balance technology investment and student needs.

When evaluating technology spending, districts should consider device count, device age, bandwidth, network usage capacity, teacher technology, and staffing levels. The district's ratios of devices per staff (2.23) and devices per student (2.06) are higher than the state median, suggesting that obsolete devices may be included in the overall device counts. The average age of the devices is three years, and the district has a high ratio of 1,116 devices per IT staff member. It is recommended that the district review the device inventory, remove obsolete devices, and adjust technology spending levels accordingly.

The district has no plans to upgrade internet connection speed within the following year. However, the network bandwidth per student is significantly above the state median. The district reported that network utilization exceeded 75% of capacity for approximately 90% (162 days) of the school year. This indicates that as technology utilization increases, the district will need to invest further in internet connectivity speeds.

The student households' access to broadband or Wi-Fi capabilities is high, with 70% having access. However, to ensure the effective and efficient use of technology to support teaching and learning and address critical issues related to resource allocation, professional development, security, and compliance, it is recommended that the district develop a formally documented technology plan. A technology plan can guide future technology spending and investments to ensure that technology spending is appropriately balanced to meet student and district needs.

Finally, the district is recommended to develop a formally documented disaster recovery plan. Disaster recovery plans ensure districts can continue operating and providing services during and after a disaster or emergency. The plan helps minimize disruption to normal school operations, ensure safety, protect data, comply with regulations, and ensure sustainability.

APPENDIX B

District Data Tables

Attala Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	2
Total Student devices (computers, laptops, tablets) (#)	1,506
Total Employee devices (computers, laptops, tablets) (#)	147
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	89
Total support/incident tickets (#)	Not Provided
Average Number of Days support/incident tickets remain open (#)	1
Total available bandwidth overall (in Mbit/s)	8,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	8,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	58%
Average age of computers, in years (#)	3.5
District Annual Actual Expenditures ($)	$16,599,105
Total Number of Active Schools (#)	5
Annual IT (Technology) Staffing Costs ($)	$109,168
Annual IT hardware, systems, and service costs ($)	$77,415
Annual IT Business Systems Costs ($)	$37,931
Annual IT Instructional Systems Costs ($)	$44,321
Annual IT Spending-Capital Investment ($)	$77,415
Total Number of district staff (#)	201
Total Number of Enrolled Students (#)	985
-- Of Total Number of Teachers (FTE) (#)	113
Network days usage exceeded 75% of capacity	14

Canton Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	4
Total Student devices (computers, laptops, tablets) (#)	6,470
Total Employee devices (computers, laptops, tablets) (#)	338
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	247
Total support/incident tickets (#)	200
Average Number of Days support/incident tickets remain open (#)	2.5
Total available bandwidth overall (in Mbit/s)	16,192
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	16,192
Percentage of Households with Wi-Fi/broadband capabilities (%)	Not Provided
Average age of computers, in years (#)	7.5
District Annual Actual Expenditures ($)	$59,481,964
Total Number of Active Schools (#)	10
Annual IT (Technology) Staffing Costs ($)	$299,503
Annual IT hardware, systems, and service costs ($)	$91,997
Annual IT Business Systems Costs ($)	$0
Annual IT Instructional Systems Costs ($)	$543,806
Annual IT Spending-Capital Investment ($)	$116,167

Total Number of district staff (#)	491
Total Number of Enrolled Students (#)	3,300
-- Of Total Number of Teachers (FTE) (#)	238
Network days usage exceeded 75% of capacity	Not Tracked

Coahoma Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	3
Total Student devices (computers, laptops, tablets) (#)	2,000
Total Employee devices (computers, laptops, tablets) (#)	300
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	80
Total support/incident tickets (#)	200
Average Number of Days support/incident tickets remain open (#)	5
Total available bandwidth overall (in Mbit/s)	1,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	1,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	90%
Average age of computers, in years (#)	3
District Annual Actual Expenditures ($)	$9,766,809
Total Number of Active Schools (#)	4
Annual IT (Technology) Staffing Costs ($)	$244,516
Annual IT hardware, systems, and service costs ($)	$159,511
Annual IT Business Systems Costs ($)	$0
Annual IT Instructional Systems Costs ($)	$79,516
Annual IT Spending-Capital Investment ($)	$0
Total Number of district staff (#)	221
Total Number of Enrolled Students (#)	1,208
-- Of Total Number of Teachers (FTE) (#)	94
Network days usage exceeded 75% of capacity	15

