

Adequacy Study 2024

Resource Allocation –
Staff in the Matrix

Prepared for the
House and Senate
Committees
on Education



March 11, 2024



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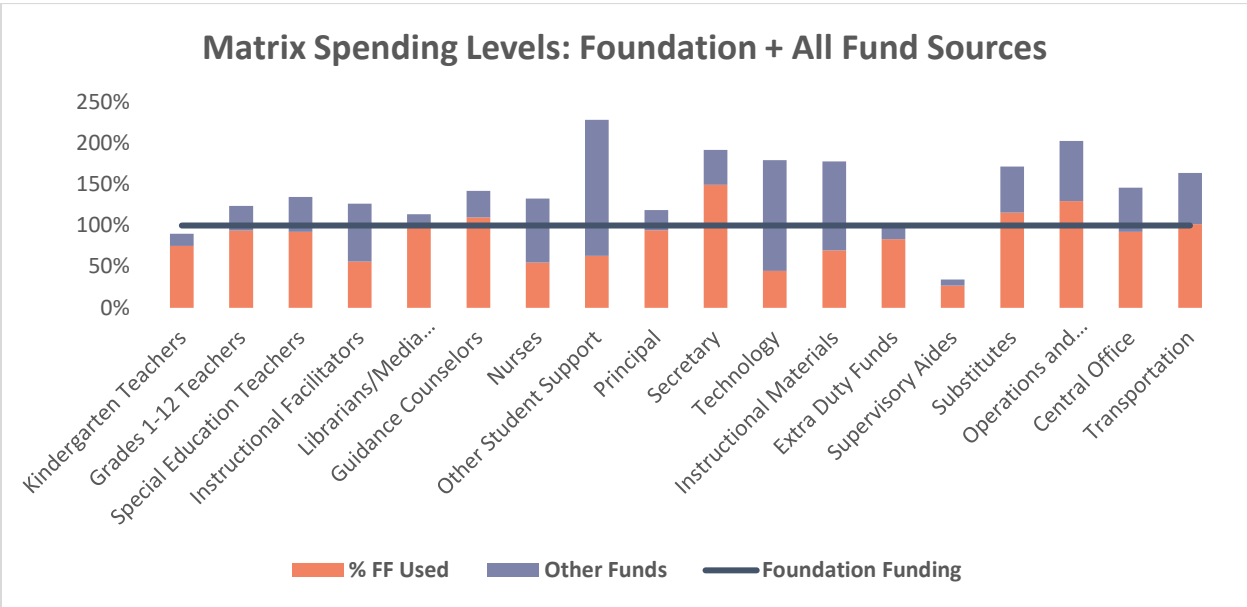
Introduction

This report is the first of three to examine the resource allocations and expenditures of funds for the resources the legislature has determined are necessary and adequate to support an education system that will enable students to meet proficient levels of learning.

After providing an overview of matrix funding and spending levels, this report will examine with the first section of the matrix, which specifies staffing for schools. The report will examine the funding and spending levels of each staff position represented in the matrix and, when possible, provide comparisons to staffing levels in other states, best practices identified in education research, and survey responses from Arkansas educators.

Matrix Items

When looking at what is spent on all matrix items, spending of foundation dollars is below the level set in the matrix on eleven items: kindergarten teachers, grades 1-12 teachers, special education teachers, instructional facilitators, nurses, other pupil support, technology, instructional materials, extra duty funds, supervisory aides, and central office. However, when spending on these items from all fund sources is considered, spending surpasses the foundation funding level on all but kindergarten teachers and supervisory aides. Foundation fund expenditures amount to more than the foundation funding level for five items: guidance counselors, secretaries, substitutes, operations and maintenance, and transportation. Even so, additional monies are also used to help pay for these items.



Classroom Teachers

In Arkansas, core classroom teachers are funded according to the number required to meet the average class sizes established in the Division of Elementary and Secondary Education (“DESE”) Rules Governing Class Size and Teaching Load.¹ These are different for kindergarten teachers, teachers in grades 1-3, and teachers in grades 4-12. Non-core teachers, also referred to as “specialist teachers,” are funded based on 20% of the total core teachers. In all, 24.94 core and non-core classroom teachers are included in the matrix for every 500 students. School districts and open-enrollment public charter schools may apply for and receive waivers from state rules regarding both class size and minimum teacher salaries; receiving such waivers does not affect funding levels. Classroom teachers constitute \$3,651 of the per-pupil foundation funding amount, just under half of the total per-pupil amount.

Kindergarten Teachers

Funding

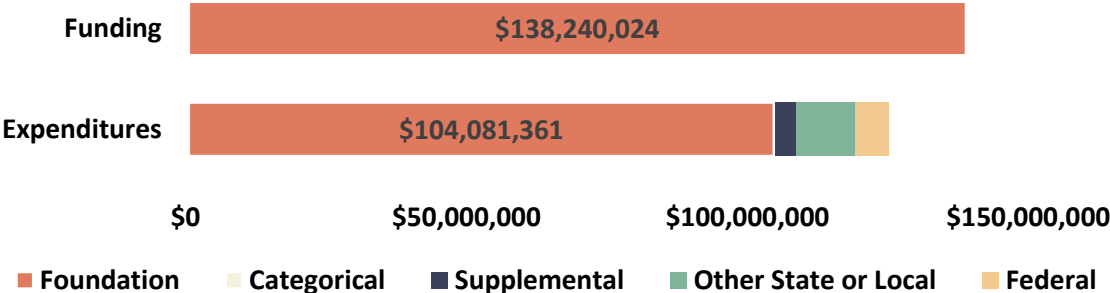
In 2023, funding for kindergarten teachers accounted for 3.9% of foundation dollars. DESE Rules call for an average kindergarten class size of 20. However, kindergarten classes are allowed to reach a total of 22 students if a half-time instructional aide is present. The matrix funds two core kindergarten teachers for the prototypical K-12 school of 500 students. While the matrix funds the number of teachers needed to meet class size rules, this happens only if a school hits the mark exactly. For example, if a school ends up with more than 45 kindergarten students, three teachers would be needed to meet class size rules.

2023 / 2024 / 2025 Per Pupil	2023 Total
\$293 / \$298 / \$304	\$138,240,024

Spending

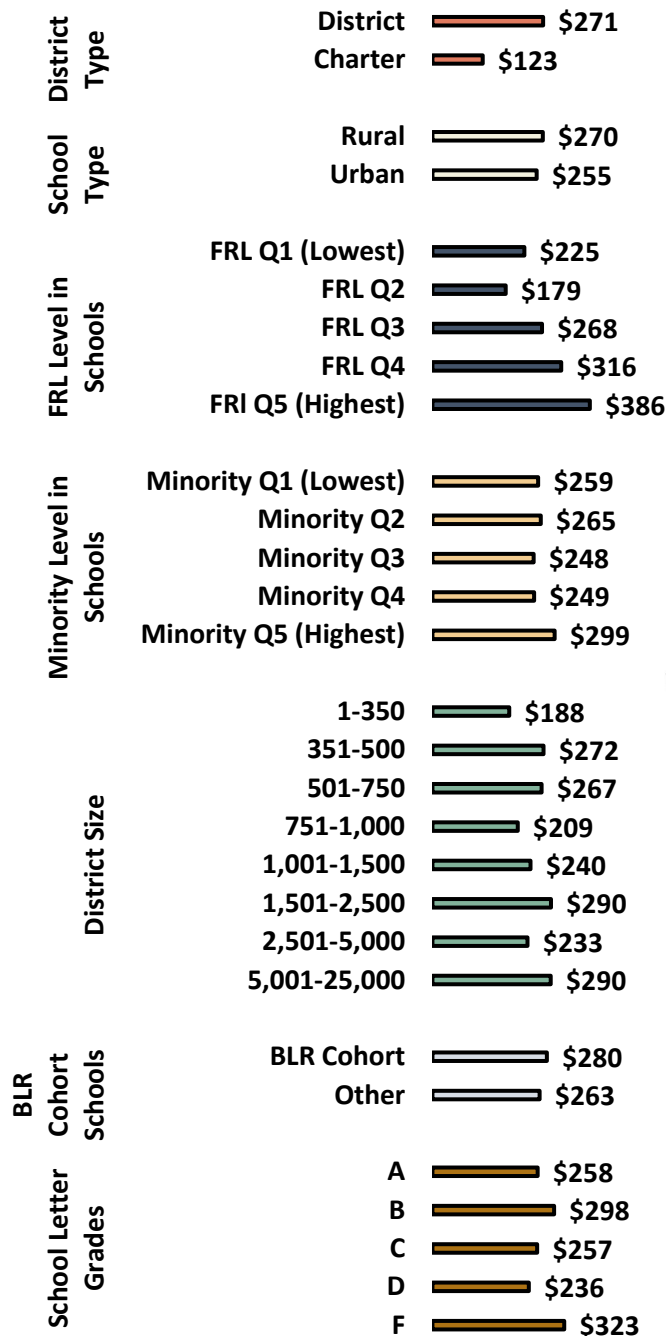
In 2023, public schools in Arkansas spent a little over \$124 million on kindergarten teachers from all fund sources, close to \$14 million less than they received in foundation funding.

Kindergarten Teachers: Funding vs. Spending



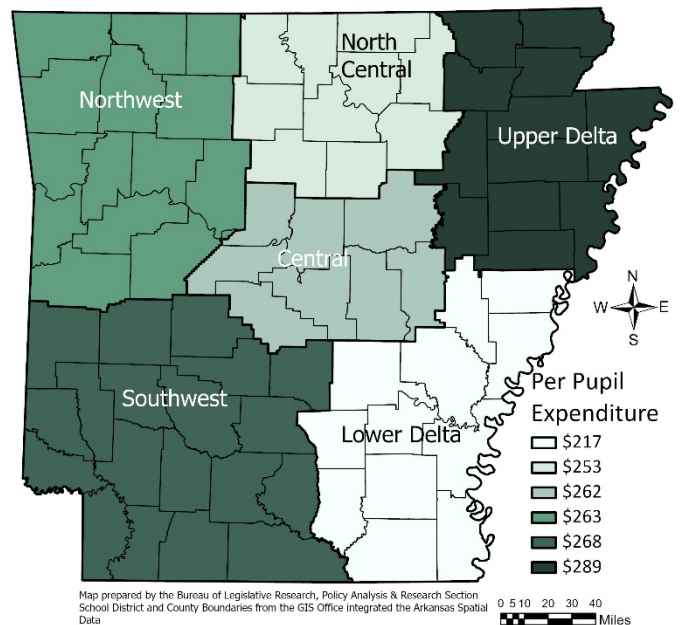
¹ [DESE Rules Governing Class Size and Teaching Load](#)

Per-Pupil Spending by School Type



When looking at spending on kindergarten teachers among different types of schools in Arkansas, districts, on average, spent more than double per pupil than charters spent. For the most part, spending increased with free/reduced lunch levels, and BLR Cohort Schools spent more, on average, than others. Few patterns emerged when looking at minority level, district size, and school letter grade categories.

The following map shows that, on average, schools in the Upper Delta region spent the most per pupil for kindergarten teachers. Schools in the Lower Delta region spent the least per pupil.



Grades 1-3 Teachers

Funding

In 2023, funding for teachers in grades 1-3 accounted for 9.9% of foundation dollars. DESE Rules call for an average class size of 23 with no more than 25 students per teacher. The matrix assumes a total of 115 students in grades 1-3, which equates to 38.33 students per grade, and funds a total of five core teachers for grades 1-3 for the prototypical K-12 school of 500 students. Based on the assumed number of students per grade, two classes in each grade are required to meet class size rules, which could result in a need for six core teachers.

2023 / 2024 / 2025 Per Pupil	2023 Total
\$732 / \$745 / \$760	\$345,642,875

Grades 4-12 Teachers

Funding

In 2023, funding for teachers in grades 4-12 accounted for 27.2% of foundation dollars. For grades 4-6, DESE Rules call for an average class size of 25 with no more than 28 students per teacher.

With the exception of classes that lend themselves to large group instruction, the Rules stipulate that individual classes shall not exceed 30 students in grades 7-12; however, an average class size is not specified. The matrix funds 13.8 core teachers for grades 4-12 for the prototypical K-12 school of 500 students, which is up to 4.2 teachers short of the number needed to meet classroom size rules.

