

CONCLUSION: A review of the information technology (IT) programs and expenditures for the reviewed Mississippi school districts in FY 2023 showed opportunities for districts to improve service levels and increase efficiency. Many school districts lack critical plans to manage technology and disaster recovery. Fourteen districts reviewed keep data backups onsite only, which puts IT functions at risk. Six districts reported that 50% or less of their students' households have access to the internet. The vast majority of districts reported network bandwidth per student below that of regional and national peers. There have been state and federal efforts to increase access to quality internet, but implementation of those efforts will take time.



BACKGROUND

In FY 2025, PEER received funding to contract with Glimpse K12 (now Level Data) to conduct a comparative review of 50 school districts. This report focuses on one of six non-instructional 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

- **Of 49 reporting districts, 20 (41%) had a documented technology plan and 25 districts (51%) had a technology disaster recovery plan.**
Such plans are critical for managing technology and disaster recovery.
- **Fourteen districts (29%) keep data backups onsite only, which puts district IT functions at risk in the event of an emergency, disaster, or cyberattack.**
Offsite backup is critical to recovering vital records and data.
- **Twelve districts (24%) do not track daily network usage.**
By tracking daily network usage, a district can identify potential network capacity problems and also have insight into network usage patterns.
- **Of the 32 districts that surveyed student households for FY 2023, six (19%) reported that 50% or less of students' households had access to broadband internet and Wi-Fi capabilities at home.**
School districts play a critical role in providing students with broadband and Wi-Fi access at school for assignments.
- **Of 49 reporting districts, 47 (96%) reported network bandwidth per student below that of regional and national peers.**
Such a condition could have negative impacts on students' education.
- **Of 37 reporting districts, 21 (57%) reported at least two days in the school year in which internet usages reached more than 75% of standard available bandwidth for five minutes or longer.**
If districts and teachers have access to higher bandwidth, additional programs and assignments could become feasible.
- **Of 49 reporting districts, 36 (74%) use a single department for traditional IT support and educational technology support functions. Eleven districts (22%) use two separate IT departments, and two districts use another type of structure.**
Each model for IT support has advantages and disadvantages.

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 (CPF). BEAM approved 24 broadband projects to be funded by the CPF; these projects are projected to serve 27,000 households in 19 counties across the state.

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

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

A Look at Internet Bandwidth

- For FY 2023, the median network bandwidth per student was 0.96 for the districts reviewed, while the regional peer average was 20.5 and the lower range for national peers was 248.4. These numbers clearly demonstrate the need for improved bandwidth in the districts.
- Two districts—Jefferson Davis and North Bolivar—reported network bandwidth per student higher than the regional peer average, while all other districts were lower.
- Twelve reporting districts (24%) did not track network usage levels in FY 2023. Of the districts that did track network usage levels, 16 reported one day or less when they experienced network capacity issues. Six districts reported exceeding 75% capacity for 90 days or more.
- Most districts are only maximizing device usage for testing and not for daily learning. If districts and teachers have access to higher internet bandwidth, additional programs and assignments could become feasible and offer students a wider range of educational opportunities not currently available due to bandwidth restrictions.
- Districts should balance investments in internet bandwidth and the educational usage of devices.

Device Inventory and Staffing

Based on the data provided, the number of devices per IT staff member ranged from 381 to 3,383. Seven districts should remove obsolete devices from their inventories, and then evaluate their staffing levels. In addition to the performance measures in this report, evaluation of staffing should include other factors (e.g., volume and complexity of support tickets, district goals, expertise of IT staff).

IT Spending Per Student

For reporting districts, the \$369 median IT spending per student is above the regional peer average of \$350 per student, indicating that overall, districts in this cohort spend more per student for IT than regional peers.

SUMMARY OF RECOMMENDATIONS FOR DISTRICTS

1. In FY 2026, 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. Districts should continue investing in network bandwidth, especially those experiencing capacity issues.
5. 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.