Copiah Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	4
Total Student devices (computers, laptops, tablets) (#)	2,350
Total Employee devices (computers, laptops, tablets) (#)	500
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	100
Total support/incident tickets (#)	Not Provided
Average Number of Days support/incident tickets remain open (#)	Not Provided
Total available bandwidth overall (in Mbit/s)	900
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	900
Percentage of Households with Wi-Fi/broadband capabilities (%)	30%
Average age of computers, in years (#)	3
District Annual Actual Expenditures ($)	$23,353,816
Total Number of Active Schools (#)	4
Annual IT (Technology) Staffing Costs ($)	$214,718
Annual IT hardware, systems, and service costs ($)	$45,270
Annual IT Business Systems Costs ($)	$11,150

Annual IT Instructional Systems Costs ($)	$22,750
Annual IT Spending-Capital Investment ($)	$288,495
Total Number of district staff (#)	330
Total Number of Enrolled Students (#)	2,281
-- Of Total Number of Teachers (FTE) (#)	204
Network days usage exceeded 75% of capacity	9

George Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	5
Total Student devices (computers, laptops, tablets) (#)	6,300
Total Employee devices (computers, laptops, tablets) (#)	2,755
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	200
Total support/incident tickets (#)	647
Average Number of Days support/incident tickets remain open (#)	3
Total available bandwidth overall (in Mbit/s)	8,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	8,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	10%
Average age of computers, in years (#)	5
District Annual Actual Expenditures ($)	$42,717,894
Total Number of Active Schools (#)	8
Annual IT (Technology) Staffing Costs ($)	$258,205
Annual IT hardware, systems, and service costs ($)	$78,844
Annual IT Business Systems Costs ($)	$38,845
Annual IT Instructional Systems Costs ($)	$799,963
Annual IT Spending-Capital Investment ($)	$0
Total Number of district staff (#)	616
Total Number of Enrolled Students (#)	4,083
-- Of Total Number of Teachers (FTE) (#)	290
Network days usage exceeded 75% of capacity	180

Greenville Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	5
Total Student devices (computers, laptops, tablets) (#)	5,800
Total Employee devices (computers, laptops, tablets) (#)	1,200
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	322
Total support/incident tickets (#)	1,200
Average Number of Days support/incident tickets remain open (#)	7
Total available bandwidth overall (in Mbit/s)	2,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	2,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	30%
Average age of computers, in years (#)	4
District Annual Actual Expenditures ($)	$51,411,368
Total Number of Active Schools (#)	11
Annual IT (Technology) Staffing Costs ($)	$107,000

Annual IT hardware, systems, and service costs ($)	$119,781
Annual IT Business Systems Costs ($)	$100,085
Annual IT Instructional Systems Costs ($)	$486,309
Annual IT Spending-Capital Investment ($)	$69,420
Total Number of district staff (#)	666
Total Number of Enrolled Students (#)	3,644
-- Of Total Number of Teachers (FTE) (#)	262
Network days usage exceeded 75% of capacity	30

Grenada Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	4.5
Total Student devices (computers, laptops, tablets) (#)	4,596
Total Employee devices (computers, laptops, tablets) (#)	710
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	277
Total support/incident tickets (#)	3,814
Average Number of Days support/incident tickets remain open (#)	0.76
Total available bandwidth overall (in Mbit/s)	1,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	1,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	80%
Average age of computers, in years (#)	2
District Annual Actual Expenditures ($)	$42,995,328
Total Number of Active Schools (#)	6
Annual IT (Technology) Staffing Costs ($)	$393,820
Annual IT hardware, systems, and service costs ($)	$567,976
Annual IT Business Systems Costs ($)	$46,865
Annual IT Instructional Systems Costs ($)	$1,792,395
Annual IT Spending-Capital Investment ($)	$153,331
Total Number of district staff (#)	606
Total Number of Enrolled Students (#)	3,628
-- Of Total Number of Teachers (FTE) (#)	265
Network days usage exceeded 75% of capacity	90