2023 / 2024 / 2025 Per Pupil	2023 Total
\$2,020 / \$2,055 / \$2,098	\$953,823,235

Physical Education, Art, and Music (“PAM”) Teachers

Funding

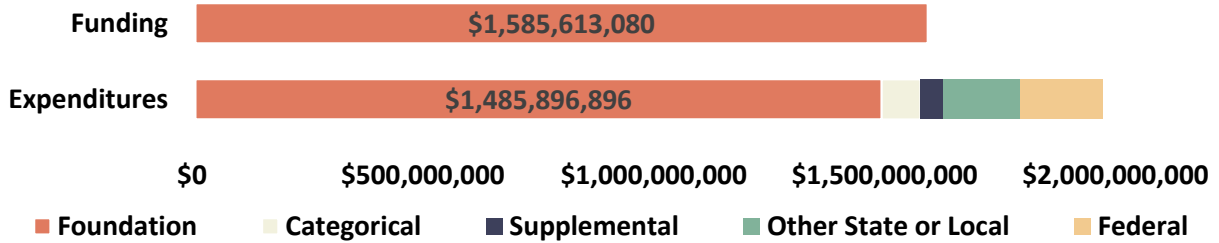
In 2023, funding for PAM teachers accounted for 8.2% of foundation dollars. The matrix funds 4.14 specialist teachers, which is a little less than 20% of the total number of core teachers funded in the matrix. These teachers not only teach non-core academic subjects such as art, music, and physical education, they help to provide teachers of core academic subjects time for professional development, planning, and preparation. According to DESE Rules, courses that lend themselves to large group instruction - as do many PAM courses - can exceed 30 students in grades 7-12.

2023 / 2024 / 2025 Per Pupil	2023 Total
\$606 / \$617 / \$629	\$286,146,970

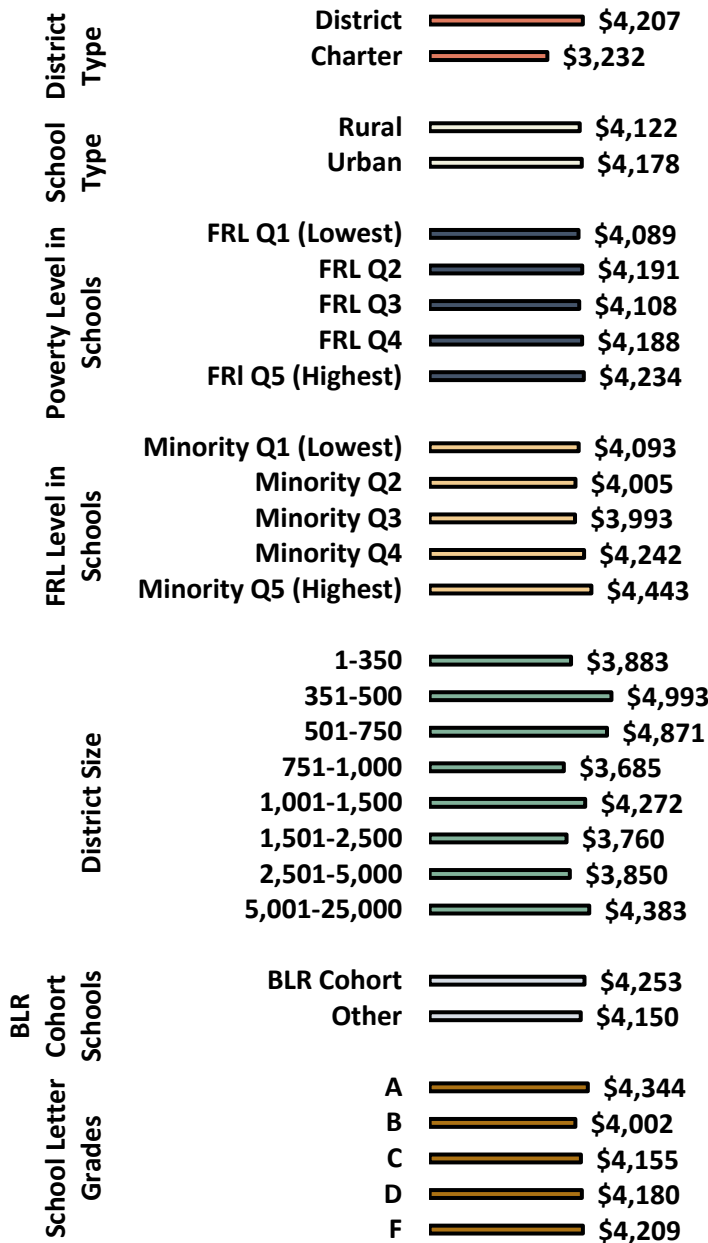
Spending

While foundation funding is broken out by grade spans, spending totals cannot be reported the same way because expenditures are not coded in the Arkansas Public School Computer Network (ASPCN) system to individual grade levels. In 2023, public schools in Arkansas spent close to \$2 billion on grades 1-12 classroom teachers from all fund sources, \$380 million more than they received in foundation funding. Public schools may use a variety of funds to pay their grades 1-12 teachers' salaries and benefits, as is illustrated in the following graph. Almost \$500 million came from other fund sources, including Teacher Salary Equalization funds, which will be discussed in detail in a later report. Schools spent 81% on regular classroom instruction and 19% on other instructional programs.

Grades 1-12 Teachers: Funding vs. Spending

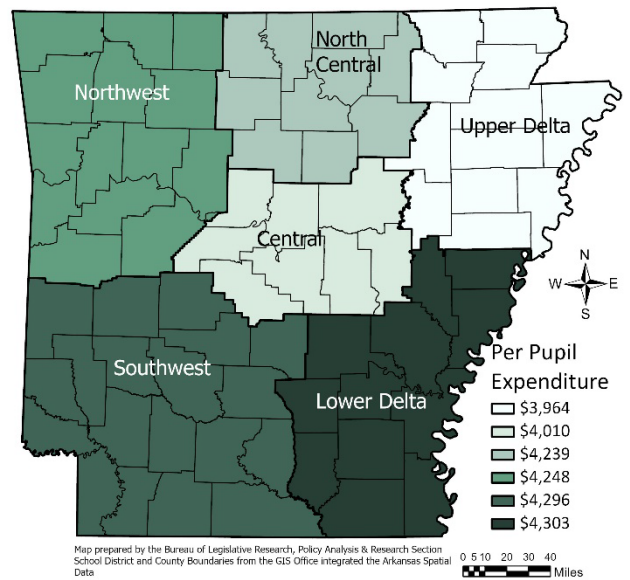


Per-Pupil Spending by School Type



When comparing per-pupil spending levels by category, few patterns emerged. Districts spent more, on average, than charters, and BLR Cohort Schools spent more on average than other schools.

The following map shows that schools in the Lower Delta region spent the most per pupil for grades 1-12 teachers. Schools in the Upper Delta region spent the least per pupil.



Research and Best Practices

According to the 2020 Arkansas School Finance Study² conducted by Augenblick, Palaich and Associates (APA), literature review findings suggest lower student-to-teacher ratios for K-3 grades than what is currently funded through the matrix. The report also indicated that evidence-based studies and other national adequacy studies suggest a 15:1 ratio. While specific sources were not provided, APA indicates that national studies identify the need for 33% more staff above core teaching staff, which is consistent with the evidence-based model recommendations.

Stakeholder feedback provided in the APA report indicated that the funded ratio being too close to the state class size maximum requirements is an issue. For example, a school may have 45 kindergarteners, which would provide funding for just over 2.0 full-time equivalent (FTE) teachers, but staffing would require three full teachers to adhere to the state class size maximum of 20 (or 22 with aides). This feedback is consistent with the information shared by respondents on both the 2023 and 2021 stakeholder surveys conducted by the BLR.

In 2003, the Arkansas Joint Legislative Committee on Educational Adequacy chose to base the matrix on the state's class size standards, which have a higher student-to-teacher ratio in grades K-3 than the evidence-based model recommendations made by the state's consultants, Odden and Picus. The table below shows the difference between current Arkansas policy and the most current evidence-based model recommendations for student to teacher ratios.

2023 Matrix	2023 Matrix Teacher-Student Ratio	Evidence-Based Model*
Kindergarten	1:20	1:15
Grades 1-3	1:23	1:15
Grades 4-12	1:25	1:25

* Odden, Allan, & Picus, Lawrence O. (2019). *School finance: A policy perspective*, 6th ed. New York: McGraw-Hill

The latest Odden and Picus evidence-based model³ provides for a total core and elective teaching staff of 31.2 and 21.6, respectively, for the prototypical 450-student elementary and middle school, respectively, and 32 for the prototypical 600-student high school.

The evidence-based model's core teaching staff recommendations are based on the number of teachers needed to meet effective class sizes. The intent is to provide core teaching positions for actual class sizes of 15 in grades K-3 and 25 in higher grades. All other instructional staff are resourced above that level. In addition to core classroom teachers, elective or specialist (non-core) teacher staffing recommendations are provided in the evidence-based model using a percentage of total core teachers. According to Odden and Picus, this is to enable schools to offer a comprehensive curriculum and to provide teachers the time required to engage in collaborative planning to review student data, design standards-based lesson and curriculum plans, and identify interventions for struggling students.

² [Arkansas School Finance Study](#) (APA, 2020)

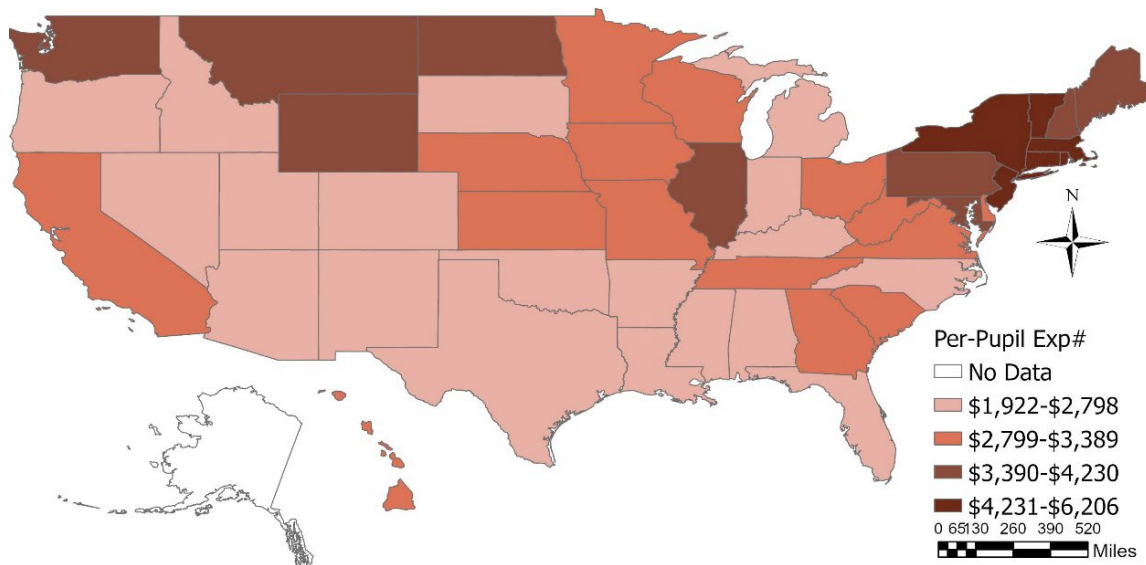
³ Odden, Allan, & Picus, Lawrence O. (2019). "*School finance: A policy perspective.*" 6th ed. New York: McGraw-Hill

A summary table displaying the difference between current Arkansas policy and the evidence-based model recommendations is provided below.

Core and Non-Core Teachers				
Matrix Item: Classroom Teachers	Matrix FTE: All grades	Evidence-Based Model FTE: 450-student prototypical elementary school	Evidence-Based Model FTE: 450-student prototypical middle school	Evidence-Based Model FTE: 600-student prototypical high school
Core: English Language Arts, Math, Social Studies and Science	20.8:500	26:450	18:450	24:450
Non-Core: PE, Art, Music and other electives	4.14:500	5.2:450	3.6:450	8.0:600
	20% of Core	20% of Core	20% of Core	33 1/3% of Core
Total	24.94:500	31.2:450	21.6:450	32:600

The National Center for Education Statistics provides expenditure data for instructional salaries by state. For 2020, the most recently available year, spending for grades K-12 regular program instructional salaries, based on total student population (adjusted for cost of living), ranged from \$6,206 per pupil in New York to \$1,922 per pupil in Utah. Arkansas’s average per-pupil spending amount for grades K-12 regular program instructional salaries was \$2,519, and the national average was \$3,319.⁴

Grades K-12 Instructional Salaries Per-Student Spending – All Students (Adjusted for Cost of Living)



⁴ National Center for Education Statistics, Elementary/Secondary Information System, <https://nces.ed.gov/ccd/elsi/>

Arkansas Educators' Input



Survey Says: 69% of superintendents reported that their districts were in moderate or extreme need of more funding for classroom teachers.⁵ Arkansas teachers were asked a series of questions related to the teaching environment and working conditions: 48% of teacher respondents indicated they did not receive 200 minutes⁶ for planning every week, and 49% reported the planning time they received during the instructional day⁷ was not sufficient.⁸

Special Education Teachers

Funding

In 2023, funding for special education teachers accounted for 5.7% of foundation dollars. DESE Rules⁹ set maximum teacher-to-student caseloads ranging from 1:6 to 1:45, depending on the type of classroom or services (e.g. regular classroom, resource services, or special class services) and other staff assistance (e.g. paraprofessional, speech/language pathologist, or co-teacher). Districts and charter school systems may not apply for waivers from laws and rules regulating special education programs;¹⁰ however, teacher salary waivers would apply to these personnel. The matrix funds 2.9 special education teachers for the prototypical K-12 district of 500 students, meaning that the state funds special education based on each district's or charter's total number of students, rather than on the total number of students with disabilities.

