

HANDOUT 2

Progress in Connecting K-12 Students

ARKANSAS



"Our children are our future, and if they don't have the connectivity they need to use digital learning tools, we all lose out. That is why I am taking action to get high-speed Internet in every classroom and unleash our students' potential to compete in tomorrow's workforce."
Governor Hutchinson

455,314

total students in 234 school districts meet the minimum recommended bandwidth goal.

Since 2015, an additional **119,860 students** in 44 school districts upgraded to the minimum recommended bandwidth.



STATE INITIATIVE HIGHLIGHTS

State leaders doubled bandwidth to **200 kbps/student for every school district at one third the cost through the Arkansas Public School Computer Network.**

In 2017, Arkansas leveraged \$33.4 million of federal E-rate funds.

Closing the K-12 Connectivity Gap

Arkansas already did its part in connecting 100% of its students!

All **455,314 students** in 234 districts continue to have the minimum recommended bandwidth of 100 kbps per student.

Prepare Arkansas students for their future

Nationwide, 22% of districts meet the long-term connectivity goal of 1 Mbps per student. Having met the 100 kbps per student goal, and with bandwidth needs growing 50% year over year, consider how you can prepare for the future.



FIBER INFRASTRUCTURE

735 schools have fiber infrastructure

5 schools still need fiber to meet future bandwidth needs



WI-FI FUNDS

\$69.6 million was made available for Wi-Fi upgrades in all districts

\$27 million in Wi-Fi funds still available for 213 school districts



BROADBAND COSTS

142 districts meet benchmark prices for broadband services

78 school districts do not meet national benchmark prices for broadband services

About the Metrics

TOTAL STUDENTS AND SCHOOL DISTRICTS CONNECTED

This metric is based on an extrapolation of the percent of students or school districts in the sample that are meeting the minimum connectivity goal to the entire population of students or school districts in the state. Student populations are based on 2014-15 National Center for Education Statistics (NCES) data and updated based on input from school districts.

ADDITIONAL STUDENTS AND SCHOOL DISTRICTS CONNECTED

This metric shows the increase in students or school districts since 2015 that are meeting the Federal Communications Commission (FCC) minimum connectivity goal of 100 kbps per student. Using the reported increase of students or school districts from 2016, we added the number of students or school districts who are newly meeting minimum connectivity goals in 2017.

This is an extrapolation of the percentage of students or school districts in the sample that are meeting goals to the entire population of students or districts in the state. Students or districts meeting the goal is calculated by taking the difference in the number of students or school districts meeting minimum connectivity from 2017 and 2016.

Student populations are based on 2014-15 NCES data and updated using input from school districts.

STUDENTS AND SCHOOL DISTRICTS THAT NEED TO BE CONNECTED

This metric shows the total number of students or school districts that are not meeting the FCC minimum connectivity goal. We take the total number of students or school districts in the state and subtract the total students and school districts connected.

FIBER INFRASTRUCTURE

This metric reports on the availability of scalable infrastructure based on the FCC-recommended goal that every school's broadband scale to 10 Gbps (which currently requires fiber). For schools where the connection type was unknown, we applied assumptions based on extensive research.

WI-FI FUNDS

This metric profiles the extent to which school districts have taken advantage of their Category 2 budgets. The FCC provided every school district with a \$153.47 per student (adjusted yearly for inflation) total "Category 2" budget from 2015-2019 to upgrade internal connections in schools. We calculated the total Category 2 budget remaining for 2018-19 after subtracting funds requested in 2015 - 2017. We applied school district E-rate discount rates when available; otherwise, we applied the aggregate state E-rate discount rate.

E-RATE FUNDS LEVERAGED

This metric is based on original funding commitment requests in 2017 from applicants within a state - does not include requests for voice or libraries, however. An original funding commitment request occurs after any changes are made to the application, and is equal to the cost of the service multiplied by the applicant's discount rate.

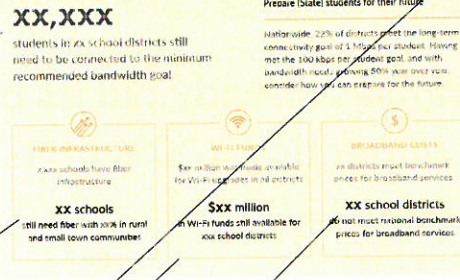
STATE MATCHING FUNDS (IF APPLICABLE)

This is the amount of funding made available to school districts by the state to leverage additional federal E-rate dollars for special fiber construction in 2017.

Progress in Connecting K-12 Students



Closing the K-12 Connectivity Gap



SCHOOL DISTRICTS CONNECTIVITY OVER 1 MBPS

This metric shows the percentage of school districts that are meeting the FCC 2018 1 Mbps connectivity goal, taking into account SETDA concurrency factors for large and mega districts. SETDA considers a large or mega district to be meeting the 2018 1 Mbps goal if they have at least 700 kbps.

BROADBAND COSTS

This metric compares the amount of bandwidth school districts currently receive to the amount they could receive if those same funds were used to buy Internet access at 2015 national benchmark prices.

Internet Access Circuit Size	Price Benchmark (\$/Mbps)
10 Gbps	\$0.75
1 Gbps	\$3.00
500 Mbps	\$5.50
200 Mbps	\$9.00
100 Mbps	\$12.00
50 Mbps	\$14.00