Hattiesburg Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	8
Total Student devices (computers, laptops, tablets) (#)	9,064
Total Employee devices (computers, laptops, tablets) (#)	750
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	225
Total support/incident tickets (#)	2,506
Average Number of Days support/incident tickets remain open (#)	12.6
Total available bandwidth overall (in Mbit/s)	1,500
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	1,500
Percentage of Households with Wi-Fi/broadband capabilities (%)	85%
Average age of computers, in years (#)	3
District Annual Actual Expenditures ($)	$58,975,957

Total Number of Active Schools (#)	9
Annual IT (Technology) Staffing Costs ($)	$474,953
Annual IT hardware, systems, and service costs ($)	$144,111
Annual IT Business Systems Costs ($)	$42,620
Annual IT Instructional Systems Costs ($)	$589,803
Annual IT Spending-Capital Investment ($)	$538,652
Total Number of district staff (#)	655
Total Number of Enrolled Students (#)	3,569
-- Of Total Number of Teachers (FTE) (#)	294
Network days usage exceeded 75% of capacity	1

Hollandale Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	2
Total Student devices (computers, laptops, tablets) (#)	950
Total Employee devices (computers, laptops, tablets) (#)	250
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	45
Total support/incident tickets (#)	121
Average Number of Days support/incident tickets remain open (#)	3
Total available bandwidth overall (in Mbit/s)	8,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	8,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	35%
Average age of computers, in years (#)	2
District Annual Actual Expenditures ($)	$12,082,504
Total Number of Active Schools (#)	2
Annual IT (Technology) Staffing Costs ($)	$98,981
Annual IT hardware, systems, and service costs ($)	Not Provided
Annual IT Business Systems Costs ($)	Not Provided
Annual IT Instructional Systems Costs ($)	$113,003
Annual IT Spending-Capital Investment ($)	Not Provided
Total Number of district staff (#)	107
Total Number of Enrolled Students (#)	568
-- Of Total Number of Teachers (FTE) (#)	46
Network days usage exceeded 75% of capacity	Not Tracked

Holmes Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	3
Total Student devices (computers, laptops, tablets) (#)	8,300
Total Employee devices (computers, laptops, tablets) (#)	450
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	279
Total support/incident tickets (#)	67
Average Number of Days support/incident tickets remain open (#)	3
Total available bandwidth overall (in Mbit/s)	8,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	8,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	Not Provided

Average age of computers, in years (#)	4
District Annual Actual Expenditures ($)	$50,281,332
Total Number of Active Schools (#)	7
Annual IT (Technology) Staffing Costs ($)	$320,543
Annual IT hardware, systems, and service costs ($)	$446,548
Annual IT Business Systems Costs ($)	$237,341
Annual IT Instructional Systems Costs ($)	$446,208
Annual IT Spending-Capital Investment ($)	Not Provided
Total Number of district staff (#)	438
Total Number of Enrolled Students (#)	2,542
-- Of Total Number of Teachers (FTE) (#)	197
Network days usage exceeded 75% of capacity	Not Tracked

Louisville Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	3
Total Student devices (computers, laptops, tablets) (#)	2,800
Total Employee devices (computers, laptops, tablets) (#)	375
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	86
Total support/incident tickets (#)	650
Average Number of Days support/incident tickets remain open (#)	5
Total available bandwidth overall (in Mbit/s)	16,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	16,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	Not Provided
Average age of computers, in years (#)	3
District Annual Actual Expenditures ($)	$35,492,961
Total Number of Active Schools (#)	7
Annual IT (Technology) Staffing Costs ($)	$223,825
Annual IT hardware, systems, and service costs ($)	$474,866
Annual IT Business Systems Costs ($)	$27,275
Annual IT Instructional Systems Costs ($)	$211,999
Annual IT Spending-Capital Investment ($)	$15,633
Total Number of district staff (#)	385
Total Number of Enrolled Students (#)	2,553
-- Of Total Number of Teachers (FTE) (#)	199
Network days usage exceeded 75% of capacity	77