2023 / 2024 / 2025 Per Pupil	2023 Total
\$424 / \$432 / \$441	\$200,448,035

In 2023, 70,023 students with disabilities attended public schools in Arkansas. Since 2017, this number has generally increased between 2.6% and 3.9%¹¹ annually while the number of special education teachers funded in the matrix has remained at 2.9 FTEs per 500 students. In 2023, districts paid for 3.29 special education teacher FTEs per 500 students from foundation funding and for 4.02 special education teacher FTEs per 500 students from all fund sources.

⁵ See Superintendents Survey Responses, question 4.

⁶ See Ark. Code Ann. § 6-17-114(a)(1) (requiring each school district to provide a "minimum of two hundred (200) minutes each week for each teacher to schedule time for conferences, instructional planning, and preparation for all classroom teachers employed by the school district").

⁷ See *id.* at Ark. Code Ann. § 6-17-114(a)(2)(A) (mandating that the 200 required minutes of planning time each week "shall be in increments of no less than forty (40) minutes during the student instructional day unless a teacher submits a written request to be allowed to have his or her planning time scheduled at some time other than during the student instructional day").

⁸ See Teacher Survey Responses, questions 12 and 14.

⁹ Arkansas Department of Education (ADE). Special Education and Related Services – 17.00 Program Standards. (July 2008). https://dese.ade.arkansas.gov/Files/20210105162326_17%2000%20PROGRAM%20STANDARDS.pdf

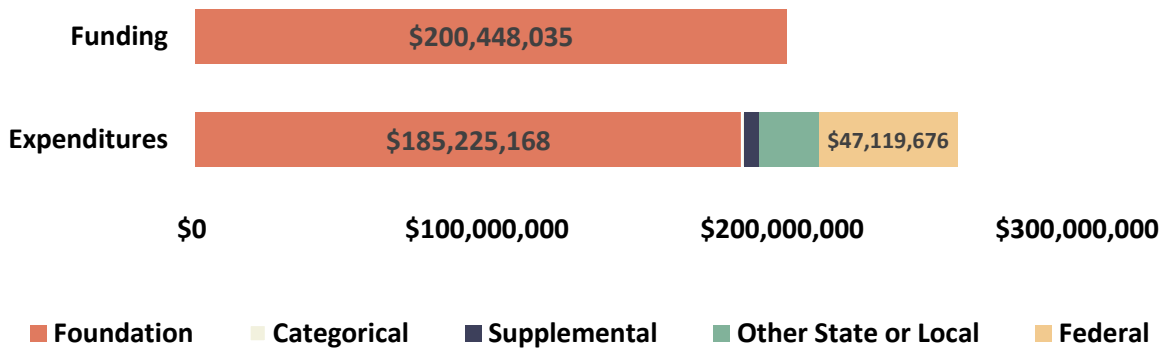
¹⁰ Arkansas Division of Elementary and Secondary Education *Rules Governing Act 1240 Waivers*, Rule 3.05.4 (May 2022).

¹¹ This excludes 2021 in which the number of students with disabilities increase 0.4%, likely due to COVID-19.

Spending

In 2023, public schools in Arkansas spent a little over \$270 million on special education teachers from all fund sources, close to \$70 million more than they received in foundation funding. When considering all special education expenditures, including services like speech pathology, physical and occupational therapy, transportation, and other instructional programs, total special education expenditures equaled \$571 million. Just over half of those expenditures went toward resource room and self-contained class expenses.

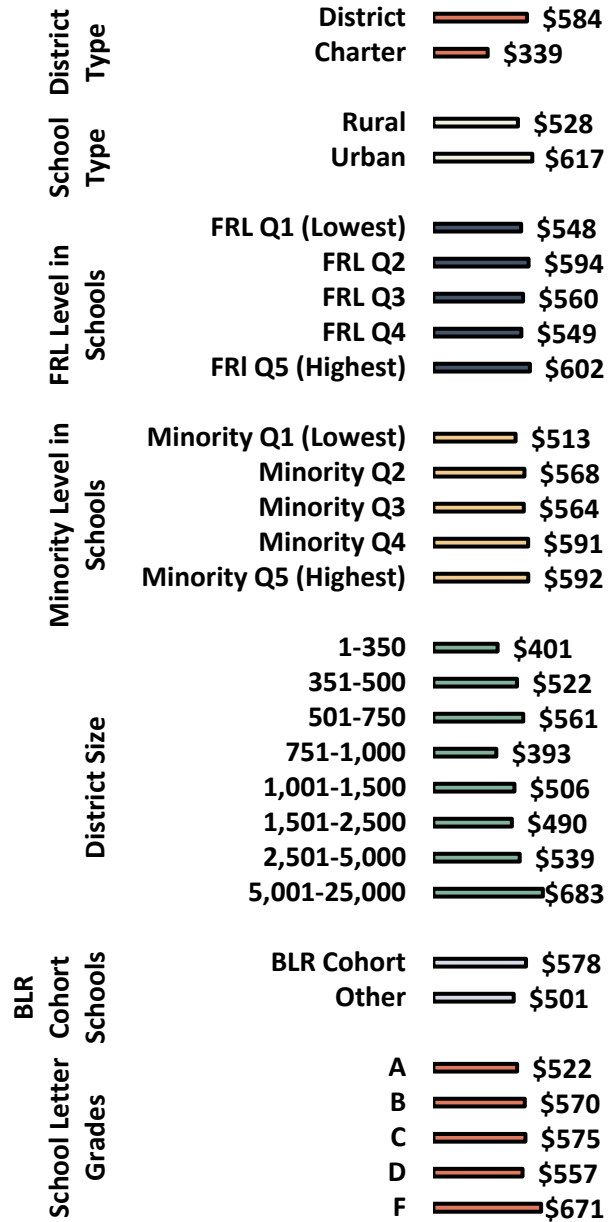
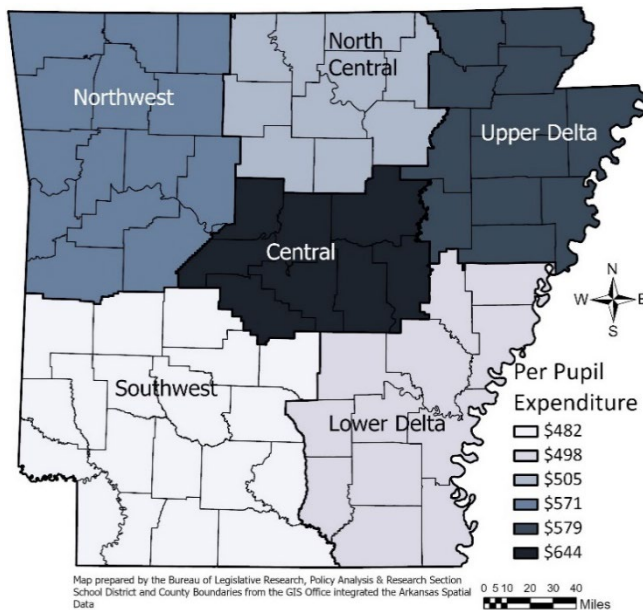
Special Education Teachers: Funding vs. Spending



Per-Pupil Spending by School Type

When looking at average per-pupil spending for special education, schools in districts spent close to two times more per pupil than charter schools. Urban schools spent more per pupil than rural schools, and per-pupil spending generally increased with higher levels of free/reduced lunch and minority students. Per-pupil spending was also higher in BLR cohort schools and highest among the largest districts and “F” schools.

The following map shows that schools in the Central region of the state spent the most per pupil expenditures for special education teachers at \$644. Schools in the Southwest region spent the least per pupil amount at \$482.



Research and Best Practices

States receive some federal funds to provide special education services but are primarily responsible for funding special education services in their respective states. A 2019 report for the National Education Policy Center noted that no single funding mechanism for special education is best as each state has to take into consideration its unique needs.¹²

¹² Funding Special Education: Charting a Path That Confronts Complexity and Crafts Coherence. (June 2019). National Education Policy Center.

The 2019 Odden and Picus¹³ evidence-based model special education recommendations, shown in the following table, propose a census approach, which would provide additional teacher resources at a fixed level. This is to be used for high-incidence, lower-cost students with disabilities and combined with funds to cover 100% of costs for low-incidence, high-cost students with disabilities (capped at 2% of students in the district). Their total special education staffing recommendation includes 8.1 positions for every 1,000 students or 4.05 for every 500 students. The breakdown for these positions is included in the following table. Odden and Picus also recommend reduced usage of paraprofessionals, except with some students with severe and profound disabilities.

Odden and Picus Special Education Evidence-Based Model	
Funding Mechanisms	Census Approach and High-Cost
Staffing for students with mild and moderate disabilities	5 special education teachers and 1 teacher behaviorist (or 6 total teacher positions) per 1,000 students
Staffing for students with severe and profound, and high cost-to-serve disabilities	Fund 100% of extra costs for students with severe and profound disabilities (minus federal Title VI-B); AND Limit students covered here to 2% of students in the district
Staffing for related services	1.1 per 1,000 students
Staffing for costs associated with developing and continually reviewing individualized education plans (Psychologists)	1 psychologist per 1,000 students
<u>Total Special Education Staffing</u>	<u>8.1 positions for every 1,000 students</u>

In its 2020 report to the House and Senate Education Committees, APA¹⁴ recommended removing special education from Arkansas’s funding matrix and instead providing support based on actual special education students served. This could be done using either a single weight for all special education students or multiple weights based on student need. The weight(s) would be applied to the special education student enrollment count and provide differentiated funding based on the distribution of students with special education needs across the states. APA further added that a multi-weight system would also align resources to the levels of services students need in each district.

The table on the next page shows a list of the various funding mechanisms for special education as noted by the Education Commission of the States, as well as a brief description of each. In most analyses, Arkansas is considered to fund special education for high-cost students only. This is likely due to the fact that the majority of state funding for special education comes through foundation funds which does not restrict any dollars for special education only. On the other hand, APA considers Arkansas’s inclusion of special education teachers in the state’s foundation funding method a census-based funding model for special education because it presumes that districts have similar percentages of students in special education and those students have similar levels of special education needs. In 2023, the percentage of students in special education ranged from 1% to 37% across school districts and open-enrollment public charter schools.

¹³ Odden, Allan, & Picus, Lawrence O. (2019). *School finance: A policy perspective.* 6th ed. New York: McGraw-Hill

¹⁴ [Arkansas School Finance Study](#) (APA, 2020)

Special Education Funding Mechanisms by State		
Funding Mechanism	General Description	States
Flat Weight	A single weight or dollar amount allocated by the state for students or districts that qualify based on certain factors or student needs. Allocations determined by flat weights do not vary based on specific program needs or student characteristics.	HI*, LA, MD, MO, NH*, NY*, NC*, ND*, OR
Multiple Student Weights	More than one weight or dollar amount is allocated by the state based on certain factors or student needs. States vary the amount allocated based on student need.	AK, AZ*, CO*, DC, FL, GA, IN, IA, KY, ME*, MN*, NV, NM, OH, OK, PA, SC, SD*, TX, UT, WA
Census-Based	The state allocates funds to each district based on an assumed level of enrollment, regardless of the district's actual demographics. This type of funding can be used in foundation formula model funding and resource allocation model funding.	AL*, AZ*, AR*, CA, ID*, IL*, MA*, MT*, NJ*, NC*, ND*, SD*, VT*
Resource-Based Allocation	All districts receive a minimum base amount of resources. Resources could be staffing, services or programs, and are often based on a ratio of staffing to students.	DE, ID*, IL*, MS*, TN, VA
Reimbursement	Districts submit receipts of eligible expenditures to the state, and the state reimburses districts for all or a portion of those expenditures.	KS, MI, MN*, MT*, NE, ND, RI*, WI*, WY
High-Cost	This type of funding is often coupled with other funding distribution methods, and funds can be distributed as grants or reimbursements.	AL*, AR*, CO*, CT, ME*, MA*, MN*, MS*, MT*, NH*, NJ*, NY*, ND*, OR*, RI*, WI*, WV
Categorical Grant	The state distributes funds based on student characteristics or program needs to districts that demonstrate eligibility and/or a need for funding.	HI*, VT*
Hybrid	The state distributes funds using two or more funding mechanisms.	AL, AZ, AR, CO, HI, ID, IL, ME, MA, MN, MS, MT, NH, NJ, NY, NC, ND, OR, RI, SD, VT, WI

Data Source: Education Commission of the States¹⁵ (2021)
 *Indicates a hybrid model.

The National Center for Education Statistics (NCES)¹⁶ provides expenditure data for special education salaries by state. For 2020, the most recently available year, special education instruction spending based on total student population (adjusted for cost of living¹⁷) ranged from \$299 per student in Oregon to \$2,061 per student in Delaware. Arkansas was roughly in the middle at \$474.

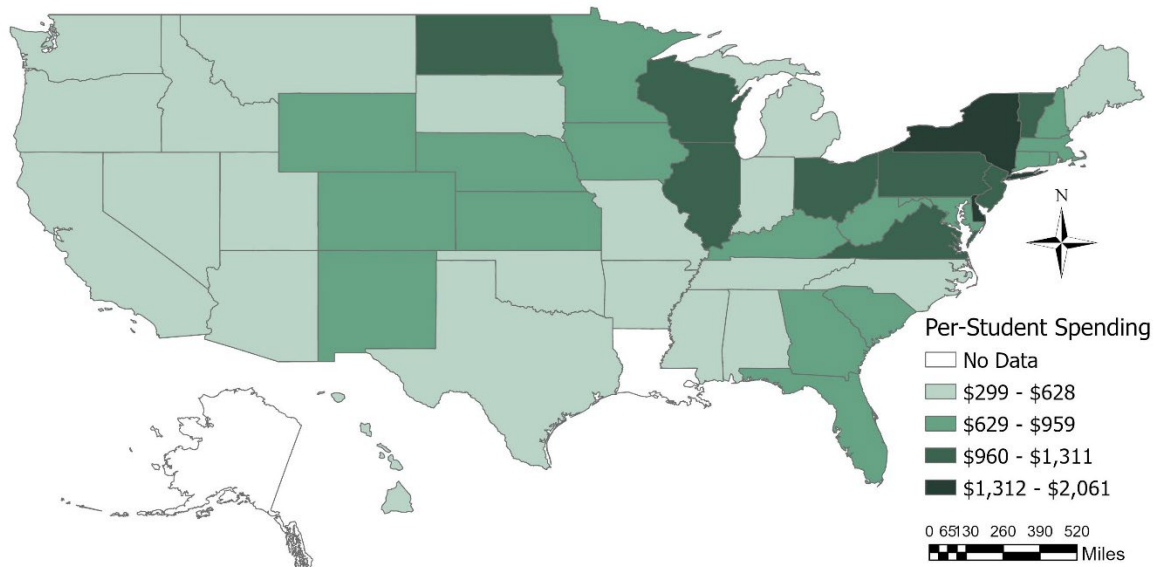
¹⁵ Education Commission of the States. (October 2021). "K-12 and Special Education Funding 50-State Comparison." <https://reports.ecs.org/comparisons/k-12-and-special-education-funding-04>

¹⁶ Note: Only uses special education instruction expenditures. It does not include any salary benefits. U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey (State Fiscal)", 2019-20 (FY 2020) v.2a; "State Nonfiscal Public Elementary/Secondary Education Survey", 2019-20 v.1a, 2021-22 v.1a

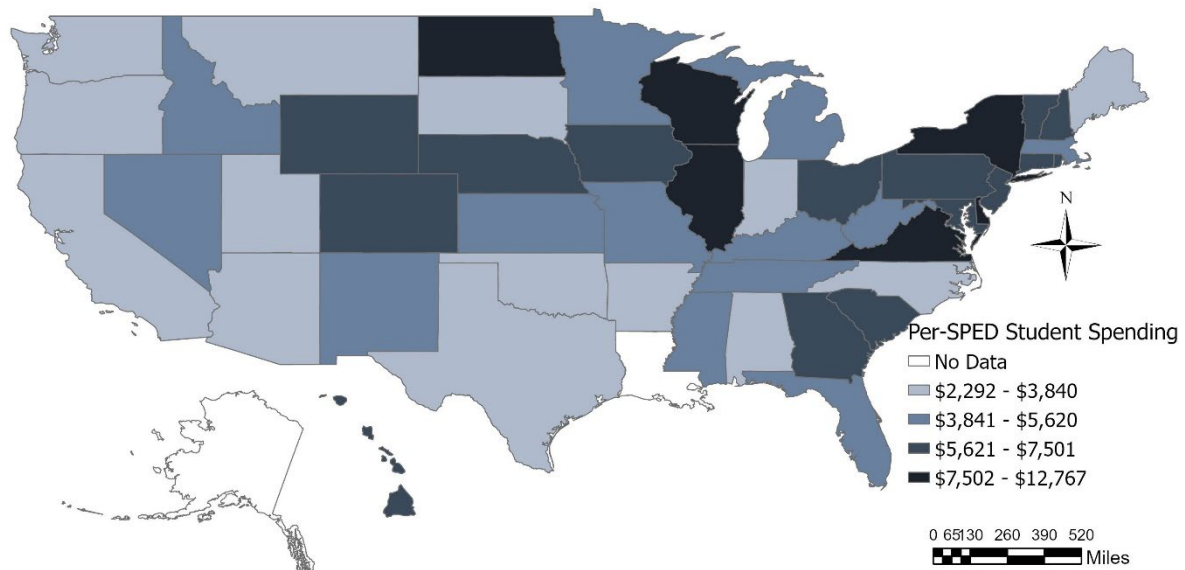
¹⁷ Missouri Economic Research and Information Center. <https://meric.mo.gov/>

For special education instruction spending based strictly on the special education population¹⁸, per-pupil (in special education) spending (adjusted for cost of living) ranged from \$2,292 again in Oregon to \$12,767 again in Delaware. Arkansas was also roughly in the middle with \$3,537 per pupil in special education. The maps below show how that spending ranged for both groups.

Special Education Teacher Per-Student Spending – All Students (Adjusted for Cost of Living)



Special Education Teacher Per-SPED Student Spending (Adjusted for Cost of Living)



¹⁸ Special education enrollment comes from the U.S. Department of Education, Office of Special Education Programs: <https://www2.ed.gov/programs/osepidea/618-data/state-level-data-files/index.html#bcc>

Arkansas Educators' Input



Survey Says: 72% of superintendents reported that their districts were in moderate or extreme need of more funding for special education teachers.¹⁹

Instructional Facilitators

Funding

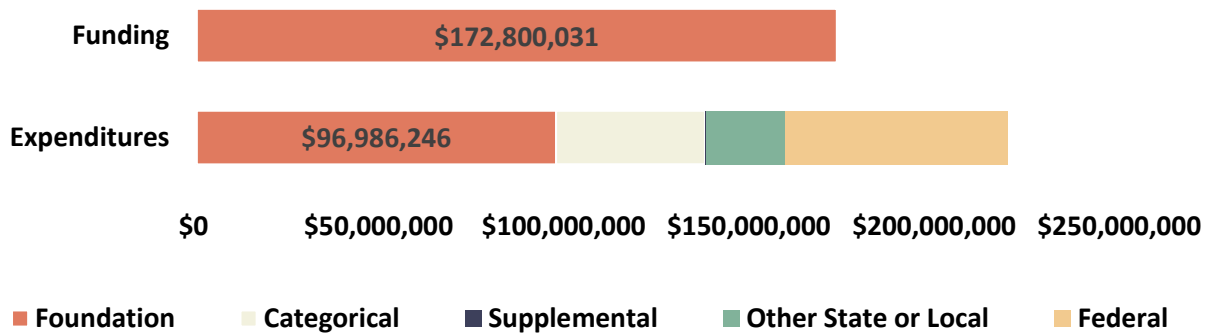
In 2023, funding for instructional facilitators accounted for 4.9% of foundation dollars. The matrix funds 2.5 instructional facilitators for every 500 students; however, the 2.5 positions are also used to pay for a half-time assistant principal (.5 FTE) and a half-time technology assistant (.5 FTE), although not all schools or school districts employ those staff. There are no state Standards for Accreditation that require the use of instructional facilitators; however, schools with more than 500 students are required to have a half-time “assistant principal, instructional supervisor, or curriculum specialist” in addition to a principal (Standard 4-C.1). Waivers for these personnel may be applied for, although there is no effect on funding.

2023 / 2024 / 2025 Per Pupil	2023 Total
\$366 / \$372 / \$380	\$172,800,031

Spending

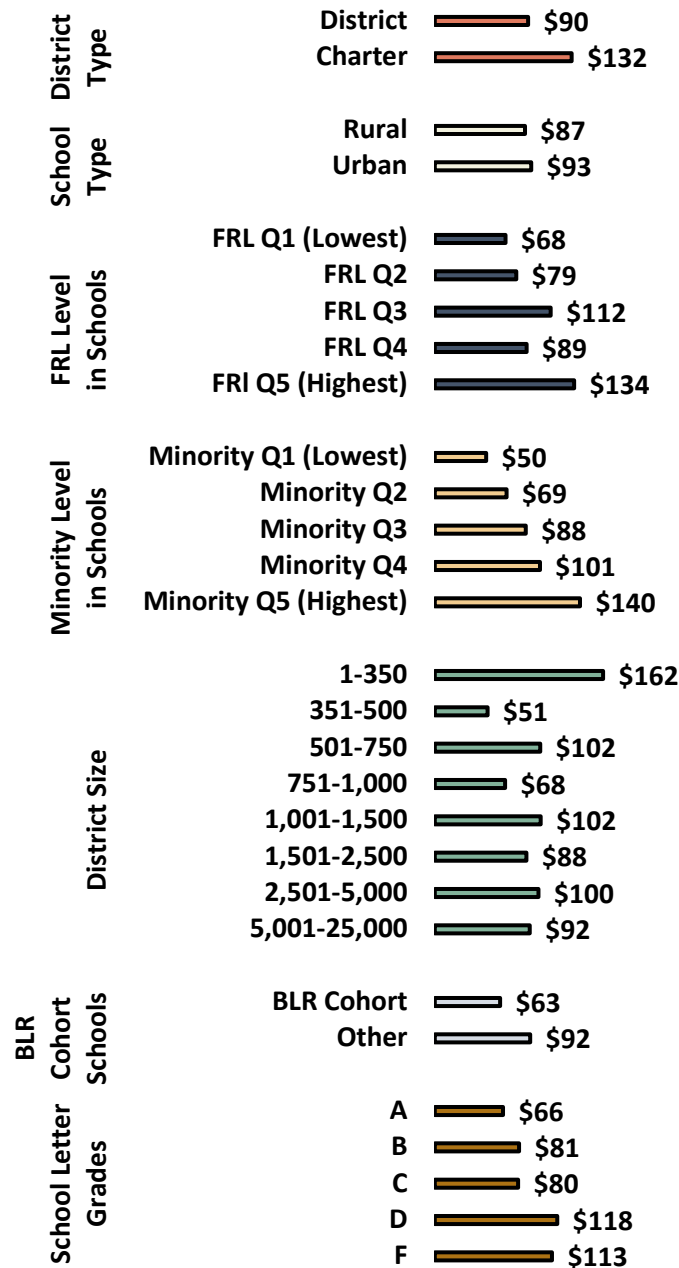
In 2023, public schools in Arkansas spent nearly \$219 million on instructional facilitators from all fund sources, over \$46 million more than they received in foundation funding. Schools spent 67% of foundation fund expenditures for this matrix line on Assistant Principals. Assistant Principals accounted for 37% of total spending.

Instructional Facilitators: Funding vs. Spending

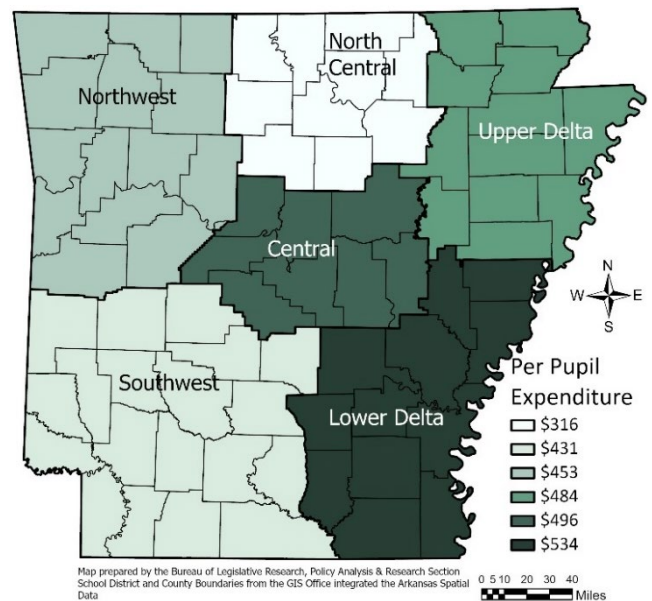


¹⁹ See Superintendents Survey Responses, question 4.