Madison Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	18
Total Student devices (computers, laptops, tablets) (#)	15,500
Total Employee devices (computers, laptops, tablets) (#)	1,600
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	439
Total support/incident tickets (#)	3,534
Average Number of Days support/incident tickets remain open (#)	Not Provided
Total available bandwidth overall (in Mbit/s)	48,000

Total available bandwidth Wi-Fi/broadband (in Mbit/s)	48,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	75%
Average age of computers, in years (#)	2
District Annual Actual Expenditures ($)	$212,092,439
Total Number of Active Schools (#)	23
Annual IT (Technology) Staffing Costs ($)	$1,527,149
Annual IT hardware, systems, and service costs ($)	$503,090
Annual IT Business Systems Costs ($)	$483,087
Annual IT Instructional Systems Costs ($)	$1,380,789
Annual IT Spending-Capital Investment ($)	$0
Total Number of district staff (#)	1,850
Total Number of Enrolled Students (#)	13,096
-- Of Total Number of Teachers (FTE) (#)	1,029
Network days usage exceeded 75% of capacity	Not Tracked

McComb Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	5
Total Student devices (computers, laptops, tablets) (#)	6,878
Total Employee devices (computers, laptops, tablets) (#)	927
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	105
Total support/incident tickets (#)	165
Average Number of Days support/incident tickets remain open (#)	11.86
Total available bandwidth overall (in Mbit/s)	8,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	8,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	17%
Average age of computers, in years (#)	5.5
District Annual Actual Expenditures ($)	$31,244,536
Total Number of Active Schools (#)	6
Annual IT (Technology) Staffing Costs ($)	$533,055
Annual IT hardware, systems, and service costs ($)	$342,761
Annual IT Business Systems Costs ($)	$304,152
Annual IT Instructional Systems Costs ($)	Not Provided
Annual IT Spending-Capital Investment ($)	$0
Total Number of district staff (#)	444
Total Number of Enrolled Students (#)	2,286
-- Of Total Number of Teachers (FTE) (#)	219
Network days usage exceeded 75% of capacity	34

Moss Point Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	5
Total Student devices (computers, laptops, tablets) (#)	2,200
Total Employee devices (computers, laptops, tablets) (#)	450
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	200
Total support/incident tickets (#)	950

Average Number of Days support/incident tickets remain open (#)	10
Total available bandwidth overall (in Mbit/s)	1,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	1,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	80%
Average age of computers, in years (#)	3
District Annual Actual Expenditures ($)	$36,692,497
Total Number of Active Schools (#)	6
Annual IT (Technology) Staffing Costs ($)	$142,292
Annual IT hardware, systems, and service costs ($)	$253,374
Annual IT Business Systems Costs ($)	$96,562
Annual IT Instructional Systems Costs ($)	$143,802
Annual IT Spending-Capital Investment ($)	$141,973
Total Number of district staff (#)	375
Total Number of Enrolled Students (#)	1,563
-- Of Total Number of Teachers (FTE) (#)	123
Network days usage exceeded 75% of capacity	10

Natchez-Adams Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	4
Total Student devices (computers, laptops, tablets) (#)	3,879
Total Employee devices (computers, laptops, tablets) (#)	1,562
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	187
Total support/incident tickets (#)	1,474
Average Number of Days support/incident tickets remain open (#)	2
Total available bandwidth overall (in Mbit/s)	20,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	20,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	80%
Average age of computers, in years (#)	4
District Annual Actual Expenditures ($)	$64,414,347
Total Number of Active Schools (#)	9
Annual IT (Technology) Staffing Costs ($)	$324,271
Annual IT hardware, systems, and service costs ($)	$1,014,487
Annual IT Business Systems Costs ($)	$27,198
Annual IT Instructional Systems Costs ($)	$877,000
Annual IT Spending-Capital Investment ($)	$0
Total Number of district staff (#)	546
Total Number of Enrolled Students (#)	2,830
-- Of Total Number of Teachers (FTE) (#)	247
Network days usage exceeded 75% of capacity	0