Per-Pupil Spending by School Type



Per-pupil spending levels for instructional facilitators were higher, on average, for charter schools compared to schools in districts. Spending increased with minority levels. The smallest district size category spent the most per pupil on instructional facilitators. The map below shows that schools in the Lower Delta region, on average, spent the most per pupil on instructional facilitators.



Research and Best Practices

Literature indicates instructional facilitators, also referred to as instructional coaches or curriculum specialists, are critical to making professional development effective.

2023 Matrix Teacher-Student Ratio	Evidence-Based Model
2.5:500	2.25:450 elementary and middle schools
	3:600 high schools

Research cited by Odden and Picus²⁰ shows nearly all improving schools provide resources to fund instructional coaches to not only design the instructional program, but also to work with school-based data teams and provide the ongoing coaching and mentoring necessary for teachers to improve their practice at scale. The evidence-based model recommends a staffing formula for such positions of one instructional coach for every 200 students which translates into 2.25 FTEs for the 450-student prototypical elementary and middle schools, and 3.0 FTEs for the 600-student high school.

Arkansas Educators' Input



Survey Says: 57% of superintendents reported that their districts were in moderate or extreme need of more funding for instructional facilitators.²¹

Librarians/Media Specialists

Funding

In 2023, funding for librarians/media specialists accounted for 1.7% of foundation dollars. The matrix funds 0.85²² librarian/media specialists for the

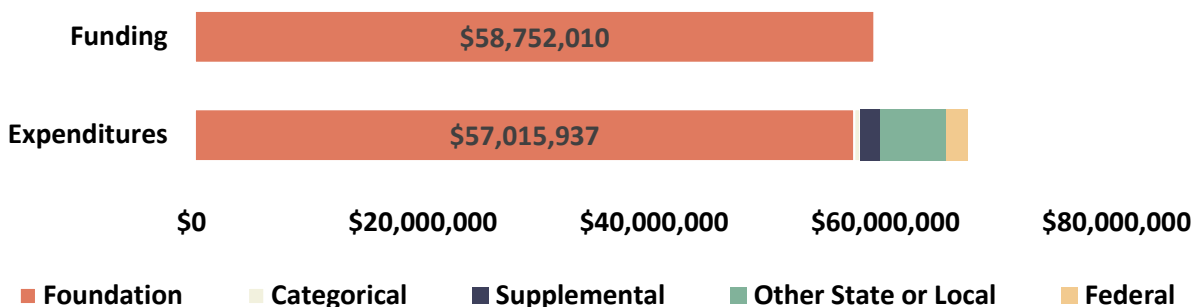
2023 / 2024 / 2025 Per Pupil	2023 Total
\$124 / \$127 / \$129	\$58,752,010

prototypical K-12 school of 500 students. The state's Standards for Accreditation²³ call for public schools with fewer than 300 students to employ at least one half-time library media specialist, while schools with 300 or more students must employ at least one full-time library media specialist. Schools with 1,500 or more students are required to employ at least two full-time library media specialists; however, waivers are granted from this accreditation standard. No adjustment to funding is made due to waivers.

Spending

In 2023, public schools in Arkansas spent close to \$67 million on librarians/media specialists, a little over \$8 million more than they received in foundation funding. Schools used close to \$10 million from other fund sources. The majority of these funds came from the other state and local funding stream.

Librarian/Media Specialists: Funding vs. Spending



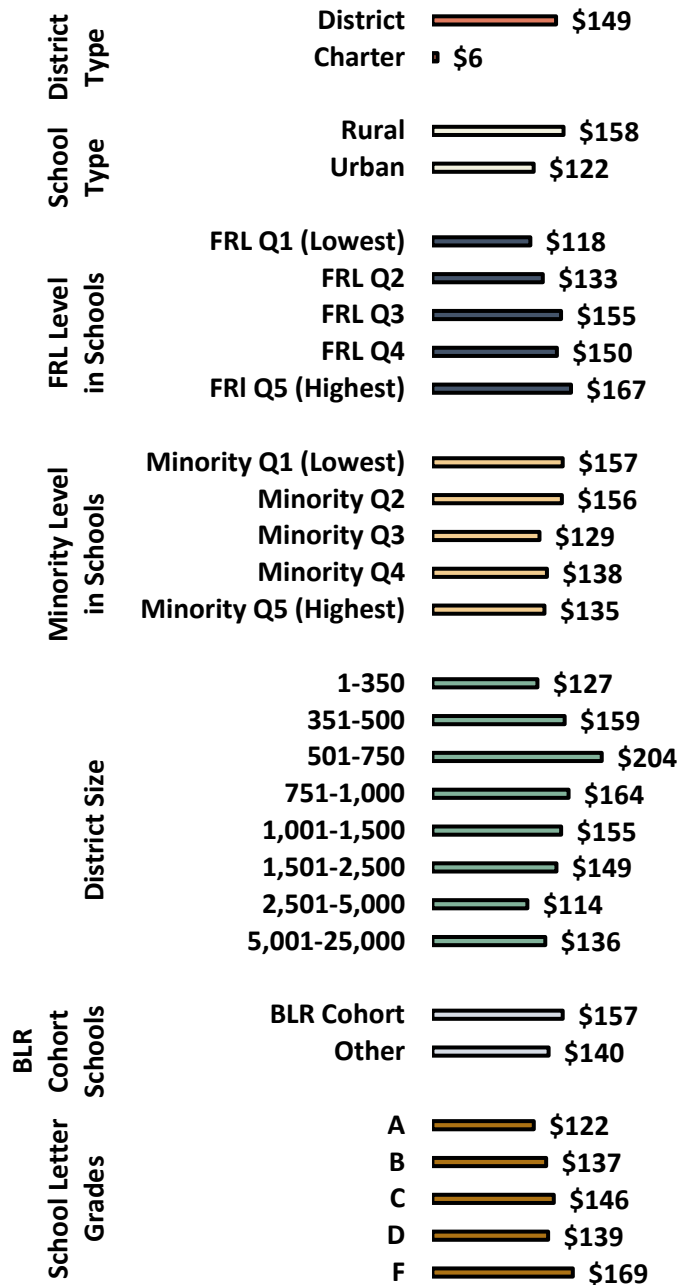
²⁰ Odden, Allan, & Picus, Lawrence O. (2019). *School finance: A policy perspective.* 6th ed. New York: McGraw-Hill

²¹ See Superintendents Survey Responses, question 4.

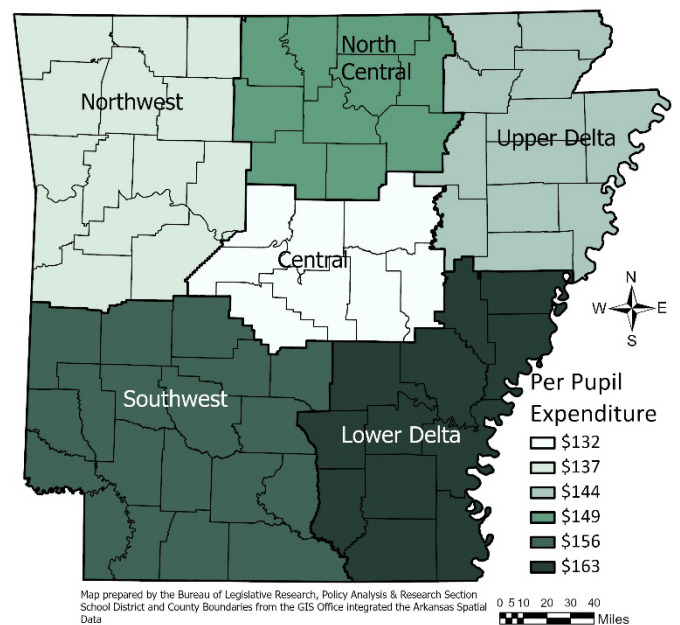
²² This calculation was originally based on the actual number of FTE library media specialists required in the state for 2005-2006, not on a 500-student prototypical school.

²³ [Arkansas Division of Elementary and Secondary Education Rules Governing Standards for Accreditation of Arkansas Public Schools, Effective Date: July 1, 2020](#)

Per-Pupil Spending by School Type



Schools in districts, on average, spent significantly more than charter schools, which may be due to the number of waivers charters receive. Rural schools spent more per pupil on librarians/media specialists, and spending increased with free/reduced lunch levels. BLR Cohort Schools spent more than others. The map below shows that schools in the Lower Delta region spent, on average, the most per pupil on librarians/media specialists.



Research and Best Practices

In 2012, Colorado conducted a study using data from 2005-2011 that showed that students with access to licensed librarians working full time performed better on state reading assessments.²⁴ The Odden and Picus evidence-based model provides for 1.0 library/media FTE position for each prototypical school,

²⁴ Lance, K. C., & Hofschire, L. (2012, January). Change in school librarian staffing linked with change in CSAP reading performance, 2005 to 2011 [Closer Look]. Retrieved from Library Research Service website: http://www.lrs.org/documents/closer_look/CO4_2012_Closer_Look_Report.pdf

which is based on best practices. The findings from data collected by the National Center for Education Statistics through the survey of school libraries conducted in 2011-2012 showed that the evidence-based model recommendation was appropriate.²⁵

Augenblick, Palaich and Associates (APA) reported that the funding in the matrix is below recommendations found in other state adequacy studies. Furthermore, APA reported that stakeholders indicated funding is below what is required for a school of 500 students per the state’s accreditation standards. Studies suggest resources of at least 1.0 librarian/media specialist FTE.

2023 Matrix Teacher-Student Ratio	Evidence-Based Model
.85:500	1:450 elementary and middle schools 1:600 high school

Arkansas Educators’ Input



Survey Says: 43% of superintendents reported that their districts were in moderate or extreme need of more funding for librarians/media specialists.²⁶

Guidance Counselors

Funding

In 2023, funding for guidance counselors accounted for 2.2% of foundation dollars. The matrix funds 1.11 guidance counselors for every 500 students. The state’s Standards for

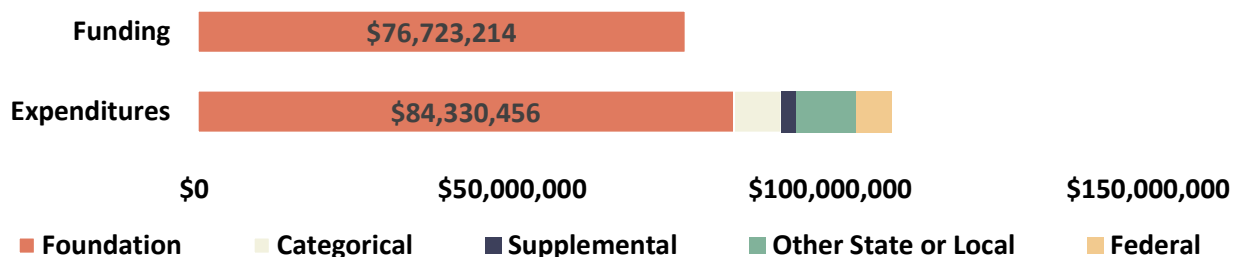
2023 / 2024 / 2025 Per Pupil	2023 Total
\$162 / \$165 / \$169	\$76,723,214

Accreditation require districts to have at least one counselor for every 450 students, which equates to approximately 1.1 FTEs per 500 students (Standard 4-E.2). Districts are eligible to receive a waiver from this accreditation standard; funding is not adjusted when these waivers are granted.

Spending

In 2023, public schools in Arkansas spent close to \$110 million on guidance counselors from all fund sources, over \$32 million more than they received in foundation funding. Schools spent \$7.6 million more in foundation funding than they received for guidance counselors. Schools used close to \$25 million from other fund sources, as illustrated in the following chart.

Guidance Counselor: Funding vs. Spending



²⁵ Odden, Allan, & Picus, Lawrence O. (2019). *School finance: A policy perspective*, 6th ed. New York: McGraw-Hill

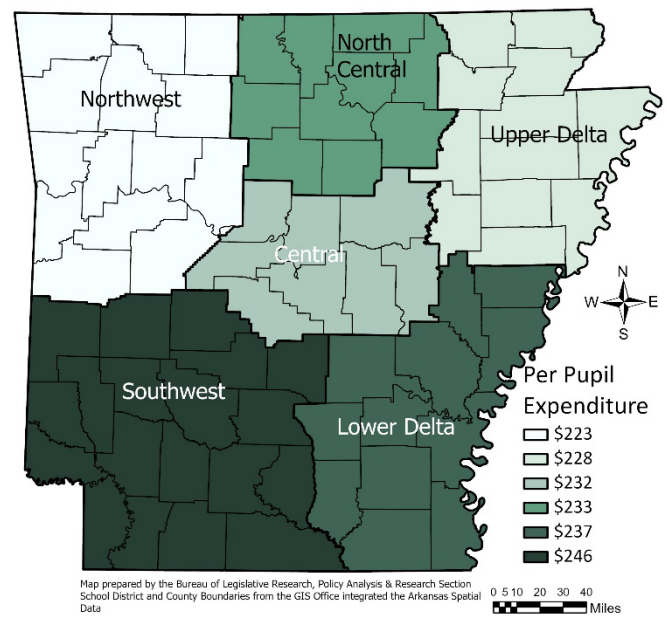
²⁶ See Superintendents Survey Responses, question 4.