North Panola Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	2
Total Student devices (computers, laptops, tablets) (#)	2,615
Total Employee devices (computers, laptops, tablets) (#)	230

Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	75
Total support/incident tickets (#)	614
Average Number of Days support/incident tickets remain open (#)	3
Total available bandwidth overall (in Mbit/s)	8,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	8,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	50%
Average age of computers, in years (#)	3
District Annual Actual Expenditures ($)	$15,170,765
Total Number of Active Schools (#)	5
Annual IT (Technology) Staffing Costs ($)	$155,581
Annual IT hardware, systems, and service costs ($)	$29,910
Annual IT Business Systems Costs ($)	$247,171
Annual IT Instructional Systems Costs ($)	$231,417
Annual IT Spending-Capital Investment ($)	$0
Total Number of district staff (#)	187
Total Number of Enrolled Students (#)	1,250
-- Of Total Number of Teachers (FTE) (#)	138
Network days usage exceeded 75% of capacity	Not Tracked

Noxubee Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	3
Total Student devices (computers, laptops, tablets) (#)	1,500
Total Employee devices (computers, laptops, tablets) (#)	150
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	30
Total support/incident tickets (#)	450
Average Number of Days support/incident tickets remain open (#)	1
Total available bandwidth overall (in Mbit/s)	8,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	8,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	80%
Average age of computers, in years (#)	3
District Annual Actual Expenditures ($)	$19,126,092
Total Number of Active Schools (#)	4
Annual IT (Technology) Staffing Costs ($)	$213,901
Annual IT hardware, systems, and service costs ($)	$44,618
Annual IT Business Systems Costs ($)	$351,919
Annual IT Instructional Systems Costs ($)	$288,729
Annual IT Spending-Capital Investment ($)	$42,487
Total Number of district staff (#)	192
Total Number of Enrolled Students (#)	1,401
-- Of Total Number of Teachers (FTE) (#)	94
Network days usage exceeded 75% of capacity	40

Okolona Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	1
Total Student devices (computers, laptops, tablets) (#)	800
Total Employee devices (computers, laptops, tablets) (#)	150
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	50
Total support/incident tickets (#)	Not Provided
Average Number of Days support/incident tickets remain open (#)	3
Total available bandwidth overall (in Mbit/s)	8,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	8,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	70%
Average age of computers, in years (#)	4
District Annual Actual Expenditures ($)	$4,544,083
Total Number of Active Schools (#)	3
Annual IT (Technology) Staffing Costs ($)	$43,624
Annual IT hardware, systems, and service costs ($)	$3,900
Annual IT Business Systems Costs ($)	$29,011
Annual IT Instructional Systems Costs ($)	$95,117
Annual IT Spending-Capital Investment ($)	$0
Total Number of district staff (#)	58
Total Number of Enrolled Students (#)	518
-- Of Total Number of Teachers (FTE) (#)	31
Network days usage exceeded 75% of capacity	Not Tracked

Oxford Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	10
Total Student devices (computers, laptops, tablets) (#)	5,636
Total Employee devices (computers, laptops, tablets) (#)	1,491
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	250
Total support/incident tickets (#)	6,745
Average Number of Days support/incident tickets remain open (#)	4
Total available bandwidth overall (in Mbit/s)	2,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	2,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	97%
Average age of computers, in years (#)	2.4
District Annual Actual Expenditures ($)	$77,699,247
Total Number of Active Schools (#)	6
Annual IT (Technology) Staffing Costs ($)	$768,825
Annual IT hardware, systems, and service costs ($)	$1,563,865
Annual IT Business Systems Costs ($)	$89,873
Annual IT Instructional Systems Costs ($)	$517,939
Annual IT Spending-Capital Investment ($)	$495,392
Total Number of district staff (#)	646
Total Number of Enrolled Students (#)	4,682
-- Of Total Number of Teachers (FTE) (#)	321

Network days usage exceeded 75% of capacity	Not Tracked

Pass Christian Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	4.5
Total Student devices (computers, laptops, tablets) (#)	3,199
Total Employee devices (computers, laptops, tablets) (#)	700
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	151
Total support/incident tickets (#)	2,556
Average Number of Days support/incident tickets remain open (#)	2
Total available bandwidth overall (in Mbit/s)	1,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	300
Percentage of Households with Wi-Fi/broadband capabilities (%)	45%
Average age of computers, in years (#)	2.5
District Annual Actual Expenditures ($)	$20,491,000
Total Number of Active Schools (#)	4
Annual IT (Technology) Staffing Costs ($)	$368,013
Annual IT hardware, systems, and service costs ($)	$501,105
Annual IT Business Systems Costs ($)	$31,375
Annual IT Instructional Systems Costs ($)	$174,709
Annual IT Spending-Capital Investment ($)	$55,277
Total Number of district staff (#)	294
Total Number of Enrolled Students (#)	1,975
-- Of Total Number of Teachers (FTE) (#)	151
Network days usage exceeded 75% of capacity	180

Perry Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	2
Total Student devices (computers, laptops, tablets) (#)	630
Total Employee devices (computers, laptops, tablets) (#)	131
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	61
Total support/incident tickets (#)	5,844
Average Number of Days support/incident tickets remain open (#)	17.5
Total available bandwidth overall (in Mbit/s)	5,200
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	840
Percentage of Households with Wi-Fi/broadband capabilities (%)	Not Provided
Average age of computers, in years (#)	5
District Annual Actual Expenditures ($)	$9,728,002
Total Number of Active Schools (#)	4
Annual IT (Technology) Staffing Costs ($)	$121,256
Annual IT hardware, systems, and service costs ($)	$739,600
Annual IT Business Systems Costs ($)	$27,500
Annual IT Instructional Systems Costs ($)	$5,927
Annual IT Spending-Capital Investment ($)	$0
Total Number of district staff (#)	176

Total Number of Enrolled Students (#)	929
-- Of Total Number of Teachers (FTE) (#)	92
Network days usage exceeded 75% of capacity	Not Tracked

Simpson Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	5
Total Student devices (computers, laptops, tablets) (#)	3,805
Total Employee devices (computers, laptops, tablets) (#)	1,509
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	181
Total support/incident tickets (#)	3,134
Average Number of Days support/incident tickets remain open (#)	11.4
Total available bandwidth overall (in Mbit/s)	1,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	Not Provided
Percentage of Households with Wi-Fi/broadband capabilities (%)	Not Provided
Average age of computers, in years (#)	5.36
District Annual Actual Expenditures ($)	$27,464,199
Total Number of Active Schools (#)	9
Annual IT (Technology) Staffing Costs ($)	$628,179
Annual IT hardware, systems, and service costs ($)	Not Provided
Annual IT Business Systems Costs ($)	Not Provided
Annual IT Instructional Systems Costs ($)	Not Provided
Annual IT Spending-Capital Investment ($)	N/A
Total Number of district staff (#)	485
Total Number of Enrolled Students (#)	3,102
-- Of Total Number of Teachers (FTE) (#)	256
Network days usage exceeded 75% of capacity	Not Tracked

Sunflower Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	5
Total Student devices (computers, laptops, tablets) (#)	3,288
Total Employee devices (computers, laptops, tablets) (#)	1,000
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	300
Total support/incident tickets (#)	40
Average Number of Days support/incident tickets remain open (#)	3
Total available bandwidth overall (in Mbit/s)	16,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	8,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	85%
Average age of computers, in years (#)	5
District Annual Actual Expenditures ($)	$46,208,251
Total Number of Active Schools (#)	12
Annual IT (Technology) Staffing Costs ($)	$305,782
Annual IT hardware, systems, and service costs ($)	$55,874
Annual IT Business Systems Costs ($)	$49,348
Annual IT Instructional Systems Costs ($)	$180,053