Per-Pupil Spending by School Type

District Type	District	\$233
	Charter	\$188
School Type	Rural	\$231
	Urban	\$229
FRL Level in Schools	FRL Q1 (Lowest)	\$218
	FRL Q2	\$238
	FRL Q3	\$230
	FRL Q4	\$241
	FRL Q5 (Highest)	\$230
Minority Level in Schools	Minority Q1 (Lowest)	\$226
	Minority Q2	\$218
	Minority Q3	\$222
	Minority Q4	\$232
	Minority Q5 (Highest)	\$254
District Size	1-350	\$246
	351-500	\$257
	501-750	\$256
	751-1,000	\$213
	1,001-1,500	\$222
	1,501-2,500	\$214
	2,501-5,000	\$230
	5,001-25,000	\$236
BLR Cohort Schools	BLR Cohort	\$238
	Other	\$230
School Letter Grades	A	\$214
	B	\$221
	C	\$233
	D	\$242
	F	\$224

Per-pupil spending levels for guidance counselors show that, on average, schools in districts spent more than charter schools. Spending by free/reduced lunch levels varied, but increased with higher minority populations. Smaller districts spent more per pupil, as did BLR Cohort Schools.

The following map shows that schools in the Southwest region spent the most, on average, per pupil for guidance counselors.



Research and Best Practices

In recent years, the evidence-based model approach has changed from providing an overall student support resource recommendation to specifying counselor positions as part of the core program, and to provide additional pupil support positions (e.g., additional counselors, as well as social workers, or family liaison persons) on the basis of free/reduced lunch and ELL student counts.

Odden and Picus cite numerous research studies that show school counseling programs designed after the model developed by the American School Counselor Association (ASCA) and using the 1:250 ratio recommended by ASCA have a positive impact on student learning, achievement test scores, and graduation rates. Thus, the evidence-based model uses the ASCA standard student-to-counselor ratio for middle and high school students. The model was recently modified to include a minimum of one guidance counselor for a 450-student prototypical elementary school.²⁷

2023 Matrix Teacher-Student Ratio	Evidence-Based Model
1.11:500	1:450 grades K-5 1:250 grades 6-12

Arkansas Educators' Input

Survey Says: 53% of superintendents reported that their districts were in moderate or extreme need of more funding for guidance counselors.²⁸ The guidance counselors who responded to the teacher survey indicated 76% of their time is spent on direct services, while the other 24% is spent on administrative duties.²⁹

Nurse

Funding

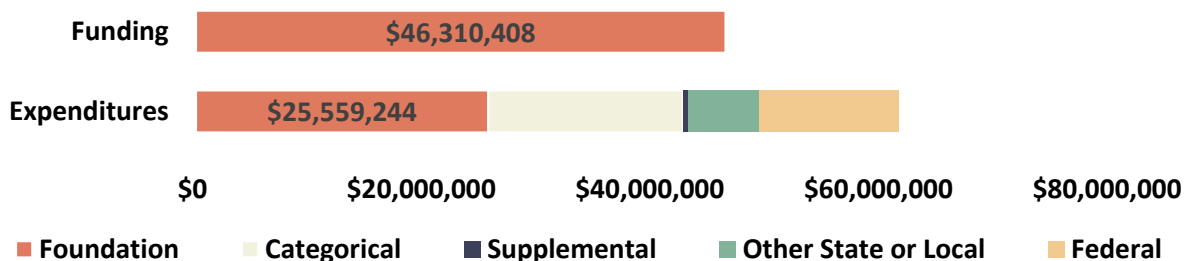
In 2023, funding for nurses accounted for 1.3% of foundation dollars. The matrix funds .67 FTE nurses for every 500 students. State law requires districts to have at least one nurse per 750 students (§ 6-18-706(c)(1)). The law also notes that districts with “a high concentration of children with disabling conditions as determined by the State Board of Education ... should” have a nurse-to-student requirement of 1:400. In districts that “provide a center for profoundly disabled students,” the ratio “should” be 1:125. [§ 6-18-706(c)(2) and (3)]. However, the law also includes a provision that makes these requirements effective “only upon the availability of state funds” (§ 6-18-706(e)(1)).

2023 / 2024 / 2025 Per Pupil	2023 Total
\$98 / \$100 / \$102	\$46,310,408

Spending

In 2023, public schools in Arkansas spent over \$61 million on nurses from all fund sources, a little over \$15 million more than they received in foundation funding. Schools spent almost \$36 million on nurses using other funding sources.

Nurse: Funding vs. Spending

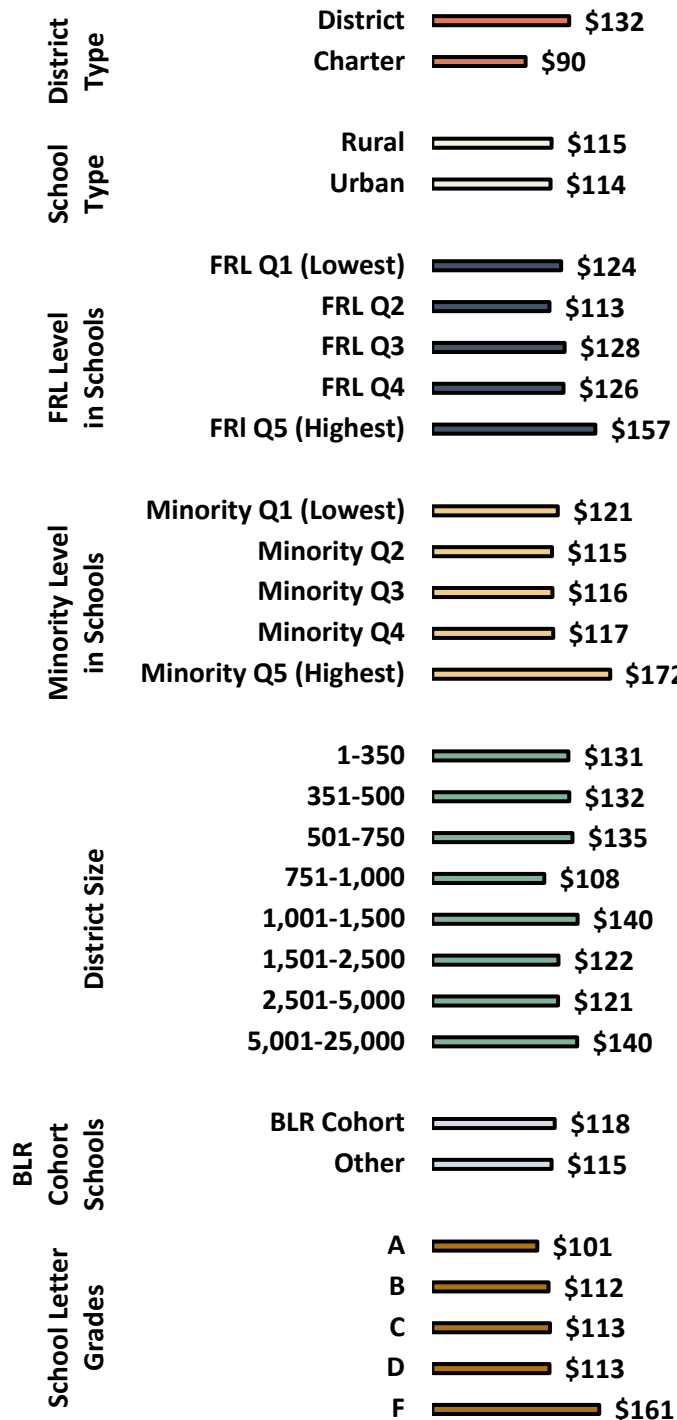


²⁷ Odden, Allan, & Picus, Lawrence O. (2019). “School finance: A policy perspective.” 6th ed. New York: McGraw-Hill

²⁸ See Superintendents Survey Responses, question 4.

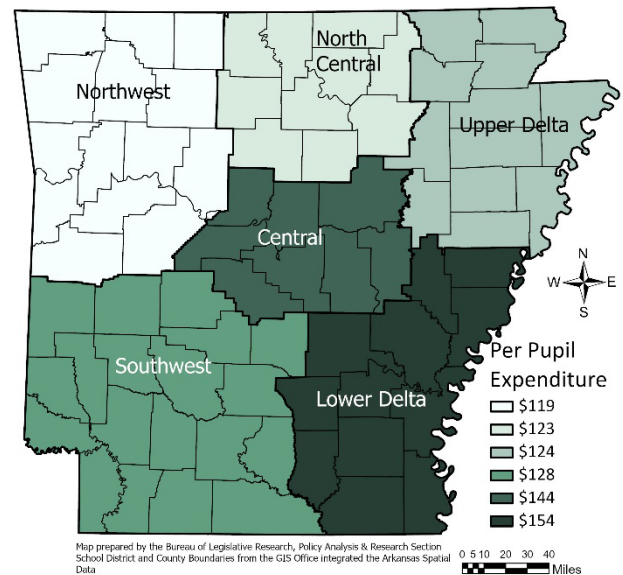
²⁹ See Teacher Survey Responses, question 17.

Per-Pupil Spending by School Type



District schools spent more than charter schools, on average, per pupil on nurses. Schools with the highest free/reduced lunch levels and minority populations spent more per pupil for nurses.

The following map shows that schools in the Lower Delta region spent the most per pupil for nurses, on average, while schools in the Northwest region averaged spending the least per pupil.



Research and Best Practices

To meet the physical and medical needs of students that have dramatically increased over the past decade, Odden and Picus' evidence-based model has been enhanced to provide nurses as core positions.³⁰ Using the staffing standard of the National Association of School Nurses, the evidence-based model provides core school nurses at the rate of one nurse position for every 750 students.³¹ This allocation allows districts to provide a half-time nurse in each prototypical elementary and middle school and a full-time nurse in each prototypical high school. According to the association, school nursing is a specialized practice of nursing that protects and promotes student health and advances academic success.³² It is the association's position that a full-time registered school nurse be present in every school, every day.

2023 Matrix Nurse-Student Ratio	Evidence-Based Model
0.67:500	1:750

Arkansas Educators' Input



Survey Says: 58% of superintendents reported that their districts were in moderate or extreme need of more funding for nurses.³³

Other Student Support

Funding

In 2023, funding for other student support personnel accounted for 1.4% of foundation dollars. The matrix funds 0.72 FTE positions for other student support, which includes psychologists, social workers, speech therapists, and family outreach workers. While no specific state standards require these individual services, Arkansas accreditation standards do require school districts to "offer a full continuum of special education services as required by the Individuals with Disabilities Education Act" (Standard 2-F.2). Schools are required to provide some of these services for special education students whose individualized education program (IEP) calls for them.

2023 / 2024 / 2025 Per Pupil	2023 Total
\$105 / \$107 / \$109	\$49,766,409

Spending

In 2023, schools in Arkansas spent a little over \$113 million on other student support staff from all fund sources, more than \$46 million than they received in foundation funding. This is over \$26 million more than what was reported in the 2022 adequacy report. Schools spent over \$82 million from other funding streams, with about 77% of that from federal funds.

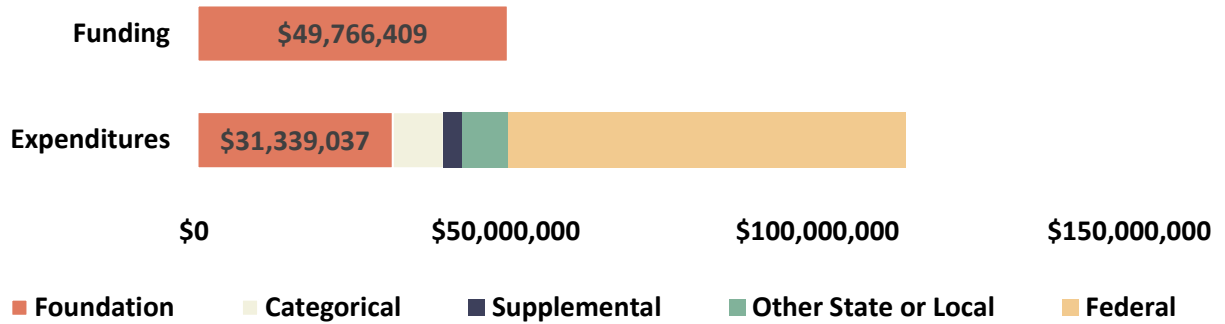
³⁰ Odden, Allan, & Picus, Lawrence O. (2019). *School finance: A policy perspective.* 6th ed. New York: McGraw-Hill

³¹ National Association of School Nurses. (2015). *School nurse workload: Staffing for safe care (Position Statement)*. Silver Spring, MD: Author.