Annual IT Spending-Capital Investment ($)	$927,102
Total Number of district staff (#)	542
Total Number of Enrolled Students (#)	3,061
-- Of Total Number of Teachers (FTE) (#)	212
Network days usage exceeded 75% of capacity	0

Tate Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	3
Total Student devices (computers, laptops, tablets) (#)	2,030
Total Employee devices (computers, laptops, tablets) (#)	307
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	175
Total support/incident tickets (#)	300
Average Number of Days support/incident tickets remain open (#)	2
Total available bandwidth overall (in Mbit/s)	1,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	1,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	96%
Average age of computers, in years (#)	2.5
District Annual Actual Expenditures ($)	$23,230,839
Total Number of Active Schools (#)	6
Annual IT (Technology) Staffing Costs ($)	$180,271
Annual IT hardware, systems, and service costs ($)	$54,868
Annual IT Business Systems Costs ($)	$32,840
Annual IT Instructional Systems Costs ($)	$151,302
Annual IT Spending-Capital Investment ($)	$0
Total Number of district staff (#)	314
Total Number of Enrolled Students (#)	2,000
-- Of Total Number of Teachers (FTE) (#)	154
Network days usage exceeded 75% of capacity	20

Walthall Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	4
Total Student devices (computers, laptops, tablets) (#)	2,060
Total Employee devices (computers, laptops, tablets) (#)	400
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	150
Total support/incident tickets (#)	421
Average Number of Days support/incident tickets remain open (#)	10
Total available bandwidth overall (in Mbit/s)	1,500
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	1,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	Not Provided
Average age of computers, in years (#)	2.62
District Annual Actual Expenditures ($)	$22,678,120
Total Number of Active Schools (#)	6
Annual IT (Technology) Staffing Costs ($)	$137,350
Annual IT hardware, systems, and service costs ($)	$151,232

Annual IT Business Systems Costs ($)	$47,256
Annual IT Instructional Systems Costs ($)	$325,237
Annual IT Spending-Capital Investment ($)	$0
Total Number of district staff (#)	315
Total Number of Enrolled Students (#)	1,702
-- Of Total Number of Teachers (FTE) (#)	148
Network days usage exceeded 75% of capacity	Not Tracked

Water Valley Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	1
Total Student devices (computers, laptops, tablets) (#)	1,700
Total Employee devices (computers, laptops, tablets) (#)	150
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	85
Total support/incident tickets (#)	100
Average Number of Days support/incident tickets remain open (#)	2
Total available bandwidth overall (in Mbit/s)	1,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	150
Percentage of Households with Wi-Fi/broadband capabilities (%)	50%
Average age of computers, in years (#)	3
District Annual Actual Expenditures ($)	$12,082,854
Total Number of Active Schools (#)	2
Annual IT (Technology) Staffing Costs ($)	$67,208
Annual IT hardware, systems, and service costs ($)	$9,425
Annual IT Business Systems Costs ($)	$14,520
Annual IT Instructional Systems Costs ($)	$31,476
Annual IT Spending-Capital Investment ($)	$0
Total Number of district staff (#)	157
Total Number of Enrolled Students (#)	1,057
-- Of Total Number of Teachers (FTE) (#)	76
Network days usage exceeded 75% of capacity	20

Wayne Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	5
Total Student devices (computers, laptops, tablets) (#)	5,210
Total Employee devices (computers, laptops, tablets) (#)	590
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	259
Total support/incident tickets (#)	4,140
Average Number of Days support/incident tickets remain open (#)	3.5
Total available bandwidth overall (in Mbit/s)	1,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	1,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	81%
Average age of computers, in years (#)	5
District Annual Actual Expenditures ($)	$44,925,000
Total Number of Active Schools (#)	7

Annual IT (Technology) Staffing Costs ($)	$205,800
Annual IT hardware, systems, and service costs ($)	$26,387
Annual IT Business Systems Costs ($)	$45,000
Annual IT Instructional Systems Costs ($)	$602,000
Annual IT Spending-Capital Investment ($)	$1,200,000
Total Number of district staff (#)	502
Total Number of Enrolled Students (#)	2,850
-- Of Total Number of Teachers (FTE) (#)	204
Network days usage exceeded 75% of capacity	115

West Point Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	7
Total Student devices (computers, laptops, tablets) (#)	3,500
Total Employee devices (computers, laptops, tablets) (#)	500
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	210
Total support/incident tickets (#)	1,232
Average Number of Days support/incident tickets remain open (#)	3
Total available bandwidth overall (in Mbit/s)	16,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	16,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	50%
Average age of computers, in years (#)	3
District Annual Actual Expenditures ($)	$37,377,275
Total Number of Active Schools (#)	8
Annual IT (Technology) Staffing Costs ($)	$467,188
Annual IT hardware, systems, and service costs ($)	$239,673
Annual IT Business Systems Costs ($)	$28,773
Annual IT Instructional Systems Costs ($)	$65,583
Annual IT Spending-Capital Investment ($)	$213,778
Total Number of district staff (#)	426
Total Number of Enrolled Students (#)	2,770
-- Of Total Number of Teachers (FTE) (#)	215
Network days usage exceeded 75% of capacity	0

Wilkinson Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	4
Total Student devices (computers, laptops, tablets) (#)	1,328
Total Employee devices (computers, laptops, tablets) (#)	233
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	74
Total support/incident tickets (#)	Not Provided
Average Number of Days support/incident tickets remain open (#)	Not Provided
Total available bandwidth overall (in Mbit/s)	8,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	8,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	50%
Average age of computers, in years (#)	6

District Annual Actual Expenditures ($)	$13,547,905.00
Total Number of Active Schools (#)	5
Annual IT (Technology) Staffing Costs ($)	$5,035.00
Annual IT hardware, systems, and service costs ($)	$104,406.00
Annual IT Business Systems Costs ($)	$37,585
Annual IT Instructional Systems Costs ($)	$20,410
Annual IT Spending-Capital Investment ($)	$0
Total Number of district staff (#)	161
Total Number of Enrolled Students (#)	888
-- Of Total Number of Teachers (FTE) (#)	95
Network days usage exceeded 75% of capacity	160

Yazoo County Information Technology (IT) Data	
Data	2021-2022
Total Number of IT Staff (#)	3
Total Student devices (computers, laptops, tablets) (#)	2,848
Total Employee devices (computers, laptops, tablets) (#)	500
Total Advanced-Presentation devices (e.g., Smartboards, Prometheans) (#)	94
Total support/incident tickets (#)	2,000
Average Number of Days support/incident tickets remain open (#)	50
Total available bandwidth overall (in Mbit/s)	8,000
Total available bandwidth Wi-Fi/broadband (in Mbit/s)	8,000
Percentage of Households with Wi-Fi/broadband capabilities (%)	70%
Average age of computers, in years (#)	3
District Annual Actual Expenditures ($)	$23,404,242.46
Total Number of Active Schools (#)	4
Annual IT (Technology) Staffing Costs ($)	$179,190.67
Annual IT hardware, systems, and service costs ($)	$20,998.04
Annual IT Business Systems Costs ($)	$49,163.00
Annual IT Instructional Systems Costs ($)	$476,388.00
Annual IT Spending-Capital Investment ($)	$0.00
Total Number of district staff (#)	224
Total Number of Enrolled Students (#)	1,385
-- Of Total Number of Teachers (FTE) (#)	123
Network days usage exceeded 75% of capacity	162

James F. (Ted) Booth, Executive Director

Reapportionment
Ben Collins

Administration
Kirby Arinder
Stephanie Harris
Gale Taylor

Quality Assurance and Reporting
Tracy Bobo
Hannah Jane Costilow

Performance Evaluation
Lonnie Edgar, Deputy Director
Jennifer Sebren, Deputy Director
Drew Allen
Emily Cloys
Kim Cummins
Matthew Dry
Matthew Holmes
Drew Johnson
Billy Loper
Debra Monroe-Lax
Taylor Mullins
Meri Clare Ringer
Sarah Williamson
Julie Winkeljohn
Ray Wright