³² National Association of School Nurses. (2017). *Definition of School Nursing*

³³ See Superintendents Survey Responses, question 4.






























Student Support: Funding vs. Spending



The largest other student support expenditures were for physical and occupational therapy, followed closely by speech and audiology services.

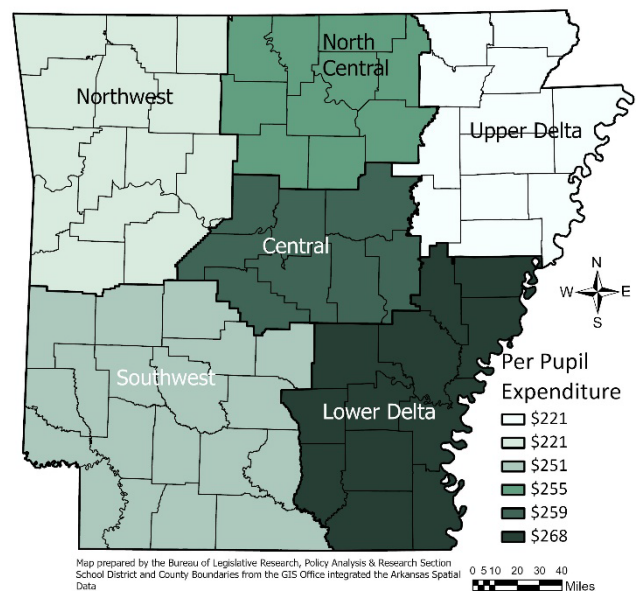
Function Description	2023 Foundation Expenditures	2023 Total Expenditures
Physical and Occupational Therapy	\$7.9 M	\$38.4 M
Speech Pathology and Audiology Services	\$11.1 M	\$28.3 M
Psychological Testing and Services	\$8.4 M	\$23.7 M
Attendance and Social Work Services	\$2.4 M	\$12.2 M
Parental Involvement	\$898K	\$7.5 M
School Based Mental Health	\$604K	\$3 M
Total	\$31.3 M	\$113.1 M

Per-Pupil Spending by School Type

District Type	District  \$236
	Charter  \$309
School Type	Rural  \$224
	Urban  \$248
FRL Level in Schools	FRL Q1 (Lowest)  \$185
	FRL Q2  \$194
	FRL Q3  \$231
	FRL Q4  \$271
	FRL Q5 (Highest)  \$356
Minority Level in Schools	Minority Q1 (Lowest)  \$200
	Minority Q2  \$200
	Minority Q3  \$218
	Minority Q4  \$236
	Minority Q5 (Highest)  \$326
District Size	1-350  \$276
	351-500  \$239
	501-750  \$262
	751-1,000  \$140
	1,001-1,500  \$209
	1,501-2,500  \$226
	2,501-5,000  \$259
	5,001-25,000  \$256
BLR Cohort Schools	BLR Cohort  \$212
	Other  \$237
School Letter Grades	A  \$199
	B  \$211
	C  \$204
	D  \$277
	F  \$419

Schools in districts spent less per pupil, on average, than charter schools. Spending increased with higher free/reduced lunch and minority levels. BLR Cohort Schools, on average, spent less per pupil than others.

The following map shows that schools in the Lower Delta region spent the most per pupil for student support, on average.



Research and Best Practices

Other states' adequacy studies have recommended student mental health support through a combination of guidance counselors, nurses, psychologists, and social workers at a level of 150 students to one mental health professional for elementary and 180:1 for secondary. Nationally, different models are recommended to support student mental health. The following table shows recommended staffing ratios from school mental health professional associations.³⁴

³⁴ [Arkansas School Finance Study 2020](#)

Professional Association	Recommended Staffing Level
American School Counselor Association	250:1 student to school counselors
National Association of School Psychologists	250:1 for school counselors, 500-700:1 for school psychologists, and 400:1 for school social workers
National Association of Social Workers	250:1 for school social workers, unless working with students with intensive needs, when a lower ratio is required

Multiple data sources suggest that student mental health is an area of increasing need. According to the Centers for Disease Control and Prevention, each year nearly one in five school-age children and youth meet the criteria for a mental health disorder, yet less than 20% of students get the help they need. Of those who do receive mental health services, more than 75% get help in schools. Between 2009-2019, the number of high school students experiencing persistent symptoms of depression increased by 40%, while the number of youth indicating they had made a suicide plan in the past year increased by 44%.³⁵ In fact, by 2018, suicide replaced homicide as the second leading cause of death in youth ages 10-24. Suicide rates are higher in rural areas for a variety of reasons, but limited access to mental health services is cited as a significant factor.³⁶ The escalating mental health crisis, exacerbated by the pandemic, prompted the American Academy of Pediatrics, the American Academy of Child and Adolescent Psychiatry, and the Children’s Hospital Association to join together in October 2021 to declare a National State of Emergency in Children’s Mental Health.³⁷

According to the American School Counselor Association, students’ unmet mental health needs can be a significant obstacle to student academic, career, and social/emotional development and even compromise school safety.³⁸ Without planned intervention for students exhibiting early-warning signs, setbacks in academic, career, and social/emotional development can result during later school years and adulthood. High school students with significant symptoms of depression are more than twice as likely to drop out of school, and students aged 6-17 with mental, emotional, or behavioral concerns are three times more likely to repeat a grade.³⁹

Arkansas Educators’ Input



Survey Says: 60% of superintendents reported that their districts were in moderate or extreme need of more funding for other student support.⁴⁰

When superintendents were asked if there were any resources not included in the matrix they believe are an important part of providing an adequate education; mental and behavioral health specialists (not guidance counselors) were among the most frequently cited resources needed.⁴¹ As shared earlier in the report, districts are spending student support funds on mental and behavioral health, although these resources were not explicitly included as part of the original funding for the other student support matrix line.

³⁵ [Center for Disease Control and Prevention](#) (2019)
³⁶ National Association of School Psychologists. (2021). [Comprehensive School-Based Mental and Behavioral Health Services and School Psychologists](#)
³⁷ [American Academy of Pediatrics](#) (2021)
³⁸ [The School Counselor and Student Mental Health](#) (2020), American School Counselor Association.
³⁹ [National Alliance on Mental Illness](#) (2021)
⁴⁰ See Superintendents Survey Responses, question 4.
⁴¹ See Superintendents Survey Responses, question 5.

When asked if their district had mental health therapists working in schools to provide mental health therapy services directly to students during the 2022-2023 school year, 85% of superintendents reported they did. A total of 160.25 FTE mental health therapists were employed directly by districts, and 899.25 FTEs were employed by an agency or other organization.⁴² The results from the educator surveys conducted by the BLR for the 2024 adequacy study are consistent with the data collected by BLR for the 2022 adequacy study, and by APA as part of their 2020 district-level survey, educator panels, and online forums. School-based mental health services were one of several areas most cited as highly in need of funding.

Although the matrix identifies resources for guidance counselors, many Arkansas educators – superintendents, principals, and teachers – reported the growing student mental health needs go beyond the expertise of guidance counselors and that specific mental health resources and support for all students, including additional positions for specialized staff- such as social workers, psychologists, or behavioral specialists, need to be identified.⁴³

Principal

Funding

In 2023, funding for principals accounted for 2.8% of foundation dollars. Arkansas’s standards call for one half-time principal, at least, for schools with fewer than 300 students.⁴⁴ Of the 313

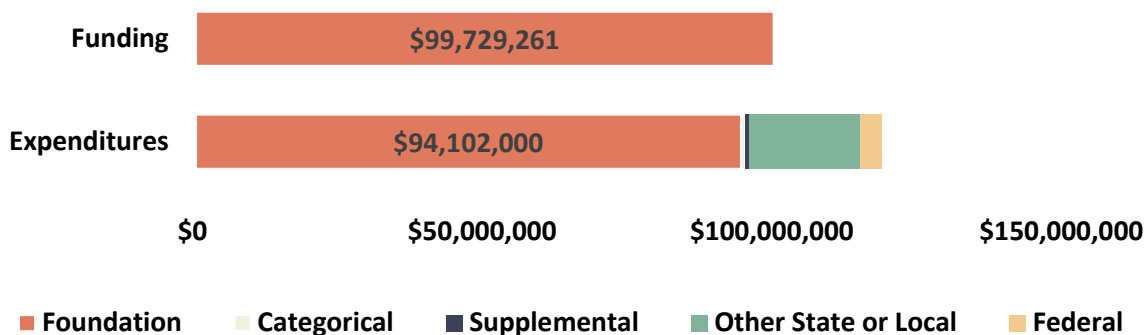
2023 / 2024 / 2025	2023 Funding Amount
\$208 / \$211 / \$211	\$99,729,261

schools with enrollment of 299 or lower in 2021, 175 employed at least one full-time equivalent principal. The funding matrix, however, funds a full-time principal with a salary and benefits totaling \$99,012 – *if* a school has 500 or more students. Districts may apply for waivers from the rules regarding principals and their licensure. Funding remains the same when waivers are in effect.

Spending

In 2023, districts received \$99,729,261 in foundation funding for principals, and spent \$94,102,000 in foundation funding, with \$24,337,810 coming from other funds.

Principals: Funding vs. Spending

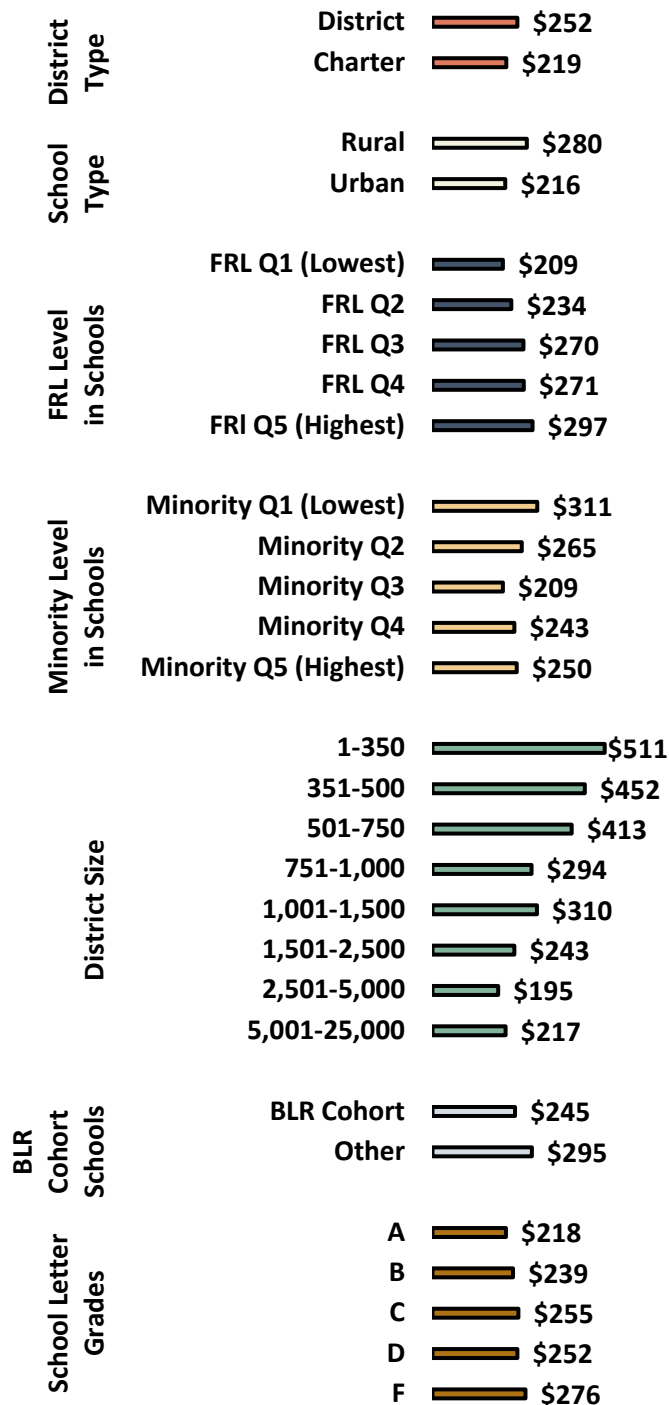


⁴² See Superintendents Survey Responses, questions 16-18.

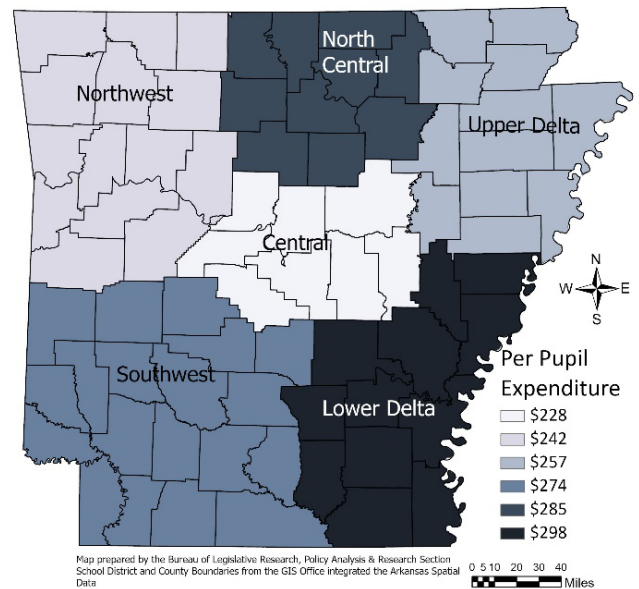
⁴³ 2021 and 2023 BLR Educator Surveys. [Arkansas School Finance Study 2020](#)

⁴⁴ Arkansas Division of Elementary and Secondary Education, *Rules Governing Standards for Accreditation of Arkansas Public Schools and Schools District*, Rule 4-C (May 2022).

Per-Pupil Spending by School Type



When looking at different types of schools and districts in Arkansas, schools in districts, on average, spent more than charter schools, and rural schools spent more than urban schools. Per-pupil spending was highest in the smallest districts (1-350 students) and lowest in the “A” schools.



Research and Best Practices

Little research has been done on the appropriate ratio of administrators to students; however, a study of schools in Indiana found that higher performing schools had lower administrator-to-student ratios.⁴⁵ Other studies have found that principals' duties can number up to 42 individual responsibilities,⁴⁶ but the Indiana study found that higher achievement was associated with those schools where principals kept a majority of "organizational duties" for themselves (hiring and developing teachers and budget planning, for instance) while delegating to assistants other common administrative duties such as student discipline and managing school facilities.

The referenced studies of characteristics of successful and improving schools point to leadership that holds staff accountable while also inspiring and supporting them, especially in the areas of teaching and learning. The concept of shared leadership, in which principals seek and incorporate ideas from staff, is also found to be integral to higher performing schools.⁴⁷

Arkansas Educators' Input



Survey Says: 49% of superintendents reported that their districts were in moderate or extreme need of more funding for principals.⁴⁸

In the adequacy principal survey, principals were asked to complete a number of questions on their background and experience working as a principal. In addition, superintendents were asked about challenges in recruiting and retaining principals.

Principals' Working Conditions

Principals reported spending 31% of their time on student interactions and 28% of their time on curriculum and teaching related tasks.

Principal Recruitment and Retention

Superintendents responding reported that difficulty in offering competitive salaries, scarcity of principal candidates, and inadequate housing options in the area were the most significant challenges to recruiting principals. The least significant challenges were retirement benefits, school or district reputation or accountability label, student population, and inadequate community or parent support. Respondents reported that stress/workload and difficulty in offering competitive salaries were the most significant challenges in retaining principals. The least significant challenges were retirement benefits and school and district leadership.⁴⁹

⁴⁵ McCaffrey, C. (Doctoral Research Paper, Ball State University, May 2014) "Investing the Connection of the Student-to-Administrator Ratio and Administrative Roles in Indiana Public High Schools."

⁴⁶ Grissom, J. and Loeb, S. (American Educational Research Journal, 2011.) "Triangulating Principal Effectiveness: How Perspectives of Parents, Teachers, and Assistant Principals Identify the Central Importance of Managerial Skills" and Waters, T., Marzano, R., and McNulty, B. "Balanced Leadership: What 30 Years of Research Tells Us About the Effect of Leadership on Student Achievement. A Working Paper."

⁴⁷ Craig, J. et al. (Appalachia Educational Laboratory at Edvantia, 2005) "A Case Study of Six High-Performing Schools in Tennessee;" (The Center on School Turnaround at WestEd, 2017) "Four Domains for Rapid School Improvement: A System Framework;" and (Hanover Research, 2014) "Best Practices for School Improvement Planning."

⁴⁸ See Superintendent Survey Responses, question 4.

⁴⁹ See Superintendents Survey Responses, questions 9 and 10

Secretary

Funding

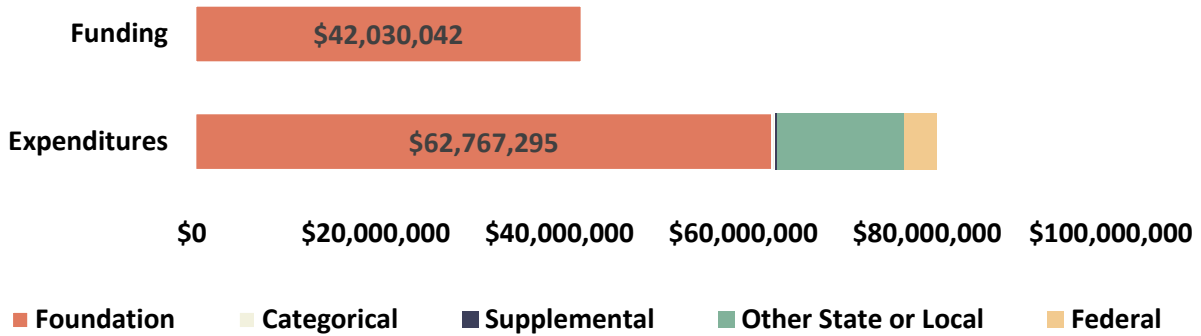
In 2023, funding for school secretaries accounted for 1.2% of foundation funding.

2023 / 2024 / 2025 Per Pupil	2023 Total
\$86 / \$91 / \$92	\$42,030,042

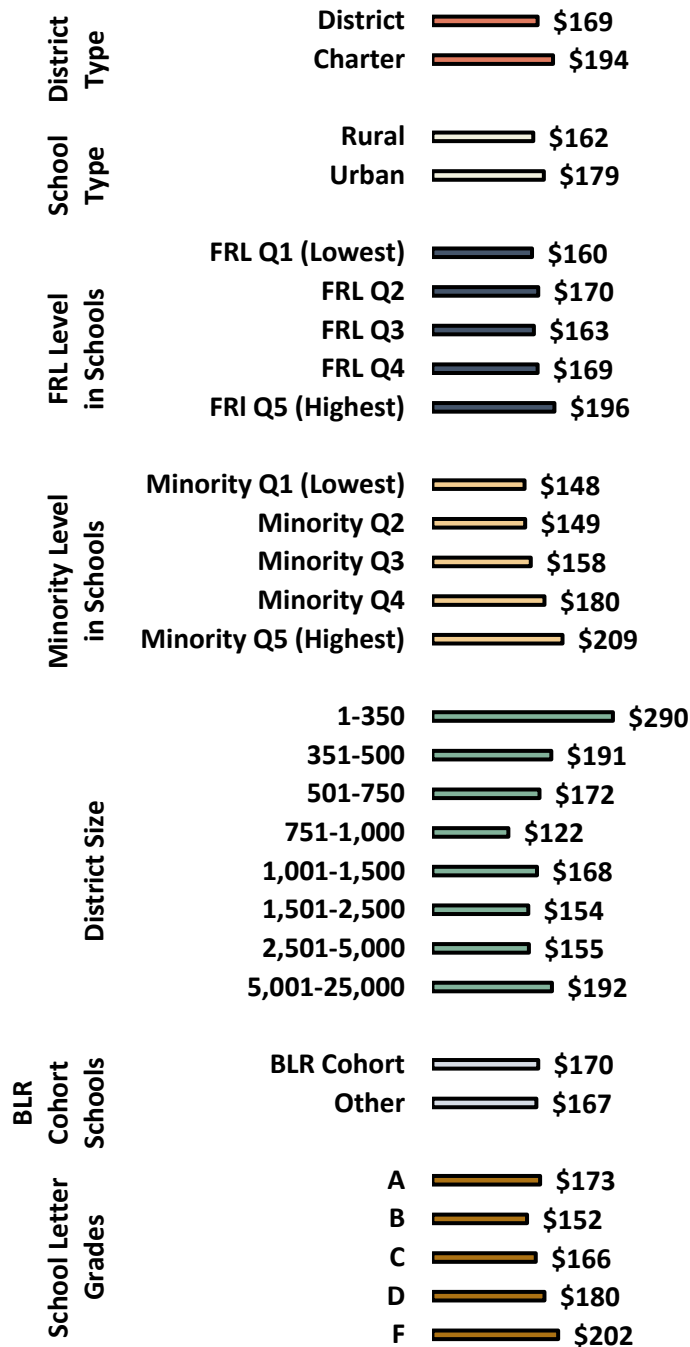
Spending

In 2023, districts received \$42,030,042 in foundation funding, and spent \$62,767,295 in foundation funds and \$17,914,872 in other funds.

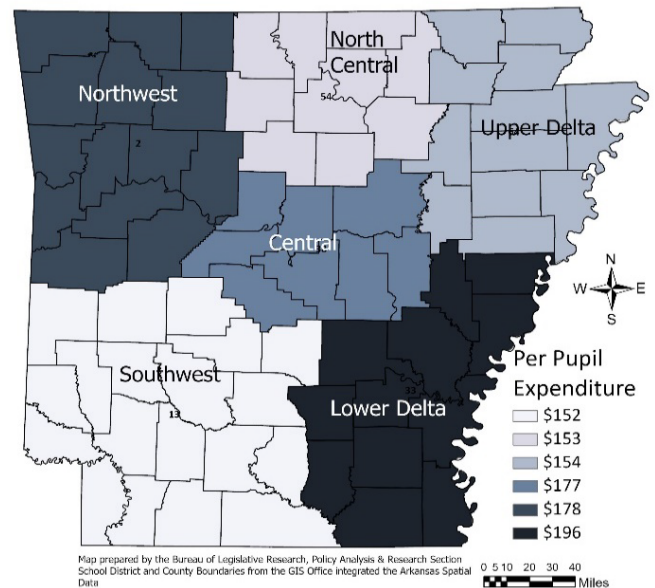
Secretary: Funding vs. Spending



Per-Pupil Spending by School Type



When looking at average spending differences among different types of schools and districts in Arkansas, schools in the smallest districts spent the highest amount per pupil. Districts with 751 to 1,000 students spent the least amount per pupil, on average.



Research and Best Practices

The 2020 Arkansas study report provided by APA indicated the current funding of 1.0 secretary FTE is below recommendations from Odden and Picus' 2006 and 2014 reports, as well as adequacy reports from other states, which recommend at least 2.0 FTE for 500 students. APA reported that case study schools with 400 or more students generally have at least 2.0 FTE secretaries.

Arkansas Educators' Input



Survey Says: 51% of superintendents reported that their districts were in moderate or extreme need of more funding for secretaries.⁵⁰

2023 LEGISLATION

Implications of LEARNS Act on Staffing

Several pieces of **ACT 237 OF 2023** (the LEARNS Act) have implications for schools' staff that are included in the matrix:

Employment Benefits and Procedures - Repeals

The act repeals the Arkansas Traveling Teacher Program, which permits qualified individuals and school districts to enter into agreements in order to provide traveling teacher services to school districts meeting certain criteria. The act also repeals the Teacher Fair Dismissal Act and the Public School Employees Fair Hearing Act.

Compensation - Salaries, Loan Forgiveness, and Incentives

The act increases the amount of loan repayments under the State Teacher Education Program to six thousand dollars (\$6,000); establishes the minimum base salary for teachers to be fifty thousand dollars (\$50,000); and requires, during the 2023-2024 school year, each teacher to be paid at least two thousand dollars (\$2,000) more than his or her current salary amount. The act requires each school district to meet certain criteria in order to receive state funds to implement the minimum base salary and salary increases, provides for an annual bonus of up to ten thousand dollars (\$10,000) to qualifying teachers, and establishes the categories into which a teacher may fall to be eligible for the annual bonus. The act creates the Arkansas Teacher Academy Scholarship Program, which provides annual scholarships of the cost of tuition and fees at an institution of higher education or the amount for obtaining a teaching license, including the cost of one (1) required examination, and requires participants to agree to teach for at least one (1) full school year in a school that serves primarily public-school students with disabilities. The act requires institutions of higher education that establish an Arkansas Teacher Academy to develop partnerships with public schools and requires the Division of Higher Education to create an administrative process and distribution criteria in order to implement the program.

Employment Generally

The act repeals the requirement that specific information be included in school district employment contracts. The act requires a public-school district superintendent to consult with teachers employed by the public-school district before making decisions regarding the hiring or placement of a principal at the public school in which the teachers are employed. The act establishes the criteria for public school district hiring decisions, reduction-in-force procedures, and other employment-related decisions. The act establishes paid maternity leave for education.

⁵⁰ See Superintendent Survey Responses, question 4.